ANNEX B3

| Item Code | Item Name | Agency Specification | Classification | Test Parameters (Post Evaluation) | Test Parameters (Inspection and Acceptance) | Onsite Warranty (Parts and Service) | Training | English Manual | Qty | Unit |
|--------------|----------------------------------|---|----------------|---|--|-------------------------------------|----------|-------------------|-----|-------|
| 03-001 | Grid Connected Solar PV, 15kW | refer to Technical Specification of Item Code 03- 001 | Equipment | Brochure with picture and data sheet | - Checking the conformity with the quantity including parts and accessories - Checking the conformity of hardware vis-a-vis offered specifications - Functionality testing | 1 Year | Yes | Yes | 5 | units |
| 03-002 | Grid Connected Solar PV, 5kW | refer to Technical Specification of Item Code 03- 002 | Equipment | Brochure with picture and data sheet | - Checking the conformity with the quantity including parts and accessories - Checking the conformity of hardware vis-a-vis offered specifications - Functionality testing | 1 Year | Yes | Yes | 5 | units |
| 03-003 | Grid Connect, 3.8kW | refer to Technical Specification of Item Code 03- 003 | Equipment | Brochure with picture and data sheet | - Checking the conformity with the quantity including parts and accessories - Checking the conformity of hardware vis-a-vis offered specifications - Functionality testing | 1 Year | Yes | Yes | 5 | units |



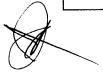


| Item Code | Item Name | Agency Specification | Classification | Test Parameters (Post Evaluation) | Test Parameters (Inspection and Acceptance) | Onsite Warranty (Parts and Service) | Training | English Manual | Qty | Unit |
|--------------|--|--|----------------|---|--|-------------------------------------|----------|-------------------|-----|-------|
| 03-004 | Grid Connect, 5kW | refer to Technical Specification of Item Code 03- 004 | Equipment | Brochure with picture and data sheet | - Checking the conformity with the quantity including parts and accessories - Checking the conformity of hardware vis-a-vis offered specifications - Functionality testing | 1 Year | Yes | Yes | 5 | units |
| 03-005 | Grid Connect with power limiter, 5kW | refer to Technical Specification of Item Code 03- 005 | Equipment | Brochure with picture and data sheet | - Checking the conformity with the quantity including parts and accessories - Checking the conformity of hardware vis-a-vis offered specifications - Functionality testing | 1 Year | Yes | Yes | 10 | units |
| 03-006 | Solar Module, 300 to 350W | Monocrystalline 300 - 350 W atleast 60 cells System Voltage: atleast 1000 Half Cell, MBB Aluminum Frame | Equipment | Brochure with picture and data sheet | - Checking the conformity with the quantity including parts and accessories - Checking the conformity of hardware vis-a-vis offered specifications - Functionality testing | 1 Year | Yes | Yes | 60 | units |

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| Item Code | Item Name | Agency Specification | Classification | Test Parameters (Post Evaluation) | Test Parameters (Inspection and Acceptance) | Onsite Warranty (Parts and Service) | Training | English Manual | Qty | Unit |
|--------------|------------------------------|---|----------------|---|--|-------------------------------------|----------|-------------------|-----|-------|
| 03-007 | Solar Module, 400 to 450W | Monocrystalline 400 - 450 W atleast 140 cells System Voltage: atleast 1000 Half Cell, MBB Aluminum Frame | Equipment | Brochure with picture and data sheet | - Checking the conformity with the quantity including parts and accessories - Checking the conformity of hardware vis-a-vis offered specifications - Functionality testing | 1 Year | Yes | Yes | 60 | units |
| 03-008 | Solar Module, 200 to 250W | Polycrystalline 200 - 250 W atleast 60 cells System Voltage: atleast 1000 Aluminum Frame | Equipment | Brochure with picture and data sheet | - Checking the conformity with the quantity including parts and accessories - Checking the conformity of hardware vis-a-vis offered specifications - Functionality testing | 1 Year | Yes | Yes | 60 | units |
| 03-009 | Solar Site Analysis tool | Non-electronic Composed of: - Dome Section - Base Section - Instrument Section With tripod and case | Equipment | Brochure with picture and data sheet | - Checking the conformity with the quantity including parts and accessories - Checking the conformity of hardware vis-a-vis offered specifications - Functionality testing | 1 Year | Yes | Yes | 5 | sets |





| item Code | item Name | Agency Specification | Classification | Test Parameters (Post Evaluation) | Test Parameters (Inspection and Acceptance) | Onsite Warranty (Parts and Service) | Training | English Manual | Qty | Unit |
|--------------|---------------|--|---------------------------------------|---|---|-------------------------------------|----------|-------------------|-----|------|
| 03-010 | Mounting rail | Aluminum 4.2 meters | Tools and Measuring Instruments | Brochure with picture and data sheet | - Checking the conformity of quantity - Type and measurement of material used | 1 Year | N/A | N/A | 100 | pcs |
| 03-011 | Splice | Aluminum Compatible with the mounting rail, item no. 03-010 | Tools and Measuring Instruments | Brochure with picture and data sheet | - Checking the conformity of quantity - Type and measurement of material used | 1 Year | N/A | N/A | 50 | pcs |
| 03-012 | Mid Clamp | Aluminum Nut must be compatible with the mounting rail, item no. 03- 010 | Tools and Measuring Instruments | Brochure with picture and data sheet | - Checking the conformity of quantity - Type and measurement of material used | 1 Year | N/A | N/A | 300 | pcs |
| 03-013 | End Clamp | Aluminum Nut must be compatible with the mounting rail, item no. 03- 010 | Tools and Measuring Instruments | Brochure with picture and data sheet | - Checking the conformity of quantity - Type and measurement of material used | 1 Year | N/A | N/A | 300 | pcs |
| 03-014 | Grounding Lug | Aluminum Nut must be compatible with the mounting rail, item no. 03- 010 | Tools and Measuring Instruments | Brochure with picture and data sheet | - Checking the conformity of quantity - Type and measurement of material used | 1 Year | N/A | N/A | 100 | pcs |





| ltem Code | Item Name | Agency Specification | Classification | Test Parameters (Post Evaluation) | Test Parameters (Inspection and Acceptance) | Onsite Warranty (Parts and Service) | Training | English Manual | Qty | Unit |
|--------------|-------------------------------------|---|----------------|---|--|-------------------------------------|----------|-------------------|-----|-------|
| 03-015 | Solar PV Complete Test Kit | refer to Technical Specification of Item Code 03- 015 | Equipment | Brochure with picture and data sheet | - Checking the conformity with the quantity including parts and accessories - Checking the conformity of hardware vis-a-vis offered specifications - Functionality testing | 1 Year | Yes | Yes | 1 | set |
| 03-016 | Computerized Battery Analyzer | refer to Technical Specification of Item Code 03- 016 | Equipment | Brochure with picture and data sheet | - Checking the conformity with the quantity including parts and accessories - Checking the conformity of hardware vis-a-vis offered specifications - Functionality testing | 1 Year | Yes | Yes | 5 | units |

| I hereby commit to comply and deliver all the above requirements in accordance with the above stated schedule. | | | | | | | |
|--|--|------|--|--|--|--|--|
| Name of Company/Bidder | Signature over Printed Name of Authorized Representative | Date | | | | | |





TECHNICAL SPECIFICATION

| Name of The Learning System | Grid Connected Solar PV, 15kW |
|--------------------------------|---|
| Item Code | 03-001 |
| Technology Area(s) | Power Generation Equipment and Supplies |

Inverter

Type: On-grid 3-phaseNominal Rating: 15 kW

• MPPT Tracker: 2

Max DC Input Voltage: 1,000 V

Rated AC Output Power: at least 15,000 Watts

Rated Grid Voltage: 3/N/PE, 220/380Vac, 230/400Vac, 240/415VAC

Nominal Grid Frequency: 60HzEquipped with export control

All accessories shall be included

Wifi Interface for power monitoring

• Power Limiter/export control if not integrated in the inverter

PV Array

- PV array shall be over sized from 17,000 to 20,000 Wp to increase production during times of low irradiation and losses compensation
- Must be equipped with rapid shutdown
- All accessories included: e.g. cable clips, end clamp, mid clamp, etc.

Solar Module

The solar module should have the following characteristics:

Nominal power rating: 300 up to 550 kWp

Technology: Half Cell MBB

System Voltage: at least 1,000 volts

Mounting Structure

- Flat on tin roof
- Material: Aluminum
- Must be able to accommodate the PV array mentioned above
- Must include all attachments, fittings, and mounting accessories: e.g. mid and end clamp for selected solar modules, bolts and nuts, washers, etc.





Electrical accessories



The following electrical components, fittings and accessories shall be supplied together with the system:

Conductors:

- String conductors shall be of approved type for photovoltaic application
- Grounding conductor of approved type and of suitable size for the application
- Other conductors required to make the system operational
- Approximate distance:
 - ♦ PV Array to inverter: 100 meters
 - Inverter to AC common point of coupling: 50 meters

Distribution Panel

- Two distribution panels; one for DC and one for AC
- Size: good enough to accommodate the necessary protective devices
- At least IP 65

Grounding and Bonding

- WEEB to create bonding between solar modules and railings
- Grounding Lug to connect grounding conductor from railings to grounding electrode
- Grounding rod with clamps, at least 6 ft

Protective Devices and Disconnecting Means

- AC and DC surge protective Device, DIN mounted
- DC circuit breaker, DIN mounted for each string
- AC circuit breaker, DIN mounted
- AC Isolator: at least IP65, for outdoor application

| I hereby commit to comply and deliver all the above requirements in accordance with the above stated schedule. | | | | | |
|--|--|------|--|--|--|
| Name of Company/Bidder | Signature over Printed Name of Authorized Representative | Date | | | |







TECHNICAL SPECIFICATION

| Name of The Learning System | Grid Connected Solar PV, 5kW |
|--------------------------------|---|
| Item Code | 03-002 |
| Technology Area(s) | Power Generation Equipment and Supplies |

Inverter

- Type: Hybrid
- Nominal Rating: 5 kW
- MPPT input: 2
- DC Input Power Per MPPT: at least 2,600 Watts
- DC input Current Per MPPT: at least 11A
- Rated AC Output Power: at least 3,500 Watts
- Rated Grid Voltage: 220V/230V/240V
- Nominal Grid Frequency: 60Hz
- Max. Charging Power: at least 2,500 Watts
- Must be able to handle 48V battery bank system
- EPS Rated Output Power: at least 3000VA
- Equipped with export control
- Equipped with automatic transfer to switch-on critical load from grid to back-up power

All accessories shall be included

- Wifi Interface for power monitoring
- Power Limiter/export control if not integrated in the inverter

Battery

- Lithium Iron Phosphate or Lithium Ion
- Must be compatible to the hybrid inverter mentioned above
- Rating: at least 3.0 kWh
- Equipped with BMS
- All accessories included: e.g mounting bracket, fastening devices, connecting cables and terminals, and battery storage

| hereby commit to comply and deliver all the above requirements in accordance with the above stated schedule. | | | | | | | |
|--|--------------------------------|------|--|--|--|--|--|
| Name of Company/Bidder | Signature over Printed Name of | Date | | | | | |



TECHNICAL SPECIFICATION

| Name of The Learning System | Grid Connect, 3.8kW |
|--------------------------------|---|
| Item Code | 03-003 |
| Technology Area(s) | Power Generation Equipment and Supplies |

Grid Connect with export limiting smart meter and integrated data manager

GENERAL DATA

Rated Power: 3.8 kW

Protection Class: NEMA 4XNight time consumption: <1W

• Inverter topology: Transformeriess

Cooling: Variable speed fan

• Installation: Indoor and outdoor installation

• Ambient operating temperature range: -40 - 131°F (-40 - 55°C)

Permitted humidity: 0 - 100 %

Elevation:4000m (13123 ft)

DC connection terminals:4x DC+ and 4x DC- screw terminals for copper (solid / stranded / fine stranded) or aluminum (solid/stranded)

\searrow

PROTECTION DEVICES

- DC reverse polarity protection
- Anti islanding
- Over temperature protection
- AFCI
- Rapid shutdown compliant
- Ground fault protection with isolation monitor interrupter
- DC disconnect

INTERFACES

- Wi-Fi / Ethernet LAN
- USB (A socket)
- 2x RS422 (RJ45 socket)

INPUT DATA

- Recommended PV power (kWp): 3.0-6.0kW
- Max. usable input current (MPPT 1/MPPT 2): 18A / 18A
- Max. usable input current (MPPT 1+MPPT 2): 36A
- Max. array short circuit current (1.5* lmax) (MPPT1/MPPT2): 27A / 27A
- Nominal input voltage: 410V
- Operating voltage range: 80V-600V
- DC startup voltage: 80V
- MPP Voltage Range: 200-480V





OUTPUT DATA

Max. output power:c 3800VA / 3800 VA

Frequency range (adjustable): 45.0 - 55.0 Hz / 50 - 66 Hz

• Operating frequency range default for CAL setups: --/ 58.5 - 60.5 Hz

Nominal operating frequency: 60Hz

• Admissible conductor size AC: AWG 14 - AWG 6

• Total harmonic distortion: < 5.0 %

• Power factor range: 0.85-1 ind./cap

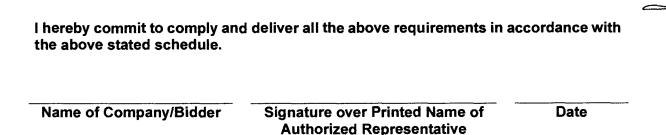
Max. continuous output current: 208V = 18.3A, 240V = 15.8A

OCPD/AC breaker size: 208V=25A, 240V=20A

Max. Efficiency: 96.7%CEC Efficiency: 95.0%

CERTIFICATES AND COMPLIANCE WITH STANDARDS

 UL 1741-2010 Second Edition (incl. UL1741 Supplement SA 2016-09 for California Rule 21 and Hawaiian Electric Code Rule14H), UL1998 (for functions: AFCI, RCMU and isolation monitoring), IEEE 1547-2003, IEEE 1547.1-2003, ANSI/IEEEC62.41, FCC Part 15 A & B, NEC 2017 Article 690, C22. 2 No.107.1-16, UL1699B Issue 2 -2013, CSA TIL M-07 Issue 1 – 2013





TECHNICAL SPECIFICATION

| Name of The Learning System | Grid Connect, 5kW |
|--------------------------------|---|
| Item Code | 03-004 |
| Technology Area(s) | Power Generation Equipment and Supplies |

input (DC)

Max. PV power: 8000WpMax. DC voltage: 600V

Rated MPP voltage range: 220 – 480 V
MPPT operating voltage range:100 – 550 V
Min. DC voltage / start voltage: 100 V / 125 V
Max. operating input current per MPPT: 10A

Max. short circuit current per MPPT: 18A
Number of MPPT tracker / string per MPPT tracker: 3/1

Output (AC)

AC nominal power: 5000W

Max. AC apparent power: 5000VANominal voltage / adjustable: 240V

AC voltage range: 211 – 264 V
AC grid frequency: 60 Hz / 50 Hz

Max. output current: 21.0 A

Power factor (cos φ) / harmonics: 1 / < 4 %

Output phases / line connections: 1 / 2

• Max. efficiency: 208V=97.2%, 240V=97.6%

• CEC efficiency: 208V=96.5%, 240V=96.7%

Protection devices

- DC disconnect device / DC reverse polarity protection
- Ground fault monitoring / Grid monitoring
- AC short circuit protection
- All-pole sensitive residual current monitoring unit (RCMU)
- Arc fault circuit interrupter (AFCI)
- Protection class / overvoltage category: I / IV

General data

Rated Power: 5kW

Environmental protection rating: NEMA 3R

Noise emission (typical): 39 dB(A)

Internal power consumption at night: < 5 W

Topology / cooling concept: transformerless / convection

Features

• Ethernet ports: 2

Secure Power Supply

• Display (2 x 16 characters)





- 2.4 GHz WLAN / External WLAN antenna
- ShadeFix technology for string level optimization
- Warranty: 10 yrs

Certificates and approvals

 UL 1741, UL 1741 SA incl. CA Rule 21 RSD, UL 1998, UL 1699B Ed. 1, IEEE1547, FCC Part 15 (Class A & B), CAN/CSA V22.2 107.1-1, HECO Rule 14H, PV Rapid Shutdown System Equipment

| I hereby commit to comply and deliver all the above requirements in accordance with the above stated schedule. | | | | | | |
|--|--|------|--|--|--|--|
| Name of Company/Bidder | Signature over Printed Name of Authorized Representative | Date | | | | |





TECHNICAL SPECIFICATION

| Name of The Learning System | Grid Connect with power limiter, 5kW | | | | |
|--------------------------------|---|--|--|--|--|
| Item Code | 03-005 | | | | |
| Technology Area(s) | Power Generation Equipment and Supplies | | | | |

General data

Rated Power: 5kW

Cooling concept: NaturalTopology: Non-isolated

Communication interfaces

- Pocket WiFi(optional)/Pocket LAN(optional)/Pocket

GPRS(optional)/Meter(optional)/RS485/DRM/USB-Upgrade

LCD display: Yes

Standard warranty [years]: 5-10

Input Data

• Max. PV array power [Wp]: 5200

• Max. DC voltage [V]: 600

Nominal DC operating voltage [V]: 360

• Max. input current [A]: 12/12

Max. short circuit current [A]: 12.8/12.8

MPPT voltage range[V]: 70-580

Start operating voltage[V]: 100

No. of MPP trackers: 2

Strings per MPP tracker: 1

Output Data

Nominal AC power [VA]: 5000

• Max. AC power [VA]: 5000

Nominal grid voltage(AC voltage range) [V]: 200-250

Nominal grid frequency/range [Hz]: 50-60

Nominal AC current [A]: 21.7

Max. AC current [A]: 22.7

Displacement power factor: 0.8 leading ~ 0.8 lagging

THDi, rated power [%]: <2

Device Protection

- Over voltage/ Under Voltage protection
- Overcurrent protection
- Overload Protection
- Overheat Protection
- Anti-Islanding Protection
- Backfeed Current Monitoring
- DC isolation impedance monitoring
- Ground fault current monitoringDC injection monitoring
- RCD protection







Certificates and Compliance with Standard

• Safety: IEC62109-1/-2

• EMC: EN 61000-6-1 / EN 61000-6-2 / EN 61000-6-3

Certification: VDE4105 /G98 / G99/ AS4777 / EN50549 / CEI0-21

Environment Limit

• Degree of protection (according to IEC60529): IP65

Power Limiter: Compatible with the above inverter

I hereby commit to comply and deliver all the above requirements in accordance with the above stated schedule.

