

National Council of Science Museums 33 Block GN, Saltlake Sector V Bidhannagar, Kolkata 700 091

<u>I-18012/7/23(146)</u>

Technical Specification

1. Mini PC 16 nos.

Processor

Processor Make Intel

Chipset Intel TigerLake

Processor Generation 11th Generation or Better

Processor Description Intel Core i3 11th Generation, upto 4.10 GHz, 6 MB Cache, 2

Cores or Better

Graphics

Graphics Type Integrated Intel® UHD Graphics for 11th Gen Intel®

Processors

Operating System

Operating System (Pre-Loaded) Windows 11 Professional

Refrest Rate 4K @ 60 Hz

Memory

Type of RAM 2 x SO-DIMM DDR4

Dated Official Seal Signature of the Tenderer/Constituted Attorney

RAM Size (GB) 8 GB RAM Expandability upto (GB) 64 GB RAM Speed (MHz) 2666 MHz Storage Type of Internal Storage 1 1 x M.2 2242 SSD for NVMe Storage 1 Capacity (GB) 512 GB SSD NVMe Connectivity 1 x M.2 2230 for Wi-Fi + BT Wi Fi Connectivity If Yes, type of Wi Fi Connectivity Wi-Fi (802.11ac), Speed 433 Mbps or Higher 10/100/1000 on board Integrated Gigabit Port **Network Connectivity Bluetooth Connectivity** Yes 4.2 or Higher **TPM TPM 2.0** Interface HDMI Port (Number) 1 x HDMI Mini DisplayPort 1 x Mini DisplayPort USB Port 3.0 (Number) 2

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USB Port 2.0 (Number)

USB C-Type (Number)

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1

| | To be entered by hidder |
|---------------------------|--------------------------------------|
| Make & Model offered: | |
| Warranty | 3 years onsite warranty |
| Dimension | 190 x 130 x 40mm or less |
| RoHS Compliance | RoHS in the name of OPS Manufacturer |
| BIS Registration | BIS in the name of OPS Manufacturer |
| Certification | |
| DIMM Slots (Number) | 2 |
| Cabinet Volume (Litres) | 1 |
| Cabinet | |
| Audio In / Out (Number) | 1 |
| LAN Port (Number) | 2 |
| Internal Antenna (Number) | 2 |

2. 24" Non Touch Display

3Nos

Size (cm) 60.4

Aspect Ratio 16:09

Pixel Pitch(mm) 0.275 mm x 0.275 mm or less

Resolution 1920 x 1080

Brightness 250 cd/m² or more

Contrast Ratio 1000:1 (Original),

Response Time 5ms

Viewing Angle 178º - H / 178º - V

Surface Treatment Anti Glare (3H)

D-Sub Yes

HDMI Yes

Port Location Rear

Input 100 ~ 240Vac, 50/60Hz

On Mode 22 Watt or less

Sleep Mode 0.3 Watt or less

Color Weakness Yes

Flicker Safe Yes

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|-----------------------|--------------------------------|
| Make & Model offered: | |
| Warranty | 3 years onsite warranty |
| Power Cord | Adapter |
| HDMI | Yes |
| Certification | UL(cUL), FCC-B, CE, Win10, BIS |
| On Screen Control | Yes |
| Smart EnergySaving | Yes |

| 3. 32" Non Touch | Display | 9No | S. |
|------------------|-----------------------------|-----|------------------------------|
| PANEL | Screen Size | | 32" |
| | Panel Technology | | IPS |
| | Back Light Type | | Direct |
| | Aspect Ratio | | 16:9 |
| | Native Resolution | | 1920 x 1080 (FHD) |
| | Refresh Rate | | 60Hz |
| | Brightness | | 400nit (Typ.) |
| | Contrast Ratio | | 1,100:1 |
| | Dynamic CR | | 1,000,000:1 |
| | Color gamut | | NTSC 68% |
| | Viewing Angle(H x V) | | 178 x 178 |
| | Color Depth | | 10-bit(D), 1.07Bilion colors |
| | Response Time | | 10ms (G to G) |
| | Surface Treatment(Haze) | | 1% |
| | Life time | | 50,000Hrs |
| | Operation Hours (Hours/Day) | | 24/7 |