Name of Company/Bidder Signature over Printed Name of Date
Authorized Representative

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TECHNICAL SPECIFICATION

| Name of The Learning System | Solar PV Complete Test Kit | | | | | |
|--------------------------------|---|--|--|--|--|--|
| Item Code | 03-015 | | | | | |
| Technology Area(s) | Power Generation Equipment and Supplies | | | | | |

The solar PV complete test kit shall include the following:

- 1. A compact solar PV tester with I-V curve tracing
- 2. Solar Irradiance Meter
- 3. Solar Irradiance meter mounting bracket
- 4. AC/DC Current Clamp Ammeter
- 5. SolarCert Solar PV Reporting Software
- 6. Complete testing and other accessories:
 - 2 x MC4 test lead adaptors
 - 2 x combiner box test probes and detachable alligator clips (MC4)
 - 2 x test leads with detachable alligator clips (4mm)
 - USB download cable
 - rugged carry bag
 - quick start guide
 - calibration certificates and a 2-year warranty

COMPACT SOLAR PV TESTER WITH I-V CURVE TRACING

Key Features:

- Instant NFC data transfer using the PVMobile app.
- All-in-one commissioning tests and I-V curve tracing.
- Automatic fill factor calculation.
- Ground continuity measurement with test lead null.
- PV string open circuit and maximum power point voltage measurements up to 1000V DC.
- PV string short current up to 15A DC.
- PV array insulation test at 250/500/1000V.
- Tests individual PV modules or strings.
- Memory for up to 999 records and USB download to PC.
- High contrast display, visible in bright light.

General Specification:

- Instrument Dimensions and Weight Weight 1.04kg / 2.3lb
- Dimensions 26.4 x 10.7 x 5.8cm / 10.4 x 4.2 x 2.3"
- Display Custom LCD with backlight
- Power Source 6 x 1.5V AA cells
- Battery life >1000 test sequences
- Auto power down User programmable
- Onboard memory Up to 999 complete test datasets





- Connectivity USB download to PC (CSV format)
- Wireless "Solarlink TM" to Survey 200R (range ~30m/100ft)
- NFC transfer of data to PVMobile Android App
- App compatibility: Compatible with Android version 4.2 Jelly Bean
- Software compatibility: Compatible with SolarCert software (English language only)
- Service 2 year warranty

Technical Specification:

Open Circuit Voltage Measurement (PV Terminals)

Display Range: 0.0VDC - 1000VDC

• Measuring Range: 5.0VDC - 1000VDC

• Resolution: 0.1VDC maximum

Accuracy: ± (0.5 % + 2 digits)

• Enunciators: DC voltage polarity correct or reversed

Short Circuit Current Measurement (PV Terminals)

- Display Range 0.00ADC 15.00ADC
- Measuring Range 0.50ADC 15.00ADC
- Maximum Power 10kW
- Resolution 0.01ADC maximum Accuracy ± (1% + 2 digits)

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Earth Continuity Resistance Measurement (4mm Terminals)

- >Test Voltage Open Circuit >4VDC, nominal
- >Test Current into 2 Ω: >200mA
- >Display Range: 0.00Ω 199Ω
- >Measuring Range (EN 61557-4): 0.05Ω 199Ω
- >Resolution: 0.01Ω maximum
- >Accuracy: ± (2% + 5 digits)
- >Test Leads Zero: Zero up to 10Ω, by zero button
- >Visible Warning: ≥30V AC or DC at inputs
- Circuitry Protection: Test inhibited if ≥30V AC or DC at inputs
- >Repeat tests as per IEC 61557-4: Approx 4000 1 second test

Insulation Resistance (Auto Test Sequence, PV Terminals and Red 4mm Terminal)

- Test Voltage Open Circuit 250V, 500V, 1000V (as per IEC61557-2)
- Test Voltage Specification -0% +20% (open circuit)
- Test Voltage @ 1mA >1mA into UN x (1000Ω/V)
- Test Current Short Circuit
- Measuring Range: (EN 61557-2) 0.05MΩ 200MΩ
- Resolution: 0.01MΩ maximum
- Accuracy: $0.05M\Omega 100M\Omega \pm (5\% + 5 \text{ digits})$, $101M\Omega 200M\Omega \pm (10\% + 5 \text{ digits})$
- Visible Warning: ≥ 30V AC or DC at inputs
- Circuitry Protection: Test inhibited if ≥ 30V AC or DC at inputs
- Repeat tests as per IEC61557-4: Approx 4000 1 second tests



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SOLAR IRRADIANCE METER

General Specification:

• Display: Custom LCD

• Power Supply: 2AA Alkaline Batteries

• Battery Life: >20,000 Readings

Auto power down After 2 minutes

IRRADIANCE

Display Range: 100 – 1500 W/m-2 or 30 – 500 BTU/hr-ft 2

Measurement Ranges -30°C to +125°C

Resolution 1°

TEMPERATURE

• Display Range -30°C to +125°C

Measurement Ranges -30°C to +125°C

Resolution 1°

COMPASS BEARING

Display Range: 0° to 360°

Measurement Ranges: 0° to 360°

Resolution 1°

INCLINOMETER

• Display Range: 0° to 90°

Measurement Ranges: 0° to 90°

Resolution 1°

DATALOGGING AND CONNECTIVITY

Datasets: 5000 Sample

• Rate 1 to 60 minutes (user definable)

Datalogging: Download utility software included

• Compatible with SolarCert Elements software (version 1.1)

• Connectivity: USB download to PC, Wireless 'SolarlinkTM' (range c. 100m / 330 ft)

SERVICEABILITY

Warranty: 2 years

Calibration: 1 year







SOLAR IRRADIANCE METER

General Specification:

The lightweight Solar AC/DC Current Clamp is a compact instrument capable of providing accurate measurements of AC or DC currents in conductors measuring up to 22mm in diameter. Used in conjunction with the compact PV tester mentioned above. AC and DC currents can be measured from 0.5A to 40.0A.

Sample Image:





Picture for reference only

| I hereby commit to comply and deliver all the above requirements in accordance with the above stated schedule. | | | | | | |
|--|--|------|--|--|--|--|
| Name of Company/Bidder | Signature over Printed Name of Authorized Representative | Date | | | | |



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TECHNICAL SPECIFICATION

| Name of the Equipment | Computerized Battery Analyzer |
|--------------------------|---|
| Item Code | 03-016 |
| Technology Area(s) | Power Generation Equipment and Supplies |

Capabilities

Scientifically Analyze Battery Performance

- True constant current battery capacity test with results graphically displayed constant power testing supported with Extended software upgrade
- Discharge current is software and electronically regulated using a solid-state switch and fan cooled electronic load
- Test any type of battery; coin cell to automotive or larger. Presets for NiCad, NiMH, Lead Acid, Li Ion, Li Poly, Alkaline, Carbon Zinc, Mercury etc.
- Solar cell profiling capability *
- Lower current testing capabilities down to 10 mA
- Multiple discharge tests can use Watts as a parameter

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Perform Fast, High Power Testing

- Tests quickly at real world load conditions, up to 150 watts or 40 amps maximum, whichever is higher
- High voltage testing at up to 55 volts (CBA II/CBA III is only 48V); the equivalent of 1 to 38 NiCad or NiMh cells *
- Perform power profile test (increase current at user's rate to see how voltage/power responds), useful for testing max power output of a power supply or solar cell *
- Optional 500 watt and 1000-watt amplifiers

Accuracy and Precision for Demanding Applications

- On-board computer performs accurate measurement with 12 bit effective resolution. Auto ranging for 2 current ranges and three voltages
- Each CBA is individually calibrated with a computerized calibration system.
- Calibration certification data provided with CBA IV Pro
- SDK for developing your own scripts or programming *
- TTL UART port that can be controlled by an Arduino, Raspberry PI, or other embedded system with a TTL serial port *

Built-in Safety Features Provide Superior Battery Protection

- Fail safe: automatic protection of temperature, current and power *
- Safety watchdog stops a discharge in the event of a computer crash *
- Discharge test current user selectable from 0 to 40 Amps





- Timed discharge test (stop discharge once certain Ah has been reached) *
- Dynamic test (alter test current using panel on the side of the software, without having to stop and start a new test) *
- Automatic voltage shut off at end of test using a software recommended or user selected safe discharge voltage
- Automatic over-temperature shut off at end of test at using a software recommended or user selected maximum temperature with optional external magnetic temperature sensor

Free Standard Software for Data Analysis

- User selected battery cell chemistry, number of cells and test current
- Software recommends safe tests based on user supplied battery information
- Automatic graph setup and scaling
- Measures and displays voltage, current, amp-hrs, and watts
- User can set the criteria for "Easy-Go/No-Go" testing
- Easy overlay comparisons of multiple graphs may be displayed saved and recalled
- Save, display and print battery test graphs and battery labels.
- Plug and Play high speed USB interface, with easy to use and intuitive Windows® software supplied on CD ROM
- Manage individual tests on any number of CBA IV units connected to the same PC
- Software has no limit on number of CBA IVs that can be attached (CBA II/CBA III required multiple unit license) *

Specifications:

- Maximum continuous discharge rate: 100 watts
- Maximum limited term discharge rate with < 3500 ma-hour battery: 125 watts
- Maximum limited term discharge rate with < 1000 ma-hour battery: 150 watts</p>
- 0-3 amp accuracy: typically better than + 10 ma
- 3-40 amp accuracy: typically better than + 45 ma
- 0-5 volt accuracy: typically better than + .005 volts
- 5-15 volt accuracy: typically better than + .01 volts
- 10-60 volt accuracy: typically better than + .05 volts
- Maximum operating voltage: 55 Volts (48 Volt Lead Acid Telecom supported) *
- Maximum discharge rate: 40 amps (Battery dependent, 100 watt continuous)
- Minimum discharge voltage to maintain 30 amps .9Volts (Battery dependent)
- Minimum Voltage for a 40 amp discharge: 2 volts at completion of test (Battery defendant)
- Minimum discharge rate: 0.01 Amps *







- Residual current drain, battery connected while not in use: < .003 amps @ 12 volts
- High performance micro controller with built in USB interface and 12 bit A/D conversion.
- USB powered; the CBA does not use the battery being tested to run the CBA or the fan.
- System ready and Test in progress LED indicators, viewable from across a room.
- CBA internal over temperature sensing and protection.
- Graph printing on any standard color or B&W printer.
- Battery test label printing on standard 05160 stick-on labels.

The computerized battery analyzer shall include the following accessories/software:

- 6 inch pigtail adapter
- Standard version CBA software CD-ROM
- 6 ft USB Cable
- 40 amp fuse
- User Manual
- Calibration data

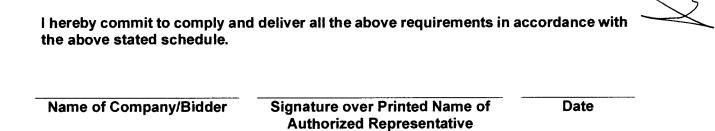




Sample Image:



Picture for reference only







Technical Specifications

Lot 4 : Industrial Automation, Mechatronics and Robotics

APPROVED BUDGET . Two Million Three Hundred Thirty-Two Thousand Eight

FOR THE CONTRACT Hundred One Pesos and 95/100 (₱2,332,801.95)

| Item Code | Item Name | Agency Specification | Qty | Unit | Statement of Compliance* | Make Brand / Model | Reference |
|--------------|--|--|-----|-------|--------------------------|--------------------------|-----------|
| 04- 001 | Human Machine Interface | Kindly refer to the technical specifications attached as Annex B4 . | 5 | units | | | |
| 04- 002 | Variable Frequency Drive | Kindly refer to the technical specifications attached as Annex B4 | 10 | units | | | |
| 04- 003 | Double Acting Cylinder | Kindly refer to the technical specifications attached as Annex B4 | 50 | pcs | | | |
| 04- 004 | Reed Switch | Kindly refer to the technical specifications attached as Annex B4 | 100 | pcs | | | |
| 04- 005 | 5/2 Way Double Solenoid Valve | Kindly refer to the technical specifications attached as Annex B4 | 50 | pcs | | | |
| 04- 006 | 5/2 Way Single Solenoid Valve | Kindly refer to the technical specifications attached as Annex B4 | 50 | pcs | | | |
| 04- 007 | Filter Regulator Lubricator | Kindly refer to the technical specifications attached as Annex B4 | 20 | pcs | | | |

^{*} Bidders must state here either "Comply" or "Not Comply" against each of the individual parameters of each Specification stating the corresponding performance parameter of the equipment offered. Statements of "Comply" or "Not Comply" must be supported by evidence in a Bidders Bid and cross-referenced to that evidence. Evidence shall be in the form of manufacturer's un-amended sales literature, unconditional statements of specification and compliance issued by the manufacturer, samples, independent test data etc., as appropriate. A statement that is not supported by evidence or is subsequently found to be contradicted by the evidence presented will render the Bid under evaluation liable for rejection. A statement either in the Bidder's statement of compliance or the supporting evidence that is found to be false either during Bid evaluation, post-qualification or the execution of the Contract may be regarded as fraudulent and render the Bidder or supplier liable for prosecution subject to the applicable laws and issuances.

I hereby commit to comply and deliver all the above requirements in accordance with the above stated schedule.

Name of Company/Bidder

Signature over Printed Name of Authorized Representative Date



ANNEX B4

| Item Code | Item Name | Agency Specification | Classification | Test Parameters (Post Evaluation) | (Inspection and | Onsite Warranty (Parts and Service) | Training | English Manual | Qty | Unit |
|--------------|--------------------------------|---|----------------|---|---|-------------------------------------|----------|-------------------|-----|-------|
| 04-001 | Human Machine Interface | 7 inch display / TFT Display 800X480 pixels resolution Color display 3 number of ports Port Type: Ethernet, MPI, Profibus DP, USB Processor Type: ARM With backlight Supply voltage: 24VDC Dimension: 214x158x63mm IP Rating: IP20, IP65 Configurable from WINCC COMFORT V11 | Equipment | Brochure with picture and data sheet | - Measurement of monitor - Checking the conformity with the quantity including parts and accessories - Checking the conformity of hardware vis-a-vis offered specifications - Functionality testing | 1 Year | Yes | Yes | 5 | units |
| 04-002 | Variable Frequency Drive | Power rating 2.2KW Single phase Current rating 11 AMP Supply voltage 220-240 VAC Output frequency 0-550HZ fieldbus communication type: modbus With control panel Mounting type: wall mounting With accessories: Smart access module | Equipment | Brochure with picture and data sheet | - Checking the conformity with the quantity including parts and accessories - Checking the conformity of hardware vis-a-vis offered specifications - Functionality testing | 1 Year | Yes | Yes | 10 | units |







| Item Code | Item Name | Agency Specification | Classification | Test Parameters (Post Evaluation) | Test Parameters (Inspection and Acceptance) | Onsite Warranty (Parts and Service) | Training | English Manual | Qty | Unit |
|--------------|--|---|------------------------|---|--|-------------------------------------|----------|-------------------|-----|------|
| 04-003 | Double Acting Cylinder | Pneumatic double acting Piston Diameter: 20mm Stroke length: Maximum 100 mm Cushioning: P flexible cushioning ring/pads on both sides Position sensing: For proximity sensor ISO 6432 | Gadgets and Devices | Brochure with picture and data sheet | - Checking the conformity with the quantity including parts and accessories - Checking the conformity of hardware vis-a-vis offered specifications - Functionality testing | 1 Year | N/A | N/A | 50 | pcs |
| 04-004 | Reed Switch | Switching output: N/O contact (PNP / NPN) with switching status indication Operating voltage: 5 – 30 V DC Output current: max. 100 mA With mounting system for cylinder diameter: 20 mm Compatible with double acting cylinder, item no. 19-001 | Gadgets and Devices | Brochure with picture and data sheet | - Checking the conformity with the quantity including parts and accessories - Checking the conformity of hardware vis-a-vis offered specifications - Functionality testing | 1 Year | N/A | N/A | 100 | pcs |
| 04-005 | 5/2 Way Double Solenoid Valve | Pneumatic double solenoid valve Operating pressure: 150 – 800 kPa (1.5 – 8 bar) Electrical connection: via integrated 4mm safety sockets Power supply: 24VDC with LED | Gadgets and Devices | Brochure with picture and data sheet | - Checking the conformity with the quantity including parts and accessories - Checking the conformity of hardware vis-a-vis offered specifications - Functionality testing | 1 Year | N/A | N/A | 50 | pcs |





| Item Code | Item Name | Agency Specification | Classification | Test Parameters (Post Evaluation) | (Inspection and | Onsite Warranty (Parts and Service) | Training | English Manual | Qty | Unit |
|--------------|--|--|---------------------------------------|---|--|-------------------------------------|----------|-------------------|-----|------|
| 04-006 | 5/2 Way Single Solenoid Valve | Pneumatic single solenoid valve Operating pressure: 250 – 800 kPa (2.5 – 8 bar) Electrical connection: via integrated 4mm safety sockets Power supply: 24VDC with LED | Gadgets and Devices | Brochure with picture and data sheet | - Checking the conformity with the quantity including parts and accessories - Checking the conformity of hardware vis-a-vis offered specifications - Functionality testing | 1 Year | N/A | N/A | 50 | pcs |
| 04-007 | Filter Regulator Lubricator | Pneumatic Connection: G1/8 / G1/4 Pressure: 0.5 - 7 bar Flow rate: 400 - 650 l/min with pressure gauge Grade of filtration: max 40 µm, min 5 µm Condensate drain: MANUAL / AUTOMATIC | Tools and Measuring Instruments | Brochure with picture and data sheet | - Checking the conformity with the quantity including parts and accessories - Checking the conformity of hardware vis-a-vis offered specifications - Functionality testing | 1 Year | N/A | N/A | 20 | pcs |



I hereby commit to comply and deliver all the above requirements in accordance with the above stated schedule.

Name of Company/Bidder

Signature over Printed Name of Authorized Representative

Date







Technical Specifications

Lot 5 : Electronics/Electrical Tools and Equipment

APPROVED BUDGET . Eight Hundred Thirty-Two Thousand Two Hundred

FOR THE CONTRACT Forty-Seven Pesos and 80/100 (₱832,247.80)

| Item Code | Item Name | Agency Specification | Qty | Unit | Statement of Compliance* | Make Brand / Model | Reference |
|--------------|-------------------------------|--|-----|-------|--------------------------|--------------------------|-----------|
| 05- 001 | Digital Oscilloscope | Kindly refer to the technical specifications attached as Annex B5. | 5 | units | | | |
| 05- 002 | Insulation Tester | Kindly refer to the technical specifications attached as Annex B5. | 4 | units | | | |
| 05- 003 | Earth Resistance Tester | Kindly refer to the technical specifications attached as Annex B5. | 5 | pcs | | | |
| 05- 004 | Thermal Camera | Kindly refer to the technical specifications attached as Annex B5. | 5 | pcs | | | |
| 05- 005 | Soldering Station | Kindly refer to the technical specifications attached as Annex B5. | 10 | sets | | | |



| I hereby commit to comply an | d deliver all the above requirements in accordance wit | th |
|------------------------------|--|----|
| the above stated schedule. | | |

| Name of Company/Bidder | Signature over Printed Name of | Date |
|------------------------|--------------------------------|------|
| • • | Authorized Representative | |



^{*} Bidders must state here either "Comply" or "Not Comply" against each of the individual parameters of each Specification stating the corresponding performance parameter of the equipment offered. Statements of "Comply" or "Not Comply" must be supported by evidence in a Bidders Bid and cross-referenced to that evidence. Evidence shall be in the form of manufacturer's un-amended sales literature, unconditional statements of specification and compliance issued by the manufacturer, samples, independent test data etc., as appropriate. A statement that is not supported by evidence or is subsequently found to be contradicted by the evidence presented will render the Bid under evaluation liable for rejection. A statement either in the Bidder's statement of compliance or the supporting evidence that is found to be false either during Bid evaluation, post-qualification or the execution of the Contract may be regarded as fraudulent and render the Bidder or supplier liable for prosecution subject to the applicable laws and issuances.

ANNEX B5

| Item Code | Item Name | Agency Specification | Classification | Test Parameters (Post Evaluation) | (Inspection and | Onsite Warranty (Parts and Service) | Training | English Manual | Qty | Unit |
|--------------|-------------------------|---|---------------------------|---|--|-------------------------------------|----------|-------------------|-----|-------|
| 05-001 | Digital Oscilloscope | Bandwidth 100MHZ Oscilloscope channel: 2CH Average waveform times: 4, 8, 16, 32, 64, 128 High accuracy: Highest 12bit Input Coupling: DC, AC or ground (DC, AC, GND) Input impedance: 1MΩ±2% II20pF±3PF Probe attenuation coefficient setting: 1X, 10X, 100X, 1000X Voltage classes: 300V CAT II Maximum input voltage: 300V RMS (10X) Waveform interpolation: (sinX)/X Maximum record length: Single channel maximum 8M, Dual channel: maximum 4M Horizontal scale range: 2ns/div-100s/div, 1, 2, 5 steps Trigger mode: Automatic, normal, single Measurement Type: DC RMS, AC RMS, DC Frequency meter: Hardware 6 bits Window Rectangular, Hanning, Heming, Blackman, Bartlett, flat top Display Single display or full display Display Single display or full display Display screen type: 7in TFT LCD screen diagonally Standard interface: USB Host, USB Device Power supply voltage: 00-120 VAC RMS (±10%), 45Hz to 440Hz, CAT II, 120-240 VAC RMS (±10%), 45Hz to 66Hz, CAT II | Electronic Instruments | Brochure with picture and data sheet | - Checking the conformity with the quantity including parts and accessories - Checking the conformity of hardware vis-a-vis offered specifications - Functionality testing | 1 Year | Yes | Yes | 5 | units |





| Item Code | Item Name | Agency Specification | Classification | Test Parameters (Post Evaluation) | (inspection and | Onsite Warranty (Parts and Service) | Training | English Manual | Qty | Unit |
|--------------|-------------------------------|---|---------------------------|---|--|---|----------|-------------------|-----|-------|
| 05-002 | Insulation Tester | Digital Testing voltage: 50-1000V Power supply 220V, 60 Hz Operating temperature: -10~40°C Measuring Range: 100-400MΩ Accessory: 1 pair of measuring probes | Electronic Instruments | Brochure with picture and data sheet | - Checking the conformity with the quantity including parts and accessories - Checking the conformity of hardware vis-a-vis offered specifications - Functionality testing | 1 Year | Yes | Yes | 4 | units |
| 05-003 | Earth Resistance Tester | Display: Digital Earth Resistance Range: O-2000Ω Earth Voltage Range: (60Hz): 0VAC-200VAC Earth Resistance Accuracy: ±2%rdg±3dgt Earth Voltage Accuracy: ±1%rdg±4dgt Power Source: 6 AA batteries With hard-carrying case | Electronic Instruments | Brochure with picture and data sheet | - Checking the conformity with the quantity including parts and accessories - Checking the conformity of hardware vis-a-vis offered specifications - Functionality testing | 1 Year | Yes | Yes | 5 | units |





| Item Code | Item Name | Agency Specification | Classification | Test Parameters (Post Evaluation) | (Inspection and | Onsite Warranty (Parts and Service) | Training | English Manual | Qty | Unit |
|--------------|-------------------|--|---------------------------|---|--|-------------------------------------|----------|-------------------|-----|-------|
| 05-004 | Thermal Camera | Handheld Temperature Measurement: Minimum - 25°C, Maximum +300°C Temperature Scale: Centigrade, Fahrenheit Accuracy: ±2 °C Display: 2.4 inch LCD (320x240 px) Internal storage for up to 50,000 images Rechargeable Li-ion battery | Electronic Instruments | Brochure with picture and data sheet | - Checking the conformity with the quantity including parts and accessories - Checking the conformity of hardware vis-a-vis offered specifications - Functionality testing | 1 Year | Yes | Yes | 5 | units |





| Item Code | Item Name | Agency Specification | Classification | Test Parameters (Post Evaluation) | (inspection and | Onsite Warranty (Parts and Service) | Training | English Manual | Qty | Uni |
|--------------|----------------------|---|---------------------------------------|---|--|-------------------------------------|----------|-------------------|-----|------|
| 05-005 | Soldering Station | Data: Input Voltage: AC 110~127V 60Hz/ 220~240V 50Hz Max power consumption: 1200W Preheating Station Temperature Range: 50 ~ 400 °C Temperature Stability ±2 °C Display Type: LED, any color Preheat Area: 120*120mm Hot Air Station Airflow type brushless fan spiral out wind Air Flow ≤120L/min Temperature Range 100 ~ 480 °C Temperature Stability ±1 °C Display Type: LED, any color Handle cable length ≥100cm Soldering Iron Station Temperature Range 200 ~ 480 °C Soldering iron | Tools and Measuring Instruments | Brochure with picture and data sheet | - Checking the conformity with the quantity including parts and accessories - Checking the conformity of hardware vis-a-vis offered specifications - Functionality testing | 1 Year | N/A | N/A | 10 | sets |

I hereby commit to comply and deliver all the above requirements in accordance with the above stated schedule.



Name of Company/Bidder Signature over Printed Name of Authorized Representative

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k

Date



Technical Specifications

Lot 6 : Hand Tools and Measuring Instruments

APPROVED BUDGET Seven Hundred Four Thousand Two Hundred Twenty-

FOR THE CONTRACT : Six Pesos and 89/100 (\$\mathbb{P}704,226.89)

| Item Code | Item Name | Agency Specification | Qty | Unit | Statement of Compliance* | Make Brand / Model | Reference |
|--------------|------------------------------------|--|-----|------|--------------------------|--------------------------|-----------|
| 06- 001 | Multi weld plier | Kindly refer to the technical specifications attached as Annex B6. | 25 | pcs | | | |
| 06- 002 | Tap and Dies sets | Kindly refer to the technical specifications attached as Annex B6. | 3 | sets | | | |
| 06- 003 | Combination Square | Kindly refer to the technical specifications attached as Annex B6. | 25 | pcs | | | |
| 06- 004 | Try Square | Kindly refer to the technical specifications attached as Annex B6. | 20 | pcs | | | |
| 06- 005 | Crimping Tool | Kindly refer to the technical specifications attached as Annex B6. | 5 | pcs | | | |
| 06- 006 | Screwdriver sets (precision) | Kindly refer to the technical specifications attached as Annex B6. | 7 | sets | | | |
| 06- 007 | Allen Wrench | Kindly refer to the technical specifications attached as Annex B6. | 12 | sets | | | |
| 06- 008 | Socket Wrench | Kindly refer to the technical specifications attached as Annex B6. | 12 | sets | | | |
| 06- 009 | Digital Vernier caliper | Kindly refer to the technical specifications attached as Annex B6. | 15 | pcs | | | |







| Item Name | Agency Specification | Qty | Unit | Statement of Compliance* | Make Brand / Model | Reference |
|------------------------------|--|--|--|--|------------------------------------|--|
| Analog Vernier caliper | Kindly refer to the technical specifications attached as Annex B6. | 15 | pcs | | | |
| Bearing puller | Kindly refer to the technical specifications attached as Annex B6. | 5 | pcs | | | |
| Screwdriver sets | Kindly refer to the technical specifications attached as Annex B6. | 10 | sets | | | |
| Clamp On Meter | Kindly refer to the technical specifications attached as Annex B6. | 5 | sets | | | |
| Pipe Bender, 3/4" | Kindly refer to the technical specifications attached as Annex B6. | 6 | pcs | | | |
| Pipe Bender, 1/2-1" | Kindly refer to the technical specifications attached as Annex B6. | 5 | pcs | | | |
| Pipe Threader | Kindly refer to the technical specifications attached as Annex B6. | 2 | pcs | | | |
| Pipe Cutter | Kindly refer to the technical specifications attached as Annex B6. | 3 | pcs | | | |
| Pipe Bender, 1/2" | Kindly refer to the technical specifications attached as Annex B6. | 5 | pcs | | | |
| | Analog Vernier caliper Bearing puller Screwdriver sets Clamp On Meter Pipe Bender, 3/4" Pipe Bender, 1/2-1" Pipe Threader Pipe Cutter | Analog Vernier caliper Bearing puller Screwdriver sets Clamp On Meter Kindly refer to the technical specifications attached as Annex B6. Kindly refer to the technical specifications attached as Annex B6. Kindly refer to the technical specifications attached as Annex B6. Kindly refer to the technical specifications attached as Annex B6. Kindly refer to the technical specifications attached as Annex B6. Kindly refer to the technical specifications attached as Annex B6. Kindly refer to the technical specifications attached as Annex B6. Kindly refer to the technical specifications attached as Annex B6. Kindly refer to the technical specifications attached as Annex B6. Kindly refer to the technical specifications attached as Annex B6. Kindly refer to the technical specifications attached as Annex B6. Kindly refer to the technical specifications attached as Annex B6. Kindly refer to the technical specifications attached as Annex B6. Kindly refer to the technical specifications attached as Annex B6. Kindly refer to the technical specifications attached as Annex B6. | Analog Vernier caliper Analog Vernier caliper Bearing puller Bearing puller Screwdriver sets Kindly refer to the technical specifications attached as Annex B6. Kindly refer to the technical specifications attached as Annex B6. Kindly refer to the technical specifications attached as Annex B6. Kindly refer to the technical specifications attached as Annex B6. Kindly refer to the technical specifications attached as Annex B6. Kindly refer to the technical specifications attached as Annex B6. Kindly refer to the technical specifications attached as Annex B6. Kindly refer to the technical specifications attached as Annex B6. Kindly refer to the technical specifications attached as Annex B6. Kindly refer to the technical specifications attached as Annex B6. Kindly refer to the technical specifications attached as Annex B6. Kindly refer to the technical specifications attached as Annex B6. Kindly refer to the technical specifications attached as Annex B6. Kindly refer to the technical specifications attached as Annex B6. Kindly refer to the technical specifications attached as Annex B6. Kindly refer to the technical specifications attached as Annex B6. Kindly refer to the technical specifications attached as Annex B6. | Analog Vernier caliper Analog Vernier caliper Kindly refer to the technical specifications attached as Annex B6. Kindly refer to the technical specifications attached as Annex B6. Kindly refer to the technical specifications attached as Annex B6. Kindly refer to the technical specifications attached as Annex B6. Clamp On Meter Kindly refer to the technical specifications attached as Annex B6. Kindly refer to the technical specifications attached as Annex B6. Kindly refer to the technical specifications attached as Annex B6. Kindly refer to the technical specifications attached as Annex B6. Kindly refer to the technical specifications attached as Annex B6. Kindly refer to the technical specifications attached as Annex B6. Kindly refer to the technical specifications attached as Annex B6. Kindly refer to the technical specifications attached as Annex B6. Kindly refer to the technical specifications attached as Annex B6. Kindly refer to the technical specifications attached as Annex B6. Kindly refer to the technical specifications attached as Annex B6. Kindly refer to the technical specifications attached as Annex B6. Kindly refer to the technical specifications attached as Annex B6. Kindly refer to the technical specifications attached as Annex B6. | Name Specification Compliance* | Item Name Specification Specification Statement of Compliance* Brand / Model |







| Item Code | Item Name | Agency Specification | Qty | Unit | Statement of Compliance* | Make Brand / Model | Reference |
|--------------|------------------------|--|-----|------|--------------------------|--------------------------|-----------|
| 06- 019 | Combination Wrench | Kindly refer to the technical specifications attached as Annex B6 | 10 | sets | | | |
| 06- 020 | Push-Pull Rule | Kindly refer to the technical specifications attached as Annex B6. | 10 | pcs | | | |
| 06- 021 | Meter Stick | Kindly refer to the technical specifications attached as Annex B6. | 9 | pcs | | | |
| 06- 022 | Pipe Wrench | Kindly refer to the technical specifications attached as Annex B6. | 5 | pcs | | | |
| 06- 023 | Vise Grip, 7" | Kindly refer to the technical specifications attached as Annex B6. | 5 | pcs | | | |
| 06- 024 | Vise Grip, 10" | Kindly refer to the technical specifications attached as Annex B6. | 5 | pcs | | | |
| 06- 025 | Tin Snip, 8" | Kindly refer to the technical specifications attached as Annex B6. | 5 | pcs | | | |
| 06- 026 | Tin Snip, 10" | Kindly refer to the technical specifications attached as Annex B6. | 5 | pcs | | | |
| 06- 027 | Ball Peen Hammer | Kindly refer to the technical specifications attached as Annex B6. | 10 | pcs | | | |
| 06- 028 | Rubber Mallet | Kindly refer to the technical specifications attached as Annex B6. | 10 | pcs | | | |
| 06- 029 | Hack Saw with Blade | Kindly refer to the technical specifications attached as Annex B6. | 10 | sets | | | |







| Item Code | Item Name | Agency Specification | Qty | Unit | Statement of Compliance* | Make Brand / Model | Reference |
|--------------|------------|--|-----|------|--------------------------|--------------------------|-----------|
| 06- 030 | Steel Rule | Kindly refer to the technical specifications attached as Annex B6. | 9 | pcs | | | |

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| I hereby commit to comply an the above stated schedule. | | | | | | | | | |
|---|--|------|--|--|--|--|--|--|--|
| Name of Company/Bidder | Signature over Printed Name of Authorized Representative | Date | | | | | | | |



ANNEX B6

| Item Code | Item Name | Agency Specification | Classification | Test Parameters (Post Evaluation) | Test Parameters (Inspection and Acceptance) | Onsite Warranty (Parts and Service) | Training | English Manual | Qty | Unit |
|--------------|---------------------|---|---------------------------------------|---|--|---|----------|-------------------|-----|------|
| 06-001 | Multi weld plier | - Overall length: 8", Metal - Handle finish: non-slip grip handle | Tools and Measuring Instruments | Brochure with picture and data sheet | - Checking the conformity with the quantity including parts and accessories - Checking the conformity of hardware vis-a-vis offered specifications - Functionality testing - 6 feet drop on concrete test, head first, ten times, the head of the item should not break/deform. Scratch or kink on the shaft/handle of the item is still acceptable. | 1 Year | N/A | N/A | 25 | pcs |
| 06-002 | | Number of Pieces: 52 Set Contents Handheld Taps: M3; M4; M5; M6; M8; M10; M12; M14; M16; M18; M20 Cutting Die For Taps: M3; M4; M5; M6; M8; M10; M12; M14; M16; M18; M20 Adjustable Tap Wrench: Sizes 1 and 3 Cutting Die Holder 20 x 5; 20 x 7; 25 x 9; 30 x 11; 38 x 14; 45 x 18 Guide: 1-7 Material: HSS | Tools and Measuring Instruments | Brochure with picture and data sheet | - Checking the conformity with the quantity including parts and accessories - Checking the conformity of hardware vis-a-vis offered specifications - Functionality testing | 1 Year | N/A | N/A | 3 | sets |





| Item Code | Item Name | Agency Specification | Classification | Test Parameters (Post Evaluation) | (Inspection and Acceptance) | Onsite Warranty (Parts and Service) | Training | English Manual | Qty | Unit |
|--------------|--------------------------------|---|---------------------------------------|---|--|-------------------------------------|----------|-------------------|-----|------|
| 06-003 | Combination Square | 300 mm (12 inches) Stainless steel + zinc alloy Combination square set (Blade and Handle) | Tools and Measuring Instruments | Brochure with picture and data sheet | - Checking the conformity with the quantity including parts and accessories - Checking the conformity of hardware vis-a-vis offered specifications - Functionality testing | 1 Year | N/A | N/A | 25 | pcs |
| 06-004 | Try Square | 12" Material: Aluminum Alloy scale 0-90° | Tools and Measuring Instruments | Brochure with picture and data sheet | - Checking the conformity with the quantity including parts and accessories - Checking the conformity of hardware vis-a-vis offered specifications - Functionality testing | 1 Year | N/A | N/A | 20 | pcs |
| 06-005 | Crimping Tool | For terminal lugs Material: High carbon steel alloy Handle: Rubber Suitable terminals: VH/FL/SL 3.96, 4.8, 5.08, 6.3 Crimping Range: 26-16 AWG (0.14-1.5mm) | Instruments | | - Checking the conformity with the quantity including parts and accessories - Checking the conformity of hardware vis-a-vis offered specifications - Functionality testing | 1 Year | N/A | N/A | 5 | pcs |
| LIM-LILIM I | Screwdriver set (precision) | Philips & Standard 6 pcs. per set swivel head handles, plastic Flat Blade Tip: 1.4, 2.0, 2.4, 3.0 mm Philips Blade Tip: 0, 1 | Measuring Instruments | with picture and data | - Checking the conformity with the quantity including parts and accessories - Checking the conformity of hardware vis-a-vis offered specifications - Functionality testing | 1 Year | N/A | N/A | 7 | sets |





| Item Code | Item Name | Agency Specification | Classification | Test Parameters (Post Evaluation) | Test Parameters (Inspection and Acceptance) | Onsite Warranty (Parts and Service) | Training | English Manual | Qty | Unit |
|--------------|------------------|--|---------------------------------------|---|--|---|----------|-------------------|-----|------|
| 06-007 | Allen Wrench | 9 pc Hex Key Set: 1.5 mm, 2.0 mm, 2.5 mm, 3.0 mm, 4.0 mm, 5.0 mm, 6.0 mm, 8.0 mm, 10.0 mm Metric Ball point Rust resistance coating Chrome Vanadium steel | Tools and Measuring Instruments | Brochure with picture and data sheet | - Checking the conformity with the quantity including parts and accessories - Checking the conformity of hardware vis-a-vis offered specifications - Functionality testing | 1 Year | N/A | N/A | 12 | sets |
| 06-008 | Socket Wrench | Chrome Vanadium Steel (Cr-V) Drive: 1/4" Socket points: 12 points Socket size: Metric 10 pcs Socket: 5.5, 6, 7, 8, 9, 10, 11, 12, 13, 14 mm A5T Ratchet Handle 1/4" Universal Joint Spinner Handle: 150 mm (±5mm) Sliding T-Handle: 114 mm (±5mm) Extension bar length: 100 mm (±5mm) Extension bar length: 50 mm (±5mm) With case | Tools and Measuring Instruments | Brochure with picture and data sheet | - Checking the conformity with the quantity including parts and accessories - Checking the conformity of hardware vis-a-vis offered specifications - Functionality testing | 1 Year | N/A | N/A | 12 | sets |







| | Item Code | Item Name | Agency Specification | Classification | Test Parameters (Post Evaluation) | (Inspection and | Onsite Warranty (Parts and Service) | Training | English Manual | Qty | Unit |
|-----|--------------|------------------------------|--|---------------------------------------|---|--|---|----------|-------------------|-----|------|
| 06 | 6-009 | Digital Vernier caliper | Stainless steel Measuring range 0-150 mm English and metric scale Accuracy: 0.01 mm | Tools and Measuring Instruments | Brochure with picture and data sheet | - Checking the conformity with the quantity including parts and accessories - Checking the conformity of hardware vis-a-vis offered specifications - Functionality testing | 1 Year | N/A | N/A | 15 | pcs |
| 06 | | Analog Vernier caliper | Stainless steel Measuring range 0-150 mm English and metric scale | Tools and Measuring Instruments | Brochure with picture and data sheet | - Checking the conformity with the quantity including parts and accessories - Checking the conformity of hardware vis-a-vis offered specifications - Functionality testing | 1 Year | N/A | N/A | 15 | pcs |
| 06- | -011 | Bearing puller | Hydraulic Number of Jaws: 3 Size: 3 inches Spread Capacity: 40-75mm Made of chrome vanadium steel, chrome plated Reversible jaws | Measuring Instruments | with picture and data sheet | - Checking the conformity with the quantity including parts and accessories - Checking the conformity of hardware vis-a-vis offered specifications - Functionality testing | 1 Year | N/A | N/A | 5 | pcs |



Mr

| Item Code | Item Name | Agency Specification | Classification | Test Parameters (Post Evaluation) | Test Parameters (Inspection and Acceptance) | Onsite Warranty (Parts and Service) | Training | English Manual | Qty | Unit |
|--------------|--------------------|--|---------------------------------------|---|--|-------------------------------------|----------|-------------------|-----|------|
| 06-012 | Screwdriver set | 12 pc per set Chrome Vanadium steel bars (engraved) Polypropylene handle Philips: PH1 x 75mm, PH2 x 100mm Pozi: PZ1 x 100mm, PZ2 x 100mm Flared Slotted: 5.5 x 100mm, 6.5 x 150mm, 8 x 175mm Parallel Slotted: 4 x 100mm, 5.5 x 100mm Torx: T15 x 100mm, T20 x 100mm, T25 x 100mm | Tools and Measuring Instruments | Brochure with picture and data sheet | - Checking the conformity with the quantity including parts and accessories - Checking the conformity of hardware vis-a-vis offered specifications - Functionality testing | 1 Year | N/A | N/A | 10 | sets |
| 06-013 | Clamp On Meter | AC Current: 600-1000A DC Current: 600-1000A AC Voltage: 750V DC Voltage: 1000V Resistance: 60MΩ Frequency: 20MHz Display count: 6000 Auto range/Diode Jaw opening: at least 45mm Continuity buzzer Data hold/MAX Low battery indication Power: 9V battery Accessories: test leads, output cable | Electronic Instruments | Brochure with picture and data sheet | - Checking the conformity with the quantity including parts and accessories - Checking the conformity of hardware vis-a-vis offered specifications - Functionality testing | 1 Year | N/A | N/A | 5 | sets |





| Item Code | Item Name | Agency Specification | Classification | Test Parameters (Post Evaluation) | (Inspection and Acceptance) | Onsite Warranty (Parts and Service) | Training | English Manual | Qty | Unit |
|--------------|------------------------|---|---------------------------------------|---|--|-------------------------------------|----------|-------------------|-----|------|
| 06-014 | Pipe Bender, 3/4" | Manual Capacity: 3/4" thin wall pipe Material: Cast iron | Tools and Measuring Instruments | Brochure with picture and data sheet | - Checking the conformity with the quantity including parts and accessories - Checking the conformity of hardware vis-a-vis offered specifications - Functionality testing | 1 Year | N/A | N/A | 6 | pcs |
| 06-015 | Pipe Bender, 1/2-1" | Manual Capacity: 1/2-1" thick wall pipe Material: Cast iron | Tools and Measuring Instruments | Brochure with picture and data sheet | - Checking the conformity with the quantity including parts and accessories - Checking the conformity of hardware vis-a-vis offered specifications - Functionality testing | 1 Year | N/A | N/A | 5 | pcs |
| 06-016 | Pipe Threader | Manual size: 1/2", 3/4", 1", 1 1/4", 1 1/2", 2" includes die heads, ratchet assembly, ratchet handle and alloy dies with case | Measuring | with picture and data | - Checking the conformity with the quantity including parts and accessories - Checking the conformity of hardware vis-a-vis offered specifications - Functionality testing | 1 Year | N/A | N/A | 2 | pcs |
| 06-017 | Pipe Cutter | Steel Pipe Cutter Wheels Pipe Capacity: 2mm - 50mm | Measuring Instruments | with picture and data sheet | - Checking the conformity with the quantity including parts and accessories - Checking the conformity of hardware vis-a-vis offered specifications - Functionality testing | 1 Year | N/A | N/A | 3 | pcs |







| Item Code | Item Name | Agency Specification | Classification | Test Parameters (Post Evaluation) | (Inspection and | Onsite Warranty (Parts and Service) | Training | English Manual | Qty | Unit |
|--------------|-----------------------|--|---------------------------------------|---|--|-------------------------------------|----------|-------------------|-----|------|
| 06-018 | Pipe Bender, 1/2" | Manual Capacity: 1/2" thin wall pipe Material: Cast iron | Tools and Measuring Instruments | Brochure with picture and data sheet | - Checking the conformity with the quantity including parts and accessories - Checking the conformity of hardware vis-a-vis offered specifications - Functionality testing | 1 Year | N/A | N/A | 5 | pcs |
| 06-019 | Combination Wrench | 20 Piece Wrench Set, SAE & Metric Open End and Box End SAE sizes: 1/4, 5/16, 11/32, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16 and 3/4 inches, Metric sizes: 6, 8, 10, 12, 13, 14, 15, 16, 17, 18 mm Material: Alloy Steel | Tools and Measuring Instruments | Brochure with picture and data sheet | - Checking the conformity with the quantity including parts and accessories - Checking the conformity of hardware vis-a-vis offered specifications - Functionality testing | 1 Year | N/A | N/A | 10 | sets |
| 06-020 | Push-Pull Rule | Measuring standard: Metric & English Blade length: 8 m Blade width: Min. 25 mm (1") High impact ABS case with rubber coated | Instruments | Brochure with picture and data sheet | - Checking the conformity with the quantity including parts and accessories - Checking the conformity of hardware vis-a-vis offered specifications - Functionality testing | 1 Year | N/A | N/A | 10 | pcs |
| 06-021 | Meter Stick | Color: Yellow Material: Wood Length: 1 meter | Measuring Instruments | with picture and data sheet | - Checking the conformity with the quantity including parts and accessories - Checking the conformity of hardware vis-a-vis offered specifications - Functionality testing | 1 Year | N/A | N/A | 9 | pcs |



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| Item Code | Item Name | Agency Specification | Classification | Test Parameters (Post Evaluation | (Inspection and | Onsite Warranty (Parts and Service) | Training | English Manual | Qty | Uni |
|--------------|---------------|---|---------------------------------------|---|--|-------------------------------------|----------|-------------------|-------|-----|
| 06-022 | Pipe Wrench | Length= 12" Material: Cast Iron Max Jaw opening: 40-55 mm | Tools and Measuring Instruments | Brochure with picture and data sheet | - Checking the conformity with the quantity including parts and accessories - Checking the conformity of hardware vis-a-vis offered specifications - Functionality testing | 1 Year | N/A | N/A | 5 | pcs |
| 06-023 | Vise Grip, 7" | 7" straight jaw Hard Steel | | Brochure with picture and data sheet | - Checking the conformity with the quantity including parts and accessories - Checking the conformity of hardware vis-a-vis offered specifications - Functionality testing | 1 Year | N/A | N/A | 5 | pcs |
| 06-024 | | 10" straight jaw Chrome plated insulated handle | Measuring Instruments | Brochure with picture and data sheet | - Checking the conformity with the quantity including parts and accessories - Checking the conformity of hardware vis-a-vis offered specifications - Functionality testing | 1 Year | N/A | N/A | 5 | pcs |
| 06-025 | | 8" metal cutting forged steel | Measuring Instruments | with picture and data sheet | - Checking the conformity with the quantity including parts and accessories - Checking the conformity of hardware vis-a-vis offered specifications - Functionality testing | 1 Year | N/A | N/A | 5 1 | ocs |





| Item Code | Item Name | Agency Specification | Classification | Test Parameters (Post Evaluation) | (Inspection and Acceptance) | Onsite Warranty (Parts and Service) | Training | English Manual | | Unit |
|--------------|------------------------|---|---------------------------------------|---|--|-------------------------------------|----------|-------------------|----|------|
| 06-026 | Tin Snip, 10" | 10" metal cutting forged steel | Tools and Measuring Instruments | Brochure with picture and data sheet | - Checking the conformity with the quantity including parts and accessories - Checking the conformity of hardware vis-a-vis offered specifications - Functionality testing | 1 Year | N/A | N/A | 5 | pcs |
| 06-027 | Ball Peen Hammer | 12 oz Drop forged carbon steel head Handle material: Wood | Tools and Measuring Instruments | Brochure with picture and data sheet | - Checking the conformity with the quantity including parts and accessories - Checking the conformity of hardware vis-a-vis offered specifications - Functionality testing | 1 Year | N/A | N/A | 10 | pcs |
| 06-028 | Rubber Mallet | ● 16 oz (453.6 grams) ● Wooden Handle | Measuring Instruments | with picture and data | - Checking the conformity with the quantity including parts and accessories - Checking the conformity of hardware vis-a-vis offered specifications - Functionality testing | 1 Year | N/A | N/A | 10 | pcs |
| UD-UZY (| Hack Saw with Blade | Adjustable aluminum alloy frame with grip handle 90° adjustable blade angle 12 inches bi-metal hacksaw blade 24 TPI | Measuring | with picture and data sheet | - Checking the conformity with the quantity including parts and accessories - Checking the conformity of hardware vis-a-vis offered specifications - Functionality testing | 1 Year | N/A | N/A | 10 | sets |







| item Code | Item Name | Agency Specification | Classification | Test Parameters (Post Evaluation) | Test Parameters (Inspection and Acceptance) | Onsite Warranty (Parts and Service) | Training | English Manual | Qty | Unit |
|--------------|------------|---|----------------|--|--|-------------------------------------|----------|-------------------|-----|------|
| 06-030 | Steel Rule | Length= 12 in / 30cm English and metric measurement Material: Stainless steel | Measuring | with picture | - Checking the conformity with the quantity including parts and accessories - Checking the conformity of hardware vis-a-vis offered specifications - Functionality testing | 1 Year | N/A | N/A | 9 | pcs |

| I hereby commit to comply and deliver | Signature over Printed Name of Authorized Representative Date | |
|---------------------------------------|--|------|
| | | |
| Name of Company/Bidder | Signature over Printed Name of Authorized Representative | Date |





Technical Specifications

Lot 7 : Fabrication Tools, Equipment and Supplies

APPROVED BUDGET
FOR THE CONTRACT
One Million Four Hundred Seventeen Thousand Nine
Hundred Eight Pesos and 06/100 (₱1,417,908.06)

| Item Code | Item Name | Agency Specification | Qty | Unit | Statement of Compliance* | Make Brand / Model | Reference |
|--------------|-------------------------|--|-----|------|--------------------------|--------------------------|-----------|
| 07- 001 | Acrylic sheet 2.0mm | Kindly refer to the technical specifications attached as Annex B7. | 20 | pcs | | | |
| 07- 002 | Acrylic sheet 3.0 mm | Kindly refer to the technical specifications attached as Annex B7. | 20 | pcs | | | |
| 07- 003 | Acrylic sheet 4.5 mm | Kindly refer to the technical specifications attached as Annex B7. | 20 | pcs | | | |
| 07- 004 | Acrylic sheet 5.0 mm | Kindly refer to the technical specifications attached as Annex B7. | 20 | pcs | | | |
| 07- 005 | Acrylic sheet 6.0 mm | Kindly refer to the technical specifications attached as Annex B7. | 20 | pcs | | | |
| 07- 006 | Acrylic sheet 10 mm | Kindly refer to the technical specifications attached as Annex B7. | 20 | pcs | | | |
| 07- 007 | Acrylic sheet 12 mm | Kindly refer to the technical specifications attached as Annex B7. | 20 | pcs | | / | |





| Item Code | Item Name | Agency Specification | Qty | Unit | Statement of Compliance* | Make Brand / Model | Reference |
|--------------|---|--|-----|-------|--------------------------|--------------------------|-----------|
| 07- 008 | Acrylic sheet, diffuser white, 2 mm | Kindly refer to the technical specifications attached as Annex B7. | 20 | pcs | | | |
| 07- 009 | Acrylic sheet, diffuser white, 3 mm | Kindly refer to the technical specifications attached as Annex B7. | 20 | pcs | | | |
| 07- 010 | Band Saw Machine | Kindly refer to the technical specifications attached as Annex B7. | 2 | units | | | |
| 07- 011 | Table Saw Machine with Stand | Kindly refer to the technical specifications attached as Annex B7. | 5 | units | | | |
| 07- 012 | Miter Saw | Kindly refer to the technical specifications attached as Annex B7. | 5 | units | | | |
| 07- 013 | Drill Press Machine | Kindly refer to the technical specifications attached as Annex B7. | 5 | units | | | |
| 07- 014 | Jig Saw | Kindly refer to the technical specifications attached as Annex B7. | 5 | units | | | |
| 07- 015 | Cordless Portable Planer | Kindly refer to the technical specifications attached as Annex B7. | 5 | units | | | |
| 07- 016 | Cordless Sander | Kindly refer to the technical specifications attached as Annex B7. | 10 | units | | | |



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| Item Code | Item Name | Agency Specification | Qty | Unit | Statement of Compliance* | Make Brand / Model | Reference |
|--------------|--------------------|--|-----|-------|--------------------------|--------------------------|-----------|
| 07- 017 | Circular Saw | Kindly refer to the technical specifications attached as Annex B7. | 5 | units | | | |
| 07- 018 | Tube Bender Kit | Kindly refer to the technical specifications attached as Annex B7. | 5 | sets | | | |

^{*} Bidders must state here either "Comply" or "Not Comply" against each of the individual parameters of each Specification stating the corresponding performance parameter of the equipment offered. Statements of "Comply" or "Not Comply" must be supported by evidence in a Bidders Bid and cross-referenced to that evidence. Evidence shall be in the form of manufacturer's un-amended sales literature, unconditional statements of specification and compliance issued by the manufacturer, samples, independent test data etc., as appropriate. A statement that is not supported by evidence or is subsequently found to be contradicted by the evidence presented will render the Bid under evaluation liable for rejection. A statement either in the Bidder's statement of compliance or the supporting evidence that is found to be false either during Bid evaluation, post-qualification or the execution of the Contract may be regarded as fraudulent and render the Bidder or supplier liable for prosecution subject to the applicable laws and issuances.

I hereby commit to comply and deliver all the above requirements in accordance with

| the above stated schedule. | | | |
|----------------------------|--------------------------------|------|--|
| | | | \ < |
| Name of Company/Bidder | Signature over Printed Name of | Date | $- \angle\!$ |

Authorized Representative



ANNEX B7

| Item Code | Item Name | Agency Specification | Classification | Test Parameters (Post Evaluation) | Test Parameters (Inspection and Acceptance) | Onsite Warranty (Parts and Service) | Training | English Manual | Qty | Unit |
|--------------|-------------------------|--|----------------|--------------------------------------|---|-------------------------------------|----------|-------------------|-----|------|
| 07-001 | Acrylic sheet 2.0 mm | Clear Thickness : 2.0 mm Dimension : 4ft x 8ft | Consumables | Brochure with picture and data sheet | - Checking the conformity with the quantity and material - Measurement of dimension | 1 Year | N/A | N/A | 20 | pcs |
| 07-002 | Acrylic sheet 3.0 mm | Clear Thickness : 3.0 mm Dimension : 4ft x 8ft | Consumables | Brochure with picture and data sheet | - Checking the conformity with the quantity and material - Measurement of dimension | 1 Year | N/A | N/A | 20 | pcs |
| 07-003 | Acrylic sheet 4.5 mm | Clear Thickness : 4.5 mm Dimension : 4ft x 8ft | Consumables | Brochure with picture and data sheet | - Checking the conformity with the quantity and material - Measurement of dimension | 1 Year | N/A | N/A | 20 | pcs |
| 07-004 | Acrylic sheet 5.0 mm | Clear Thickness : 5.0 mm Dimension : 4ft x 8ft | Consumables | Brochure with picture and data sheet | - Checking the conformity with the quantity and material - Measurement of dimension | 1 Year | N/A | N/A | 20 | pcs |
| 07-005 | Acrylic sheet 6.0 mm | Clear Thickness : 6.0 mm Dimension : 4ft x 8ft | Consumables | Brochure with picture and data sheet | - Checking the conformity with the quantity and material - Measurement of dimension | 1 Year | N/A | N/A | 20 | pcs |
| 07-006 | Acrylic sheet 10 mm | Clear Thickness : 10 mm Dimension : 4ft x 8ft | Consumables | Brochure with picture and data sheet | - Checking the conformity with the quantity and material - Measurement of dimension | 1 Year | N/A | N/A | 20 | pcs |







| | Item Code | Item Name | Agency Specification | Classification | Test Parameters (Post Evaluation) | Test Parameters (Inspection and Acceptance) | Onsite Warranty (Parts and Service) | Training | English Manual | Qty | Unit |
|---|--------------|---|--|----------------|--------------------------------------|--|-------------------------------------|----------|-------------------|-----|-------|
| C | 7-007 | Acrylic sheet 12 mm | Clear Thickness : 12 mm Dimension : 4ft x 8ft | Consumables | Brochure with picture and data sheet | - Checking the conformity with the quantity and material - Measurement of dimension | 1 Year | N/A | N/A | 20 | pcs |
| C | | Acrylic sheet, diffuser white, 2 mm | Diffuser white Thickness : 2.0 mm Dimension : 4ft x 8ft | Consumables | Brochure with picture and data sheet | - Checking the conformity with the quantity and material - Measurement of dimension | 1 Year | N/A | N/A | 20 | pcs |
| C | | Acrylic sheet, diffuser white, 3 mm | Diffuser white Thickness : 3.0 mm Dimension : 4ft x 8ft | Consumables | Brochure with picture and data sheet | Checking the conformity with the quantity and material Measurement of dimension | 1 Year | N/A | N/A | 20 | pcs |
| | 07-010 | Band Saw Machine | Vertical Supply: 220- 240V~60Hz Continuous rating Input: 900 W Max cutting capacity: 165mm (6-1/2") Blade: Replaceable for Wood or Metal Throat: 305mm (12") Blade speed High: 3280 ft/min Low: 1,640 ft/min | Equipment | Brochure with picture and data sheet | - Checking the conformity with the quantity including parts and accessories - Checking the conformity of hardware vis-a-vis offered specifications - Functionality testing | 1 Year | Yes | Yes | 2 | units |





| Item Code | Item Name | Agency Specification | Classification | Test Parameters (Post Evaluation) | Test Parameters (Inspection and Acceptance) | Onsite Warranty (Parts and Service) | Training | English Manual | Qty | Unit |
|--------------|------------------------------------|---|----------------|--|--|-------------------------------------|----------|-------------------|-----|-------|
| 07-011 | Table Saw Machine with Stand | Supply: 220-240 VAC 60Hz single phase Power: 1800 W Bevel Capacity: 0 - 45° Max Cutting Capacity at 45°: 56 mm Max Cutting Capacity at 90°: 76 mm No Load Speed: 4800 rpm Blade Size: 10" / 254 mm Table Size: 610 x 508 mm Includes Extra Carbon Brush Includes Blade for Cutting Wood With 4 Wheels For Easy Transportation | | Brochure with picture and data sheet | - Checking the conformity with the quantity including parts and accessories - Checking the conformity of hardware vis-a-vis offered specifications - Functionality testing | 1 Year | Yes | Yes | 5 | units |





| Item Code | item Name | Agency Specification | Classification | Test Parameters (Post Evaluation) | Test Parameters (Inspection and Acceptance) | Onsite Warranty (Parts and Service) | Training | English Manual | Qty | Unit |
|--------------|------------------------|---|---------------------------------------|--------------------------------------|--|-------------------------------------|----------|-------------------|-----|-------|
| 07-012 | Miter Saw | Cordless Voltage: 20V No-load speed: 3000rpm Blade size: 210mm (8-1/4")*25.4mm Cutting capacity - 0°x0°: 120*60mm, - 45°x0°: 83*60mm - 0°*45°: 120*34mm - 45°*45°: 83*34mm Lithium-lon 2.0Ah battery Battery and Charger fits to all Cordless Tools (Circular Saw: Item 07-017, Jig Saw: Item 07-014, and Cordless Sander: Item 07-016) | Tools and Measuring Instruments | Brochure with picture and data sheet | - Checking the conformity with the quantity including parts and accessories - Checking the conformity of hardware vis-a-vis offered specifications - Functionality testing | 1 Year | Yes | Yes | 5 | units |
| 07-013 | Drill Press Machine | Voltage: 220-240V~60Hz Input Power: 1/3 - 1/2 HP Max drilling capacity: 13mm No-load speed: 3450 rpm Spindle speed settings: 5 Spindle travel: 50mm Table size: 160*160mm Machine height: 580mm | Tools and Measuring Instruments | Brochure with picture and data sheet | - Checking the conformity with the quantity including parts and accessories - Checking the conformity of hardware vis-a-vis offered specifications - Functionality testing | 1 Year | Yes | Yes | 5 | units |







| Item Code | Item Name | Agency Specification | Classification | Test Parameters (Post Evaluation) | Test Parameters (Inspection and Acceptance) | Onsite Warranty (Parts and Service) | Training | English Manual | Qty | Unit |
|--------------|--------------------------------|--|---------------------------------------|--------------------------------------|--|-------------------------------------|----------|-------------------|-----|-------|
| 07-014 | Jig Saw | Voltage: 20V No-load speed: 2600 rpm Cutting capacity Metal: 8mm Wood: 80mm Lithium-lon 2.0Ah battery Battery and Charger fits to all Cordless Tools (Circular Saw: Item 07-17, Miter Saw: Item 07-012 and Cordless Sander: Item 07-016) | Tools and Measuring Instruments | Brochure with picture and data sheet | - Checking the conformity with the quantity including parts and accessories - Checking the conformity of hardware vis-a-vis offered specifications - Functionality testing | 1 Year | Yes | Yes | 5 | units |
| 07-015 | Cordless Portable Planer | No Load Speed: 14,000 Rpm Planning Width: 3 1/4 In Planning Depth: 0-2.0 mm Voltage: 18V - 2-blade cutter head with double edge carbide blades | Tools and Measuring Instruments | Brochure with picture and data sheet | - Checking the conformity with the quantity including parts and accessories - Checking the conformity of hardware vis-a-vis offered specifications - Functionality testing | 1 Year | Yes | Yes | 5 | units |





| Item Code | Item Name | Agency Specification | Classification | Test Parameters (Post Evaluation) | Test Parameters (Inspection and Acceptance) | Onsite Warranty (Parts and Service) | Training | English Manual | Qty | Unit |
|--------------|--------------------|--|---------------------------------------|--------------------------------------|--|-------------------------------------|----------|-------------------|-----|-------|
| 07-016 | Cordless Sander | Voltage: 20V No-Load Speed: 10000/min Bottom Bass: 125mm Lithium-Ion 2.0Ah battery Battery and Charger fits to all Cordless Tools (Circular Saw: Item 07- 017, Jig Saw: Item 07- 014, and Miter Saw: Item 07-012) | Tools and Measuring Instruments | Brochure with picture and data sheet | - Checking the conformity with the quantity including parts and accessories - Checking the conformity of hardware vis-a-vis offered specifications - Functionality testing | 1 Year | Yes | Yes | 10 | units |
| 07-017 | Circular Saw | Voltage: 20V No-load speed:3600rpm Blade diameter:140mm Max Cutting capacity: 45°degree: 28mm 90°degree: 40mm Adjustable cutting depth Adjustable bevel cutting Lithium-lon 2.0Ah battery Battery and Charger fits to all Cordless Tools (Jig Saw: Item 07-014, Miter Saw: Item 07-012 and Cordless Sander: Item 07-016) | Tools and Measuring Instruments | Brochure with picture and data sheet | - Checking the conformity with the quantity including parts and accessories - Checking the conformity of hardware vis-a-vis offered specifications - Functionality testing | 1 Year | Yes | Yes | 5 | units |





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| Item Code | item Name | Agency Specification | Classification | Test Parameters (Post Evaluation) | Test Parameters (Inspection and Acceptance) | Onsite Warranty (Parts and Service) | Training | English Manual | Qty | Unit |
|--------------|--------------------|---|--------------------------|--------------------------------------|--|-------------------------------------|----------|-------------------|-----|------|
| 07-018 | Tube Bender Kit | Compatible with TUBE SIZES: 1/4", 5/16", 3/8", 1/2", 5/8", 3/4", 7/8" Capable for bending of up to 90 deg. of soft copper, aluminum and light wall hydraulic tubing Carrying box included | Measuring Instruments | Brochure with picture and data sheet | - Checking the conformity with the quantity including parts and accessories - Checking the conformity of hardware vis-a-vis offered specifications - Functionality testing | 1 Year | N/A | N/A | 5 | sets |

| ereby commit to comply and delive | r all the above requirements in accordance with the above stated sched | ule. |
|-----------------------------------|--|------|
| | | |
| Name of Company/Bidder | Signature over Printed Name of Authorized Representative | Date |





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Technical Specifications

Lot 8 : IT Equipment

APPROVED BUDGET
FOR THE CONTRACT

Thirty-Nine Million Two Hundred Ninety-Five Thousand
Three Hundred Fifty-Four Pesos and 68/100

(\$29,295,354.68)

| Item Code | Item Name | Agency Specification | Qty | Unit | Statement of Compliance* | Make Brand / Model | Reference | |
|--------------|--|--|-----|-------|--------------------------|--------------------------|-----------|--|
| 08- 001 | Computer Tower Workstation 32 GB with Dual Monitor | Kindly refer to the technical specifications attached as Annex B8. | 28 | units | | | | |
| 08- 002 | Laptop i9 | Kindly refer to the technical specifications attached as Annex B8. | 65 | sets | | | | |
| 08- 003 | Laptop | Kindly refer to the technical specifications attached as Annex B8. | 10 | sets | | | | / |
| 08- 004 | Graphics Pen Tablet | Kindly refer to the technical specifications attached as Annex B8. | 28 | sets | | | | |
| 08- 005 | UPS 600W | Kindly refer to the technical specifications attached as Annex B8. | 28 | sets | | | | |
| 08- 006 | A3 Colour Laser Printer | Kindly refer to the technical specifications attached as Annex B8. | 2 | sets | | | | |
| 08- 007 | A4 Printer | Kindly refer to the technical specifications attached as Annex B8. | 11 | sets | | | | A CONTRACTOR OF THE CONTRACTOR |





| Item Code | Item Name | Agency Specification | Qty | Unit | Statement of Compliance* | Make Brand / Model | Reference |
|--------------|---------------------------|--|-----|-------|--------------------------|--------------------------|-----------|
| 08- 008 | CAD Plotter | Kindly refer to the technical specifications attached as Annex B8. | 1 | set | | | |
| 08- 009 | Label Printer | Kindly refer to the technical specifications attached as Annex B8. | 5 | units | | | |
| 08- 010 | Flash Drive | Kindly refer to the technical specifications attached as Annex B8. | 25 | pcs | | | |
| 08- 011 | External Drive Storage | Kindly refer to the technical specifications attached as Annex B8. | 10 | pcs | | | |
| 08- 012 | Wired Headset | Kindly refer to the technical specifications attached as Annex B8. | 28 | sets | | | |
| 08- 013 | 24U rack cabinet | Kindly refer to the technical specifications attached as Annex B8. | 1 | set | | | |

^{*} Bidders must state here either "Comply" or "Not Comply" against each of the individual parameters of each Specification stating the corresponding performance parameter of the equipment offered. Statements of "Comply" or "Not Comply" must be supported by evidence in a Bidders Bid and cross-referenced to that evidence. Evidence shall be in the form of manufacturer's un-amended sales literature, unconditional statements of specification and compliance issued by the manufacturer, samples, independent test data etc., as appropriate. A statement that is not supported by evidence or is subsequently found to be contradicted by the evidence presented will render the Bid under evaluation liable for rejection. A statement either in the Bidder's statement of compliance or the supporting evidence that is found to be false either during Bid evaluation, post-qualification or the execution of the Contract may be regarded as fraudulent and render the Bidder or supplier liable for prosecution subject to the applicable laws and issuances.

I hereby commit to comply and deliver all the above requirements in accordance with the above stated schedule.

| Name of Company/Bidder | Signature over Printed Name of | Date |
|------------------------|--------------------------------|------|
| - · | Authorized Representative | |



ANNEX B8

| Item Code | Item Name | Agency Specification | Classification | Test Parameters (Post Evaluation) | Test Parameters (Inspection and Acceptance) | Onsite Warranty (Parts and Service) | Training | English Manual | Qty | Unit |
|--------------|---|---|----------------|---|---|-------------------------------------|----------|-------------------|-----|-------|
| 08-001 | Computer Tower Workstation 32 GB with Dual Monitor | Intel Xeon Processor W-2225 (4 cores, 4.1GHz to 4.6GHz Turbo, 8.25MB Cache, 105W) Intel Integrated controller (RST-e) with 1-2 Front FlexBay NVMe PCle Drives 950W PCle FlexBay Chassis CL Slim ODD bezel, 100% tie with slim ODD Precision TPM 32GB 2x16GB DDR4 2933MHz RDIMM ECC Memory 2 TB, M.2, PCle NVMe, SSD, Class 40 2 TB, 7200 RPM, 3.5-inch, SATA Nvidia T400, 2GB, 3 mDP to DP adapter CPU Heatsink 3.5" 2TB 7200rpm SATA AG-Enterprise Hard Drive M.2 carrier Intel NVME PCle SSD (Front PCle FlexBay) Regulatory Label, APCC, 950W Firmware and Driver for Intel 8265 Wi-Fi + Bluetooth module Intel Dual Band Wireless AC 8265 (802.11ac) 2x2 + Bluetooth module 125 V Power Cord Wired Mouse and Keyboard (English) Applications for Windows Optimizer for Precision Windows 10 Pro for Workstations (up to 4 cores, Includes Windows 11 Pro License) English Endpoint Security (EPS) - 1 year subscription Anti-Virus, Endpoint Security, Anti | Equipment | Brochure with picture and data sheet | - Check package completeness - Functionality test | 1 Year | Yes | Yes | 28 | units |





| Item Name | Agency Specification | Classification | Test Parameters (Post Evaluation) | Test Parameters (Inspection and Acceptance) | Onsite Warranty (Parts and Service) | Training | English Manual | Qty | Unit |
|-----------|---|--|--|---|---|--|--|--|---|
| | Ransomware, Email Protection, IDS/IPS Protection, Firewall Protection, Phishing Protection, Browsing Protection, SMS Notification, Vulnerability Scan, Roaming Platform, GoDeep.Al, Asset Management, Spam Protection, Web Filtering, Advanced Device Control, Application Control, Tuneup, File Activity Monitor, Patch Management, Data Loss Prevention | | | | | | | | |
| | Monitor: 2 x 27 inches Panel Type: IPS Native Resolution: QHD 2560 x 1440 at 60 Hz with stand Warranty: 3 years on parts, labor and onsite support | | | | | | | | |
| | Online Double Conversion Tower UPS Capacity: 2000VA/1800W Nominal Voltage: 220-240VAC Input Voltage: 110-300VAC Frequency Range: 40-70Hz Power Factor: ≧0.99 Transfer Time: Zero Output Socket: 4 x Universal Type (Surge Protection & Battery Back-Up) Waveform: Pure Sinewaye | | | | | | | | |
| | Item Name | Ransomware, Email Protection, IDS/IPS Protection, Firewall Protection, Phishing Protection, Browsing Protection, SMS Notification, Vulnerability Scan, Roaming Platform, GoDeep.AI, Asset Management, Spam Protection, Web Filtering, Advanced Device Control, Application Control, Tuneup, File Activity Monitor, Patch Management, Data Loss Prevention • Monitor: 2 x 27 inches - Panel Type: IPS - Native Resolution: QHD 2560 x 1440 at 60 Hz - with stand - Warranty: 3 years on parts, labor and onsite support • Online Double Conversion Tower UPS - Capacity: 2000VA/1800W - Nominal Voltage: 220-240VAC - Input Voltage: 110-300VAC - Frequency Range: 40-70Hz - Power Factor: ≧0.99 - Transfer Time: Zero - Output Socket: 4 x Universal Type (Surge | Ransomware, Email Protection, IDS/IPS Protection, Firewall Protection, Phishing Protection, Browsing Protection, SMS Notification, Vulnerability Scan, Roaming Platform, GoDeep.AI, Asset Management, Spam Protection, Web Filtering, Advanced Device Control, Application Control, Tuneup, File Activity Monitor, Patch Management, Data Loss Prevention • Monitor : 2 x 27 inches - Panel Type: IPS - Native Resolution: QHD 2560 x 1440 at 60 Hz - with stand - Warranty : 3 years on parts, labor and onsite support • Online Double Conversion Tower UPS - Capacity: 2000VA/1800W - Nominal Voltage: 220-240VAC - Input Voltage: 110-300VAC - Frequency Range: 40-70Hz - Power Factor: ≧0.99 - Transfer Time: Zero - Output Socket: 4 x Universal Type (Surge Protection & Battery Back-Up) - Waveform: Pure Sinewave | Ransomware, Email Protection, IDS/IPS Protection, Firewall Protection, Phishing Protection, Browsing Protection, SMS Notification, Vulnerability Scan, Roaming Platform, GoDeep.Al, Asset Management, Spam Protection, Web Filtering, Advanced Device Control, Application Control, Tuneup, File Activity Monitor, Patch Management, Data Loss Prevention | Ransomware, Email Protection, IDS/IPS Protection, Firewall Protection, Phishing Protection, Browsing Protection, SMS Notification, Vulnerability Scan, Roaming Platform, GoDeep.Al, Asset Management, Spam Protection, Web Filtering, Advanced Device Control, Application Control, Tuneup, File Activity Monitor, Patch Management, Data Loss Prevention | Item Name Agency Specification Classification Classification Classification Ransomware, Email Protection, IDS/IPS Protection, Firewall Protection, Phishing Protection, Firewall Protection, SMS Notification, Vulnerability Scan, Roaming Platform, GoDeep.Al, Asset Management, Spam Protection, Web Filtering, Advanced Device Control, Application Control, Tuneup, File Activity Monitor, Patch Management, Data Loss Prevention • Monitor : 2 x 27 inches - Panel Type: IPS - Native Resolution: QHD 2560 x 1440 at 60 Hz • with stand - Warranty : 3 years on parts, labor and onsite support • Online Double Conversion Tower UPS - Capacity: 2000VA/1800W - Nominal Voltage: 220-240VAC - Input Voltage: 110-300VAC - Frequency Range: 40-70Hz - Power Factor: ≧0.99 - Transfer Time: Zero - Output Socket: 4 x Universal Type (Surge Protection & Battery Back-Up) - Waveform: Pure Sinewave | Item Name Agency Specification Classification Classification Classification Classification Ransomware, Email Protection, IDS/IPS Protection, Firewall Protection, Phishing Protection, Browsing Protection, SMS Notification, Vulnerability Scan, Roaming Platform, GoDeep, AI, Asset Management, Spam Protection, Web Filtering, Advanced Device Control, Application Control, Tuneup, File Activity Monitor, Patch Management, Data Loss Prevention Monitor: 2 x 27 inches - Panel Type: IPS - Native Resolution: QHD 2560 x 1440 at 60 Hz - with stand - Warranty: 3 years on parts, labor and onsite support Online Double Conversion Tower UPS - Capacity: 2000VA/1800W - Nominal Voltage: 110-300VAC - Frequency Range: 40-70Hz - Power Factor: ≥0.99 - Transfer Time: Zero - Output Socket: 4 x Universal Type (Surge Protection & Battery Back-Up) - Waveform: Pure Sinewave | Item Name Agency Specification Classification Classification Classification Classification Ransomware, Email Protection, IDS/IPS Protection, Firewall Protection, SMS Notification, Vulnerability Scan, Roaming Platform, GoDeep.Al, Asset Management, Spam Protection, Web Filtering, Advanced Device Control, Application Control, Tuneup, File Activity Monitor, Patch Management, Data Loss Prevention • Monitor : 2 x 27 inches - Panel Type: IPS - Native Resolution: QHD 2560 x 1440 at 60 Hz - with stand - Warranty : 3 years on parts, labor and onsite support • Online Double Conversion Tower UPS - Capacity: 2000WA1800W - Nominal Voltage: 110-300VAC - Input Voltage: 110-300VAC - Input Voltage: 110-300VAC - Frequency Range: 40-70Hz - Power Factor: ≧0.99 - Transfer Time: Zero - Output Socket: 4 x Universal Type (Surge Protection & Battery Back-Up) - Waveform: Pure Sinewave | ttem Name Agency Specification Classification Classificati |





| Item Code | Item Name | Agency Specification | Classification | Test Parameters (Post Evaluation) | Test Parameters (Inspection and Acceptance) | Onsite Warranty (Parts and Service) | Training | English Manual | Qty | Unit |
|--------------|-----------|--|----------------|---|--|-------------------------------------|----------|-------------------|-----|------|
| 08-002 | Laptop i9 | Core i9-12900H vPro with NVIDIA RTX A2000 8GB graphics, 24MB cache, 14 cores, 20 threads, 2.50 GHZ to 5.00Ghz, 45W 15.6" FHD +1920 x 1200, 60Hz 16GB, (2x 8GB) DDR5, 4800Mhz, Non-ECC SODIMM M.2 2280 1 TB Gen 4 PCIe x 4 NVME, Solid State Drive 3-cell 56WHr Lithium Ion Battery with Express Charge USB Type-C to USB Type-A/HDMI Dongle NVIDIA RTX A2000, 8GB DDR6 130W E5 Type C Power Adapter (EPEAT) Wifi 6E (6Ghz) AX211 2x2 with Bluetooth Wireless Wireless Intel AX 211 WLAN Driver Windows 10 Pro (Includes Windows 11 Pro License) English Batteries - 1 year warranty Endpoint Security (EPS) - 1 year subscription Anti-Virus, Endpoint Security, Anti Ransomware, Email Protection, IDS/IPS Protection, Firewall Protection, Phishing Protection, Browsing Protection, Phishing Protection, Browsing Protection, Roaming Platform, GoDeep.AI, Asset Management, Spam Protection, Web Filtering, Advanced Device Control, Application Control, Tuneup, File Activity Monitor, Patch Management, Data Loss Prevention Warranty: 3 years on parts, Labor and onsite support | Equipment | Brochure with picture and data sheet | - Measurement of monitor - Functionality test - Checking of specification (offered vs. actual) - Check package completeness - 24 Burn-in test using PassMark | 1 Year | Yes | Yes | 65 | sets |







| Item Code | Item Name | Agency Specification | Classification | Test Parameters (Post Evaluation) | Test Parameters (Inspection and Acceptance) | Onsite Warranty (Parts and Service) | Training | English Manual | Qty | Unit |
|--------------|-----------|--|----------------|---|---|-------------------------------------|----------|-------------------|-----|------|
| 08-003 | Laptop | Processor: Intel Core i7 1165G7, 4 cores 8 threads, 12M cache, up to 4.70 GHz, 11th Gen or higher Memory: 8GB DDR4 Hard Drive: 1TB HDD + 256GB SSD Graphics Card: 2GB MX330 Display: 15.6" IPS, Full HD 1920 x 1080 Gigabit Ethernet Operating System: Windows 10 or latest Includes Autovolt (80-240 VAC) power supply adapter | Equipment | Brochure with picture and data sheet | - Measurement of monitor - Functionality test - Checking of specification (offered vs. actual) - Check package completeness - 24 Burn-in test using PassMark | 1 Year | Yes | Yes | 10 | sets |





| item Code | item Name | Agency Specification | Classification | Test Parameters (Post Evaluation) | Test Parameters (Inspection and Acceptance) | Onsite Warranty (Parts and Service) | Training | English Manual | Qty | Unit |
|--------------|------------------------|---|----------------|---|--|-------------------------------------|----------|-------------------|-----|------|
| 08-004 | Graphics Pen Tablet | Display: 39.6 cm (15.6 in) / Full HD 1920 x 1080, IPS Response Rate: 22 ms to 25 ms Aspect Ratio / Brightness: 16:9 / 210 cd/m2 (typ) Connectivity: 3-in-1 cable (with HDMI 1.4, USB 2.0 and AC Adapter - 12V, 3A, 36W) Pen: Battery - Free Pro Pen 2 with customizable side switches and 8192 pressure levels in both pen tip and eraser (Patented electromagnetic resonance technology) Pen Tilt Recognition / Range: +/- 60 levels / 60 degrees Compatibility / System Requirements: Windows® 7 or later (latest service pack/build), OS X 10.12 or later (latest update); Internet access for driver download. Included: Pen display, Pro Pen 2, detachable pen holder with 3 replacement nibs (standard) and nib removal tool, 3 in 1 cable (1.8m), Quick Start Guide, regulation sheet 100-240 VAC, 50/60HZ Warranty: 1 year standard warranty | Equipment | Brochure with picture and data sheet | - Measurement of monitor - Functionality test - Checking of specification (offered vs. actual) - Check package completeness - 24 Burn-in test using PassMark | 1 Year | Yes | Yes | 28 | sets |







| Item Code | Item Name | Agency Specification | Classification | Test Parameters (Post Evaluation) | Test Parameters (Inspection and Acceptance) | Onsite Warranty (Parts and Service) | Training | English Manual | Qty | Unit |
|--------------|-------------------------------|--|----------------|---|--|-------------------------------------|----------|-------------------|-----|------|
| 08-005 | UPS 600W | Capacity: 1000VA/600W Voltage: 220-240VAC +/- 10% Frequency: 50/60Hz +/- 10% (auto-sensing) Sine-wave Battery: 12 V/7 AH x 2 Output Socket: 4 x Universal Type (Surge Protected & Battery Backed-Up) Warranty: Two (2) Years on UPS Electronics and One (1) Year on Battery Compatible with Item 09-002 Standalone Computer | Equipment | Brochure with picture and data sheet | - Measurement of monitor - Functionality test - Checking of specification (offered vs. actual) - Check package completeness - 24 Burn-in test using PassMark | 1 Year | Yes | Yes | 28 | sets |
| 08-006 | A3 Colour Laser Printer | Maximum Print Resolution: 1200 x 1200 dpi Processor: min. 400MHz Memory (Min / Max): 256MB / 1,024MB (with optional 768MB module) Maximum Monthly Duty Cycle: Up to 100,000 pages Print Speed: (Black & Colour) Up to 35 ppm (Simplex) / Up to 25 ppm (Duplex) Input Capacity: Up to 405 sheets Output Capacity: Up to 250 sheets Support Paper Size: Paper Cassettes: A5, A4 (SEF, LEF), A3, B5, B4, Letter (SEF, LEF), Legal, US B, Custom: 210 x 148 mm to 297 x 431.8 mm MP Tray: A6, A5, A4 (SEF, LEF), A3, B5, B4, Half Letter, Executive, 8 x 10.5 in, 8.27 x 13 in, Letter (SEF, LEF), 8.5 x 13 in, Legal, US B, Monarch Envelopes: #10, DL, C6, C5, B5, Custom: 75 x 98 mm to 297 x 431.8 mm Connectivity: USB 3.0, Ethernet Power Source: AC 220-240 V, 50-60 Hz | Equipment | Brochure with picture and data sheet | - Functionality test - Check package completeness | 1 Year | Yes | Yes | 2 | sets |







| Item Code | Item Name | Agency Specification | Classification | Test Parameters (Post Evaluation) | Test Parameters (Inspection and Acceptance) | Onsite Warranty (Parts and Service) | Training | English Manual | Qty | Unit |
|--------------|------------|--|----------------|---|--|-------------------------------------|----------|-------------------|-----|------|
| 08-007 | A4 Printer | Print, Scan, Copy Inkjet Mac OS and Windows Compatible 100 sheets input tray 30 sheets output tray A4, A5, A6, B5, B6, Legal, Letter, 5 x 7 ", 4 x 6 ", Envelopes: #10, DL, C6 Maximum Resolution: 5760 x 1440 dpi Ink tank: 1 black, 1 color (cyan, magenta, yellow) Wi-Fi, Wi-Fi Direct AC 220-240V, 50-60 Hz | Equipment | Brochure with picture and data sheet | - Checking the conformity of hardware vis-a-vis offered specifications - Functionality test - Check package completeness | 1 Year | Yes | Yes | 11 | sets |





| • | em ode | Item Name | Agency Specification | Classification | Test Parameters (Post Evaluation) | Test Parameters (Inspection and Acceptance) | Onsite Warranty (Parts and Service) | Training | English Manual | Qty | Unit |
|----|-----------|-------------|---|----------------|---|---|---|----------|-------------------|-----|------|
| 08 | -008 | CAD Plotter | 36-inch Large Format multifunction technical printer with built-in scanner Top class line accuracy Outstanding speeds of up to 2 A1 prints per minute Precision Printhead Technology Nozzle Configuration: 3,200 nozzles (800 nozzles x 4 channels x 1 head) Pigment Ink: 4 Colours - Cyan, Magenta, Yellow, Black Print Speed: CAD (A1): 22 sec Max. Roll Diameter: 2/3" Core Connectivity: USB, Ethernet Wi-Fi Direct Printer Management: Edge Dashboard, Accounting Tool Power Source: AC 100-240V, 50/60Hz, 2.8A Included Software: WindowsInstall Navi - Printer driver - Setup - Print - Net Config - Software Updater - Print Plug-in for Office - manuals Mac Setup Navi I/F:USB/LAN/WiFi | Equipment | Brochure with picture and data sheet | - Functionality test - Check package completeness | 1 Үеаг | Yes | Yes | 1 | set |







| Item Code | Item Name | Agency Specification | Classification | Test Parameters (Post Evaluation) | Test Parameters (Inspection and Acceptance) | Onsite Warranty (Parts and Service) | Training | English Manual | Qty | Unit |
|--------------|------------------|---|------------------------|---|--|-------------------------------------|----------|-------------------|-----|-------|
| 08-009 | Label Printer | QWERTY Keyboard Tape width: 6 - 24 mm Supports 8-lines printing, 175 characters Store up to 100 custom label designs; 460 symbols PC / Mac - connectivity includes: 6mm label stickers/tape 10 pcs 9mm label stickers/tape 10 pcs 12mm label stickers/tape 10 pcs 18mm label stickers/tape 10 pcs 24mm label stickers/tape 10 pcs 6 pcs AA battery Warranty: 1 year parts, labor and onsite support | Equipment | Brochure with picture and data sheet | - Checking the conformity with the quantity including parts and accessories - Checking the conformity of hardware vis-a-vis offered specifications - Functionality testing | 1 Year | N/A | N/A | 5 | units |
| 08-010 | Flash Drive | Capacity: 256 GB Interface: USB 3.0 Connector: USB-A Compatibility: USB 3.0 (backwards compatible with USB 2.0) Read Speed: Up to 130MB/s | Gadgets and Devices | Brochure with picture and data sheet | - Functionality test - Checking the conformity of hardware vis-a-vis offered specifications | 1 Year | N/A | N/A | 25 | pcs |
| 08-011 | Storage | USB 3.0 Capacity: 8TB Max. Data Transfer: 160 MB/s Integrated USB Hub Includes backup software, power adapter 1-Year Warranty | Devices | and data sheet | - Functionality test - Checking the conformity of hardware vis-a-vis offered specifications | 1 Year | N/A | N/A | 10 | pcs |



| Item Code | Item Name | Agency Specification | Classification | Test Parameters (Post Evaluation) | Test Parameters (Inspection and Acceptance) | Onsite Warranty (Parts and Service) | Training | English Manual | Qty | Unit |
|--------------|---------------------|---|------------------------|---|--|-------------------------------------|----------|-------------------|-----|------|
| 08-012 | Wired Headset | Connectivity: Wired - USB-A Connects to: Computer Wearing Style: On-Ear Boom, Noise-cancelling microphone 1-year Warranty | Gadgets and Devices | Brochure with picture and data sheet | - Checking the conformity of hardware vis-a-vis offered specifications - Functionality test - Check package completeness | 1 Year | N/A | Yes | 28 | sets |
| 08-013 | 24U rack cabinet | 4x 24U enclosure Atleast 3 adjustable front and rear vertical mounting rails Mid depth, extended to 33" for standard server installation Locking, reversible front/rear doors and locking, removable side panels Fully assembled for quick installation Casters and leveling feet included With 2x Cat5 upjacketed cable total of 100m, U/UTP, 24 AWG bare copper | Equipment | Brochure with picture and data sheet | - Functionality test - Check package completeness | 1 Year | Yes | Yes | 1 | set |



| I hereby commit to comply and deliver all the above requirements in accordance with the above stated schedule. | | | | |
|--|--|------|--|--|
| | | | | |
| Name of Company/Bidder | Signature over Printed Name of Authorized Representative | Date | | |



Technical Specifications

Lot 9 : Multimedia Equipment

APPROVED BUDGET
FOR THE CONTRACT

Thirty-Eight Million Five Hundred Thirty-Six Thousand
Seventy-Seven Pesos and 45/100 (₱38,536,077.45)

| Item Code | Item Name | Agency Specification | Qty | Unit | Statement of Compliance* | Make Brand / Model | Reference |
|--------------|--|--|-----|-------|--------------------------|--------------------------|-----------|
| 09- 001 | 3D Printer | Kindly refer to the technical specifications attached as Annex B9. | 5 | sets | | | |
| 09- 002 | IP 4K Pan- Tilt-Zoom Camera with NDI | Kindly refer to the technical specifications attached as Annex B9. | 4 | units | | | |
| 09- 003 | IP remote control panel for PTZ cameras | Kindly refer to the technical specifications attached as Annex B9. | 1 | set | | | |
| 09- 004 | 55" LED TV Smart Multi View Monitor | Kindly refer to the technical specifications attached as Annex B9. | 3 | sets | | | |
| 09- 005 | 55" LED TV Smart Monitor | Kindly refer to the technical specifications attached as Annex B9. | 1 | set | | | |
| 09- 006 | 43" Teleprompter Monitor | Kindly refer to the technical specifications attached as Annex B9. | 1 | set | | | |
| 09- 007 | 65" Interactive Display | Kindly refer to the technical specifications attached as Annex B9. | 7 | sets | | | |





| Item Code | Item Name | Agency Specification | Qty | Unit | Statement of Compliance* | Make Brand / Model | Reference |
|--------------|-----------------------------------|--|-----|---------|--------------------------|--------------------------|-----------|
| 09- 008 | Rack Frame | Kindly refer to the technical specifications attached as Annex B9. | 1 | рс | | | |
| 09- 009 | Embedder / Disembedder | Kindly refer to the technical specifications attached as Annex B9. | 2 | units | | | |
| 09- 010 | USB Audio Interface | Kindly refer to the technical specifications attached as Annex B9. | 2 | units | | | |
| 09- 011 | HDMI to USB 3.0 Capture Box | Kindly refer to the technical specifications attached as Annex B9. | 3 | units | | | |
| 09- 012 | Playback Software | Kindly refer to the technical specifications attached as Annex B9. | 1 | license | | | |
| 09- 013 | Digital Audio Mixer | Kindly refer to the technical specifications attached as Annex B9. | 1 | set | | | |
| 09- 014 | Digital Snake | Kindly refer to the technical specifications attached as Annex B9. | 1 | set | | | |
| 09- 015 | Wideband Wireless Receiver | Kindly refer to the technical specifications attached as Annex B9. | 1 | set | | | |





| Item Code | Item Name | Agency Specification | Qty | Unit | Statement of Compliance* | Make Brand / Model | Reference |
|--------------|---|--|-----|------|--------------------------|--------------------------|-----------|
| 09- 016 | Narrow Band Beltpack Transmitter | Kindly refer to the technical specifications attached as Annex B9. | 2 | sets | | | |
| 09- 017 | Wideband Antenna w/ Booster | Kindly refer to the technical specifications attached as Annex B9. | 2 | sets | | | |
| 09- 018 | IEM Transmitter | Kindly refer to the technical specifications attached as Annex B9. | 1 | set | | | |
| 09- 019 | IEM Receiver | Kindly refer to the technical specifications attached as Annex B9. | 2 | sets | | | |
| 09- 020 | Digital Audio Reference Meter | Kindly refer to the technical specifications attached as Annex B9. | 1 | set | | | |
| 09- 021 | Speaker Monitor Powered | Kindly refer to the technical specifications attached as Annex B9. | 2 | sets | | | |
| 09- 022 | 12" Powered Bi Amplified Monitor Speaker | Kindly refer to the technical specifications attached as Annex B9. | 2 | sets | | | |
| 09- 023 | Professional Large Diaphragm Headphone | Kindly refer to the technical specifications attached as Annex B9. | 12 | sets | | | |





| Item Code | Item Name | Agency Specification | Qty | Unit | Statement of Compliance* | Make Brand / Model | Reference |
|--------------|--|--|-----|-------|--------------------------|--------------------------|-----------|
| 09- 024 | Intercom System | Kindly refer to the technical specifications attached as Annex B9. | 1 | set | | | |
| 09- 025 | Channel A-B linking | Kindly refer to the technical specifications attached as Annex B9. | 2 | sets | | | |
| 09- 026 | Communicati on Headset | Kindly refer to the technical specifications attached as Annex B9. | 3 | sets | | | |
| 09- 027 | 9" Communicati on Microphone | Kindly refer to the technical specifications attached as Annex B9. | 3 | sets | | | |
| 09- 028 | Studio Furnitures | Kindly refer to the technical specifications attached as Annex B9. | 6 | sets | | | |
| 09- 029 | DNXIQ I/O Interface | Kindly refer to the technical specifications attached as Annex B9. | 6 | units | | | |
| 09- 030 | 16-17" Production Monitor | Kindly refer to the technical specifications attached as Annex B9. | 6 | sets | | | |
| 09- 031 | 5" Powered Studio Bi amp Monitor | Kindly refer to the technical specifications attached as Annex B9. | 12 | sets | | | |





| Item Code | Item Name | Agency Specification | Qty | Unit | Statement of Compliance* | Make Brand / Model | Reference |
|--------------|---|--|-----|-------|--------------------------|--------------------------|-----------|
| 09- 032 | Advance Panel | Kindly refer to the technical specifications attached as Annex B9. | 1 | unit | | | |
| 09- 033 | Digital Audio Interface | Kindly refer to the technical specifications attached as Annex B9. | 3 | units | | | |
| 09- 034 | 88Keys MIDI Keyboard Controller | Kindly refer to the technical specifications attached as Annex B9. | 1 | set | | | |
| 09- 035 | Eucon Desktop Control Surface Control Panel | Kindly refer to the technical specifications attached as Annex B9. | 3 | units | | | |
| 09- 036 | Smart-UPS 900W | Kindly refer to the technical specifications attached as Annex B9. | 6 | sets | | | |
| 09- 037 | Post Production Furniture | Kindly refer to the technical specifications attached as Annex B9. | 2 | sets | | | |
| 09- 038 | SDI/HDMI Wireless Video Transmission System | Kindly refer to the technical specifications attached as Annex B9. | 3 | sets | | | |
| 09- 039 | Short Shotgun Microphone | Kindly refer to the technical specifications attached as Annex B9. | 3 | sets | | | |





| Item Code | Item Name | Agency Specification | Qty | Unit | Statement of Compliance* | Make Brand / Model | Reference |
|--------------|---|--|-----|------|--------------------------|--------------------------|-----------|
| 09- 040 | 2-Person Camera- Mount Wireless Combo Microphone System Kit | Kindly refer to the technical specifications attached as Annex B9. | 3 | sets | | | |
| 09- 041 | Custom Server Rack | Kindly refer to the technical specifications attached as Annex B9. | 1 | set | | | |
| 09- 042 | 17.3" Full HD 12G-SDI LCD Monitor | Kindly refer to the technical specifications attached as Annex B9. | 2 | sets | | | |
| 09- 043 | 9 Feet x 12 Feet LED Wall Configuration | Kindly refer to the technical specifications attached as Annex B9. | 2 | sets | | | |
| 09- 044 | LED Video Wall Playback Software | Kindly refer to the technical specifications attached as Annex B9. | 1 | set | | | |
| 09- 045 | Multi Touch Interactive Whiteboard | Kindly refer to the technical specifications attached as Annex B9. | 16 | sets | | | |

^{*} Bidders must state here either "Comply" or "Not Comply" against each of the individual parameters of each Specification stating the corresponding performance parameter of the equipment offered. Statements of "Comply" or "Not Comply" must be supported by evidence in a Bidders Bid and cross-referenced to that evidence. Evidence shall be in the form of manufacturer's un-amended sales literature, unconditional statements of specification and compliance issued by the manufacturer, samples, independent test data etc., as appropriate. A statement that is not supported by evidence or is subsequently found to be contradicted by the evidence presented will render the Bid under evaluation liable for rejection. A statement either in the Bidder's statement of compliance or the supporting evidence that is found to be false either during Bid evaluation, post-qualification or the execution of the Contract may be regarded as fraudulent and render the Bidder or supplier liable for prosecution subject to the applicable laws and issuances.

I hereby commit to comply and deliver all the above requirements in accordance with the above stated schedule.

| Name of Company/Bidder | Signature over Printed Name of | Date |
|------------------------|--------------------------------|------|
| | Authorized Representative | |



ANNEX B9

| item Code | item Name | Agency Specification | Classification | Test Parameters (Post Evaluation) | Test Parameters (Inspection and Acceptance) | Onsite Warranty (Parts and Service) | Training | English Manual | Qty | Unit |
|------------------|------------|---|----------------|--|---|--|----------|-------------------|-----|------|
| 09- 001 | 3D Printer | Molding Technology: FDM (Fused Deposition Modeling) Printing Size: 400x400x400mm Supported Materials: PLA/TPU/PETG/ WOOD File Transfer: USB/Memory card 3D Printer Hardware Machine size: 725x640x691mm Motherboard: Silent motherboard Nominal Voltage: 100v-240v Rated Power: 500W Output Voltage: 24V 3D Printer Extruder Hardware Layer Thickness: 0.1-0.4mm Print Resolution: ±0.1mm Nozzle Temperature: ≤260°C Nozzle Diameter: standard 0.4mm Hotbed Temperature: ≤90°C Includes: • PLA 3D Printer Filament, 1.75mm, 1kg Clear Reusable Spool • Upgraded PLA 3D Printer Filament, 1.75mm, 200g x 5 Pack | Equipment | Brochure with picture and data sheet | - Functionality test - Check package completeness | 1 Year | Yes | Yes | 5 | sets |







| Item Code | Item Name | Agency Specification | Classification | Test Parameters (Post Evaluation) | Test Parameters (Inspection and Acceptance) | Onsite Warranty (Parts and Service) | Training | English Manual | Qty | Unit |
|--------------|--|--|----------------|--------------------------------------|--|--|----------|-------------------|-----|-------|
| 09- 002 | IP 4K Pan-Tilt- Zoom Camera with NDI | NDI/HX capability with built-in 4K functions Image Sensor: 1/2.3-5" MOS, approx. ≤8.5M pixels Format: - 2160/23-30p - 1080/59-94i, 50i - 720/50-60p Minimum Illumination: 0.35 lux Resolution: Max. 3840x2160 Zoom: Min. 20x Pan/Tilt Speed: Max 300°/s; Min. 90°/s Focus, Exposure, White Balance: Auto/Manual Compression Format: H.264, MJPEG, MPEG4 Bitrate Setting: 512 Kbps ~ 50 Mbps Protocols: IPv4, IPv6, TCP, UDP, ARP, ICMP, IGMP, HTTP, HTTPS, DHCP, DNS, RTP/RTCP, RTSP, UPnP, VISCA over IP Power Supply: 100-240 AC | Equipment | Brochure with picture and data sheet | - Functionality test - Check package completeness | 1 Year | Yes | Yes | 4 | units |
| 09- 003 | IP remote control panel for PTZ cameras | Max 112 IP connections Max 5 controllers on single network RJ45 Ethernet Port With preset setting With joystick Power supply: 10-13.2V DC, 3.6W | Equipment | Brochure with picture and data sheet | - Functionality test - Check package completeness | 1 Year | Yes | Yes | 1 | set |
| 09- 004 | 55" LED TV Smart Multi View Monitor | * 55" monitor * UHD 12G-SDI LCD Monitor * 3840 x 2160 resolution * Backlight Type: Direct (Full Array LED) * HDR (High Dynamic Range) Compatibility: (HDR10, HLG, Dolby Vision) * Picture Processor: Cognitive Processor XR * Smart TV (Google TV) * Power Supply- 110 V – 240 V AC, 50-60Hz | Equipment | Brochure with picture and data sheet | - Measurement of monitor - Functionality test - Check package completeness | 1 Year | Yes | Yes | 3 | sets |





| 1 | em ode | Item Name | Agency Specification | Classification | Test Parameters (Post Evaluation) | Test Parameters (Inspection and Acceptance) | Onsite Warranty (Parts and Service) | Training | English Manual | Qty | Unit |
|---|------------|--------------------------------|--|----------------|--------------------------------------|--|--|----------|-------------------|-----|------|
| | | 55" LED TV Smart Monitor | 55" screen size Smart TV 3840 x 2160 UHD LED Brightness: Min. 350 nit Contrast: Min. 4000:1 HDR Compatible Built-in WiFi 2 USB 2.0 ports, 1-2 output Power Supply: 110 V - 240 V AC, 50-60Hz | Equipment | Brochure with picture and data sheet | - Functionality test - Check package completeness | 1 Year | Yes | Yes | 1 | set |
| | 09- 006 | 43" Teleprompter Monitor | 43" monitor 1920 x 1080 Full HD HDMI 2 input HDR compatible With Customized Stand Power Supply: 100-240V AC, 50/60Hz | Equipment | Brochure with picture and data sheet | - Measurement of monitor - Functionality test - Check package completeness | 1 Year | Yes | Yes | 1 | set |
| | | 65" Interactive Display | Display 3,840 x 2,160 (UHD) IPS Technology Brightness: 350nit (w Glass, Typ.) Multi Touch Point: 20 Points (Max.) Interface: HDMI, RGB, Audio In, RS-232C In, RJ45, USB 3.0 Type A, USB 2.0 Type A, Audio Out / Optical Output, Touch USB Integrated module plug-in Windows 10 Mobile Stand Power Supply: 100-240 V AC, 50/60 Hz | Equipment | Brochure with picture and data sheet | - Measurement of monitor - Functionality test - Check package completeness | 1 Year | Yes | Yes | 7 | sets |







| Item Code | item Name | Agency Specification | Classification | Test Parameters (Post Evaluation) | Test Parameters (Inspection and Acceptance) | Onsite Warranty (Parts and Service) | Training | English Manual | Qty | Unit |
|--------------|-----------------------------------|--|------------------------|--------------------------------------|---|--|----------|-------------------|-----|-------|
| 09- 008 | Rack Frame | 2RU frame with up to 20 slot capacity 600 watts total power Integrated LCD display for name, IP address and fault identification With glowing displays for customized identification and alarming Support for analog, digital, video, audio, SDI and IP modules in the same frame Removable front door and air filter Uses DashBoard control system Includes preinstalled standard network card (MFC-8322-S) | Equipment | Brochure with picture and data sheet | - Functionality test - Check package completeness | 1 Year | N/A | N/A | 1 | рс |
| 09- 009 | Embedder / Disembedder | openGear compatible card 3G-SDI Embedder/Disembedder 8-Channel Balanced Analog Audio I/O Controlled by DashBoard network control software and external DIP switch 8x 3-Pin Terminal Block connectors (included) Compatible with OGX, OG3 and DFR-8321 openGear frames | Equipment | Brochure with picture and data sheet | - Functionality test - Check package completeness | 1 Year | Yes | Yes | 2 | units |
| 09- 010 | USB Audio Interface | Three ultra-low-noise microphone preamps Create a mix using the built-in 3 x 2 portable mixer 5-in, 2-out USB audio interface streams to computer via USB-C | Gadgets and Devices | Brochure with picture and data sheet | - Functionality test - Check package completeness | 1 Year | Yes | Yes | 2 | units |
| 09- 011 | HDMI to USB 3.0 Capture Box | USB 3.0 Interface Plug-and-Play Compatible with various operating systems Stereo line in external audio | Gadgets and Devices | Brochure with picture and data sheet | - Functionality test - Check package completeness | 1 Year | Yes | Yes | 3 | units |







| Item Code | Item Name | Agency Specification | Classification | Test Parameters (Post Evaluation) | Test Parameters (Inspection and Acceptance) | Onsite Warranty (Parts and Service) | Training | English Manual | Qty | Unit |
|--------------|----------------------------------|---|----------------|--------------------------------------|---|--|----------|-------------------|-----|---------|
| 09- 012 | Playback Software | Live switching video sources Transitions Lower Thirds Chroma Keying, Green Screen Picture-in-Picture Mix Audio Inputs Instant Replay Social Media Integrations Compatible with Apple Mac computer, 64-bit, macOS 10.x or newer | Software | Brochure with picture and data sheet | - Functionality test - Check package completeness | 1 Year | Yes | Yes | 1 | license |
| 09- 013 | Digital Audio Mixer | Up to 40 Simultaneous Input Channels 25 Phase-Coherent Mix Buses 16 Microphone Preamps 5" Full-Color TFT Display Screen 8 Stereo Signal Processing FX Engines 17 Motorized Faders 192 kHz ADC & DAC Converters AES50 Networking Allows 96-In & 96-Out 8 DCA & 6 Mute Groups Inclusive of Dant / Madi/ AES 50 Compatible Optional Cards Power Supply: 100-240 VAC (50/60 Hz) +/- 10% | Equipment | Brochure with picture and data sheet | - Functionality test - Check package completeness | 1 Year | Yes | Yes | 1 | set |
| 09- 014 | Digital Snake | 32 Mic Preamps with +48V 16 Low Impedance Line Level Outputs Ultranet Monitoring System Connectivity Dual ADAT Outputs Dual AES50 Ports for Cascading Units Remote Operation Up to 100 m via CAT5 Rugged 3U Rackmount Chassis | Equipment | Brochure with picture and data sheet | - Functionality test - Check package completeness | 1 Year | Yes | Yes | 1 | set |
| 09- 015 | Wideband Wireless Receiver | Dual true diversity in a 19" 1U stand-alone format Switching bandwidth up 370 MHz in the UHF range 40 groups of 60 frequencies, fully user programmable Multi-compander operation | Equipment | Brochure with picture and data sheet | - Functionality test - Check package completeness | 1 Year | Yes | Yes | 1 | set |







| Item Code | Item Name | Agency Specification | Classification | Test Parameters (Post Evaluation) | Test Parameters (Inspection and Acceptance) | Onsite Warranty (Parts and Service) | Training | English Manual | Qty | Unit |
|--------------|--|---|---------------------------|--------------------------------------|---|--|----------|-------------------|-----|------|
| 09- 016 | Narrow Band Beltpack Transmitter | Narrowband is Compatible with MPR52 & MRK980 Receivers Not compatible with the MCR42s receiver Linear Mode for Intermod free transmission Narrowband RF transmission – 25KHz tuning bandwidth | Gadgets and Devices | Brochure with picture and data sheet | - Functionality test - Check package completeness | 1 Year | Yes | Yes | 2 | sets |
| 09- 017 | Wideband Antenna w/ Booster | Working bandwidth of 470-870 MHz Sturdy metal body construction and epoxy protection on cable joints Optimized 6dB gain with a typical beam-width of 90 degrees Very high linear booster (OIP3 40 dBm) with 15 dB gain settable in one step dB step | Equipment | Brochure with picture and data sheet | - Functionality test - Check package completeness | 1 Year | Yes | Yes | 2 | sets |
| 09- 018 | IEM Transmitter | 330 MHz Bandwidth (470-800 MHz) Stereo, mono, intercom audio modulation 2400 user-defined frequencies (40 group by 60 freq.) Analog & digital input (AES3) | Gadgets and Devices | Brochure with picture and data sheet | - Functionality test - Check package completeness | 1 Year | Yes | Yes | 1 | set |
| 09- 019 | IEM Receiver | Up to 790 MHz bandwidth in 470/1260 MHz range 2 Channel Receive Wideband and Narrowband DSP-FM operation DSP Analogue & Digital Audio Output (AES3) | Gadgets and Devices | Brochure with picture and data sheet | - Functionality test - Check package completeness | 1 Year | Yes | Yes | 2 | sets |
| 09- 020 | Digital Audio Reference Meter | Two Channel Digital Loudness Meter RU, curved side-by-side | Electronic Instruments | Brochure with picture and data sheet | - Functionality test - Check package completeness | 1 Year | Yes | Yes | 1 | set |
| 09- 021 | Speaker Monitor Powered | 5" Bi Amplified Nearfield Monitor 47Hz-25kHz (-6 dB) frequency response Rear Ported 100W, 100-240 V AC 50/60 Hz | Equipment | Brochure with picture and data sheet | - Functionality test - Check package completeness | 1 Year | Yes | Yes | 2 | sets |





| Item Code | Item Name | Agency Specification | Classification | Test Parameters (Post Evaluation) | Test Parameters (Inspection and Acceptance) | Onsite Warranty (Parts and Service) | Training | English Manual | Qty | Unit |
|--------------|---|---|------------------------|--------------------------------------|---|--|----------|-------------------|-----|------|
| 09- 022 | 12" Powered Bi Amplified Monitor Speaker | 12" two-way bass reflex Power Rating (W, Continuous): 500 Power Rating (W, Peak): 1000 Frequency Response Hz (±3 dB): 57 - 20,000 Maximum SPL (peak dB): 126 Coverage Pattern (Nominal): 100° x 60° | Equipment | Brochure with picture and data sheet | - Functionality test - Check package completeness | 1 Year | Yes | Yes | 2 | sets |
| 09- 023 | Professional Large Diaphragm Headphone | Wired, dynamic, closed ear-design 40mm driver unit and Neodymium magnet 1000mW, 10-20kHz, 63 Ohms, 106dB Max. 9.8 foot cord with 1/4" gold plated stereo unimatch plug | Gadgets and Devices | Brochure with picture and data sheet | - Functionality test - Check package completeness | 1 Year | Yes | Yes | 12 | sets |
| 09- 024 | Intercom System | 2 RU 4-channel main station with programmable front panel buttons, individual channel short-circuit protection, individual channel volume control, and a regulated fail-safe power supply With built-in speaker Supports up to 55 beltpacks or 10 speaker stations, or 12 headset stations Microphone Input: Electret (Panel), Dynamic (Headset), >= 1K - >= 2K Impedance, >= 17dB - >= 20dB Atleast 200 - 10kHz ± 3dB frequency response <= 0.5% max. distortion Atleast < -50dBu noise Power: 100-240V AC, 50-60Hz | Equipment | Brochure with picture and data sheet | - Functionality test - Check package completeness | 1 Year | Yes | Yes | 1 | set |





| , | Item Code | Item Name | Agency Specification | Classification | Test Parameters (Post Evaluation) | Test Parameters (Inspection and Acceptance) | Onsite Warranty (Parts and Service) | Training | English Manual | Qty | Unit |
|---|--------------|--------------------------|---|------------------------|--------------------------------------|---|--|----------|-------------------|-----|------|
| | 09- 025 | Channel A-B linking | 2 RU 2-channel main station with programmable front panel buttons, individual channel short-circuit protection, individual channel volume control, and a regulated fail-safe power supply With with built-in speaker Supports up to 55 beltpacks or 10 speaker stations Microphone Input: Electret (Panel), Dynamic (Headset), >= 1K - >= 2K Impedance, >= 15dB - >= 20dB Atleast 200 - 10kHz ± 3dB frequency response <= 0.5% max. distortion Atleast < -50dBu noise Power: 100-240V AC, 50-60Hz | Equipment | Brochure with picture and data sheet | - Functionality test - Check package completeness | 1 Year | Yes | Yes | 2 | sets |
| | 09- 026 | Communication Headset | Single Ear Headset Headphone: Closed-back 40mm diameter, neodymium magnet, copperclad aluminum wire voice coil 40Hz - 20kHz frequency response -61dB ±3.5dB Microphone: Dynamic, hyper-cardiod 40mm diameter, neodymium magnet, copperclad aluminum wire voice coil 300Hz - 20kHz frequency response 102dB ±3dB Impedance Mic/Headphone: 200ohms/400ohms Cushioned with soft leatherette padding 300-degrees boom mic rotation Compatible with Item 04-034 Intercom System and 04-035 Channel A-B linking | Gadgets and Devices | Brochure with picture and data sheet | - Functionality test - Check package completeness | 1 Year | Yes | Yes | 3 | sets |







| Item Code | Item Name | Agency Specification | Classification | Test Parameters (Post Evaluation) | Test Parameters (Inspection and Acceptance) | Onsite Warranty (Parts and Service) | Training | English Manual | Qty | Unit |
|--------------|-----------------------------------|--|------------------------|--|---|--|----------|-------------------|-----|-------|
| 09- 027 | 9" Communication Microphone | 9" plug-in gooseneck microphone Gold-plated, threaded, and locking 3-conductor quarter-inch connector Uni-directional electret condenser microphone Side and rear rejection of greater than 6 dB between 100 Hz and 10 kHz Includes fitted windscreen Compatible with Item 09-024 Intercom System and 09-025 Channel A-B linking | Gadgets and Devices | Brochure with picture and data sheet | - Functionality test - Check package completeness | 1 Year | Yes | Yes | 3 | sets |
| 09- 028 | Studio Furnitures | Sit-Stand Workstation Patented Stabilization System Height Programmable Memory Cool Ib Lifting Capacity - Evenly Distributed Monitor arm (4.5-17 lb capacity) Hoos speaker mounts (2) Utility shelves (2) Pull-out keyboard tray CPU mount Dual 8 Space Rack Bays - 1st rack space (on each bay) has a 3.75" depth restriction Steel Legs with Floor Levelers Aluminum Extrusion Accessory Rail Power: 100-240V AC | Equipment | Brochure with picture and data sheet | - Functionality test - Check package completeness | 1 Year | Yes | Yes | 6 | sets |
| 09- 029 | DNXIQ I/O Interface | Analog and digital I/O for SD-4K capture HDR monitoring and output Built-in baseband encoding to UHDTV post-production codec Audio punch-in to film and video editing software application or non-linear editing system Audio Mastering Connects to the widest range of cameras and devices 12V-24V DC 1 year warranty | Equipment | Brochure with picture and data sheet | - Functionality test - Check package completeness | 1 Үеаг | Yes | Yes | 6 | units |





| Item Code | Item Name | Agency Specification | Classification | Test Parameters (Post Evaluation) | Test Parameters (Inspection and Acceptance) | Onsite Warranty (Parts and Service) | Training | English Manual | Qty | Unit |
|--------------|--|---|----------------|--|--|--|----------|-------------------|-----|------|
| 09- 030 | 16-17" Production Monitor | • 16-17" Diagonal Screen Size • Supports 1080p60 Video Signals • SDI Inputs with Active Loop-Through Out • 178°/178° H/V Viewing Angle • Embedded Audio Decoding and Display • 1920 x 1080 Native Resolution • 2 x 3G/HD/SD-SDI Inputs • HDMI and Composite Inputs • Waveform, Vectorscope, Focus Peaking • 12 VDC Input on 4-Pin XLR • For post production • Power: 100 - 240V AC, 50-60Hz • 1 year warranty | Equipment | Brochure with picture and data sheet | - Measurement of monitor - Functionality test - Check package completeness | 1 Year | Yes | Yes | 6 | sets |
| 09- 031 | 5" Powered Studio Bi amp Monitor | • LF Driver Size: 5" • Frequency Response 43Hz - 40KHz • Max SPL 104dB • Power Output 55 Watts • Input Impedance 5.12KΩ Balanced • Balanced TRS/XLR Combo Jacks • Output Power: 70W • For post production • 1 year warranty | Equipment | Brochure with picture and data sheet | - Measurement of monitor - Functionality test - Check package completeness | 1 Year | Yes | Yes | 12 | sets |
| 09- 032 | Advance Panel | Y Lift, Y Gamma and Y Gain Contrast and Pivot Midtone Detail Color Boost Shadows and Highlights Saturation Luminance Mix Mac/PC compatible 1 year warranty | Equipment | Brochure with picture and data sheet | - Functionality test - Check package completeness | 1 Year | Yes | Yes | 1 | unit |





| Item Code | Item Name | Agency Specification | Classification | Test Parameters (Post Evaluation) | Test Parameters (Inspection and Acceptance) | Onsite Warranty (Parts and Service) | Training | English Manual | Qty | Unit |
|--------------|---------------------------------------|---|----------------|--------------------------------------|---|--|----------|-------------------|-----|-------|
| 09- 033 | Digital Audio Interface | Eight of the best performing mic preamps Four monitor outs Two high headroom instrument inputs Built-in talkback mic Includes 12V-48V DC power supply Mac/PC compatible 1 year warranty | Equipment | Brochure with picture and data sheet | - Functionality test - Check package completeness | 1 Year | Yes | Yes | 3 | units |
| 09- 034 | 88Keys MIDI Keyboard Controller | 88-key hammer-action Fatar keybed with true piano fee Intuitive integration with all your virtual instruments and effects Two high-res color screens and Light Guide for at-a-glance visual feedback Comes with essential production suite, including premium instruments, and effects, and sounds covering any genre for artists and max 50 GB library | Equipment | Brochure with picture and data sheet | - Functionality test - Check package completeness | 1 Year | Yes | Yes | 1 | set |





| Item Code | item Name | Agency Specification | Classification | Test Parameters (Post Evaluation) | Test Parameters (Inspection and Acceptance) | Onsite Warranty (Parts and Service) | Training | English Manual | Qty | Unit |
|--------------|---|---|-------------------------|--------------------------------------|---|--|----------|-------------------|-----|-------|
| 09- 035 | Eucon Desktop Control Surface Control Panel | 8-unit touch-sensitive and motorized faders, touch-sensitive knobs, and touchscreen-integrated keys High-speed EuCon Ethernet protocol High-resolution OLED displays, Automation LEDs, track color switches Connect multiple units together or add an optional Pro Tools/Dock to create a single extended, integrated surface with a jog wheel, transport controls, focus fader, and more High-res metering, including gain reduction, 9.1 surround support, automation status, EQ, dynamics, and panning graphs Compatible with Pro Tools, Cubase, Logic Pro, Premiere Pro, Nuendo, and the free Control app for iOS and Android Includes Autovolt (80-240 VAC) power supply adapter Mac/PC compatible 1 year warranty | Equipment | Brochure with picture and data sheet | - Functionality test - Check package completeness | 1 Year | Yes | Yes | 3 | units |
| 09- 036 | Smart-UPS 900W | Power Rating: 900W VA Rating: 1500VA Output Voltage: 230V Input Voltage: 230V Current Rating: 6.5A | Equipment | Brochure with picture and data sheet | - Functionality test - Check package completeness | 1 Year | Yes | Yes | 6 | sets |
| 09- 037 | Post Production Furniture | Patented Stabilization System Height Programmable Memory Coo Ib Lifting Capacity Monitor arm (4.5-17 Ib capacity) Hoo speaker mounts (2) Utility shelves (2) Pull-out keyboard tray CPU mount Dual 8 Space Rack Bays - 1st rack space (on each bay) has a 3.75" depth restriction Heavy Duty Steel Legs with Floor Levelers Aluminum Extrusion Accessory Rail | Electronic Furniture | Brochure with picture and data sheet | - Functionality test - Check package completeness | 1 Year | Yes | Yes | 2 | sets |





| Item Code | I Itom Name | Agency Specification | Classification | Test Parameters (Post Evaluation) | Test Parameters (Inspection and Acceptance) | Onsite Warranty (Parts and Service) | Training | English Manual | Qty | Unit |
|--------------|--|---|------------------------|--------------------------------------|---|--|----------|-------------------|-----|------|
| 09- 038 | SDI/HDMI Wireless Video Transmission System | Entry-Level 1080p60 Transmitter/Receiver SDI/HDMI Input and Output 400' Range; L-Series Battery Plates Wi-Fi Transmission to 4 Mobile Devices Fits Mars 300/400/400S or 400S Pro Hot Shoe to 1/4"-20 Male Post Adapter Compatible with DSLR/SLR camera, camcorder, laptop, monitor, tablet, cellphone With case | Gadgets and Devices | Brochure with picture and data sheet | - Functionality test - Check package completeness | 1 Year | Yes | Yes | 3 | sets |
| 09- 039 | Short Shotgun Microphone | For Indie Films, TV & Documentaries Switchable Low-Cut Filter Phantom Powered High Sensitivity Requires Less Gain Operating Voltage: 40 to 52 V (Phantom Power) | Equipment | Brochure with picture and data sheet | - Functionality test - Check package completeness | 1 Year | Yes | Yes | 3 | sets |





| Item Code | Item Name | Agency Specification | Classification | Test Parameters (Post Evaluation) | Test Parameters (Inspection and Acceptance) | Onsite Warranty (Parts and Service) | Training | English Manual | Qty | Unit |
|--------------|---|---|----------------|--------------------------------------|---|--|----------|-------------------|-----|------|
| 09- 040 | 2-Person Camera-Mount Wireless Combo Microphone System Kit | 2-Channel Camera-Mount Receiver 2 x Omnidirectional Lav Mics 2 x Bodypack Transmitters Waterproof Case & Receiver Output Cables Plug-On, Omni Handheld Mic Battery operated, 2 AA Compatible with 600mhz frequency allocation | Equipment | Brochure with picture and data sheet | - Functionality test - Check package completeness | 1 Year | Yes | Yes | 3 | sets |
| 09- 041 | Custom Server Rack | Width: EIA Standard 19" Rack Rails External Width: 23.6" – 600mm Height: 78.74" – 2,000mm – Rack Units: 42U Depths: 39.37" & 41.34" Sidewalls, Split rear Doors Baying Kits, Toolless Shelves, Casters, Bolt Down Kits, Cable Management Power Strips – Vertical or Rackmount, Enclosure Monitoring System Toolless Blanking Panels, Fans | Equipment | Brochure with picture and data sheet | - Functionality test - Check package completeness | 1 Year | Yes | Yes | 1 | set |





| | Item Code | Item Name | Agency Specification | Classification | Test Parameters (Post Evaluation) | Test Parameters (Inspection and Acceptance) | Onsite Warranty (Parts and Service) | Training | English Manual | Qty | Unit |
|--------------|--------------|---|--|----------------|--|---|--|----------|-------------------|-----|------|
| | 09- 042 | 17.3" Full HD 12G-SDI LCD Monitor | With DCI 4K Support 17.3" 1920 x 1080 Native 10-Bit Panel Supports HDR and Gamma Selection 178° Viewing Angle Top/Bot, L/R Built-In Signal Analyzers Timecode and Audio Level Meter Display Supports SD/HD/4K DCI and UHD up to 60p Color Space Adjustment via 3D LUT HDMI, SFP, 12G-SDI, 3G-SDI Inputs Safe Area Markers and Focus Aid Function 12 VDC and 110/220 AC Power | Equipment | Brochure with picture and data sheet | - Functionality test - Check package completeness | 1 Year | Yes | Yes | 2 | sets |
| <i>\(\)</i> | 09- 043 | 9 Feet x 12 Feet LED Wall Configuration | Pixel Pitch 6mm IP 67 Compliant Pixel Configuration 3-in-1 SMD Module Resolution 32*32 Module Pixels 1024 dots Module Size 192*192mm Cabinet Size (W*H) 960*960mm Pixel Density 40000dots/m2 Physical Resolution of Panel (W × H) 96 × 192 Weight Per Panel 11.2 kg/panel Custom Reinforce Support and mounting System | Equipment | Brochure with picture and data sheet | - Functionality test - Check package completeness | 1 Year | Yes | Yes | 2 | sets |
| | 09- 044 | LED Video Wall Playback Software | LED Video Wall Playback Software Live Composite and Effects Real Time Rendering Audio & Visual Plugins | Software | Brochure with picture and data sheet | - Functionality test - Check package completeness | 1 Year | Yes | Yes | 1 | set |







| Item Code | Item Name | Agency Specification | Classification | Test Parameters (Post Evaluation) | Test Parameters (Inspection and Acceptance) | Onsite Warranty (Parts and Service) | Training | English Manual | Qty | Unit |
|--------------|--|--|----------------|--------------------------------------|---|--|----------|-------------------|-----|------|
| 09- 045 | Multi Touch Interactive Whiteboard | Screen Size:86" Panel Technology: IPS Aspect Ratio: 16:09 Multi Touch: Max 20 points / Max 10 writing & dual pen compatible Native Resolution: Ultra HD (3,840 x 2,160 resolution) (Input) Video / Audio: HDMI (3), RGB / Audio In (Input) External Control: RS232C In, RJ45 (Input) USB: USB 2.0 (3, Front : 2ea, Bottom side: 1ea Only for software update), USB 3.0 (3), Touch Out (USB2.0,B Type) (2) Monitor Dimension (W x H x D): 1,957x1,160x86mm Speaker: Built in 24W (12W + 12W) Operating System Support: Windows 7/8/10/WindowsXP/Linux/Mac/Android (WindowsXP/Linux/Mac Support one point touch) Built-in OPS kit Supports Air Class & screen sharing With Modular On-Board-Processing-System Accessory Basic: Power Cord 3 M*1, USB Cable (Type A-Type B) 5 M*1, HDMI Cable 3 M*1, Writing Pen*2pcs, User Manual, QSG, Carton Box, Remote Control Power Supply: 100-240 V~ 50/60 Hz | Equipment | Brochure with picture and data sheet | - Functionality test - Check package completeness | 1 Year | Yes | Yes | 16 | sets |

I hereby commit to comply and deliver all the above requirements in accordance with the above stated schedule.



Signature over Printed Name of Authorized Representative



Name of Company/Bidder

Date