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Portrait / Landscape

Signature of the Tenderer/Constituted Attorney

Yes / Yes

| Connectivity | Input | Digital | HDMI | Yes(3), HDCP2.2 |
|--------------|-------|---------------------|------------------------------|-----------------------------|
| | | USB | | USB2.0 Type A(1) |
| | | Audio Out | | Yes (1, Off/Fixed/Variable) |
| Key Feature | HW | Internal Memory | | 8GB or more |
| | | Wi-Fi | Built-in | Yes |
| | | Sensor | Temperature Sensor | Yes |
| | | | Auto Brightness sensor | Yes |
| | | Local Key Operation | | Yes |
| | SW | OS | | webOS6.0 or android |
| | | Embedded CMS | Local Contents Scheduling | Yes |
| | | | Group Manager | Yes |
| | | USB Plug & Play | | Yes |
| | | Fail over | | Yes |
| | | Sync Mode | RS-232C Sync | Yes |
| | | | Local Network Sync | Yes |
| | | Screen Share | | Yes |
| | | Play via URL | | Yes |

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| | Rotation | Screen Rotation | Yes |
|------------------------|-----------------------|---------------------|-----------------------|
| | Power | PM mode | Yes |
| | | Wake on LAN | Yes |
| | | Network Ready | Yes |
| Environment Conditions | Operation Temperature | | 0 °C to 40 °C or more |
| | Operation Humidity | | 10 % to 80 % or more |
| POWER | Power Supply | | AC 100-240V~, 50/60Hz |
| | Power Type | | Built-In Power |
| Power Consumption | Тур. | | 55W or less |
| | Max. | | 75W or less |
| SOUND | Speaker | | Yes(10W x 2EA) |
| CERTIFICATION | Safety | | CB / NRTL |
| Warranty | | | 3 years |
| Make & Model offered | | o be entered by bid | lder |

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| 4. Touch d | isplay 23 to 24 inc | h | | 9 nos. | |
|-----------------|----------------------------|-----------------|-------------------|------------|-------|
| Description | Features | | | | |
| Screen Size | 23.5-inch or more up t | o 24 inch max | | | |
| Resolution | FHD1, 1920 X 1080 | or more | | | |
| Panel | IPS, 3-sided microedge | | | | |
| Brightness | 300 nits or mor | e | | | |
| Contrast Ratio | 1000: 1 static or more | | | | |
| | 5000000: 1 dynamic | | | | |
| Panel Features | s flicker free | | | | |
| Special Feature | es Integrated tou | ch technology / | integrated | capacitive | panel |
| Ports | DisplayPort 41.2, HD | MI 1.4, 4 USB-A | 3.2 Gen1, USB-B | , VGA | |
| Certificate | EPEAT, Energystar, TCC | Certified | (but this is less | important) | |
| Ergonomics | Height, tilt, pivot, swive | el | | | |

Make & Model offered:

Warranty: 1 year onsite warranty at ASSAM

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5. Projector Ultra short throw

3 nos.

Display Technology DLP/LCD

Native Resolution WUXGA 1920 x 1200 or better

Brightness 5,000 Lumens or more

Contrast 100,000:1 or more

Light Source Laser phosphor

Light Source Life Bright 30,000 hours (Eco mode) or more

Throw Ratio 0.253:1 or less

Zoom Type Fixed or variable

I/O Connectors HDMI x 2 (HDCP 2.0; compatible with HDMI 1.4a); VGA in x 1; VGA out x 1; USB B x 1 (for service); USB Type A x 1 (for Power);

Audio in x 1 (mini Jack); Audio out x 1 (mini Jack); Microphone (mini Jack) x 1

Speaker (Watts)10W

Keystone Correction ±15° Vertical, ±15° Horizontal

Weight (Kg) 6.5 or less

Dimensions (W x D x H) (mm) 400 x 330 x 100 (excluded adjustment feet) or less

Aspect Ratio 16:10 Native, 16:9 and 4:3 Compatible

Features Certified to IEC standard 60529 with an IP5X dust resistance rating, certified to IEC standard 60529 with an IP5X dust resistance rating, HDR10 compatible, Compatible with OMS, System integration and control RS232, AMX, LAN Control, Crestron Roomview, PJLink

3D Support Full 3D

3D compatibility Side-by-Side:1080i50 / 60, 720p50 / 60 Frame-pack: 1080p24, 720p50 / 60

Over-Under: 1080p24, 720p50 / 60

Projection Screen Size 133.5"~154.1"

Projection Distance 727 – 840 mm

Computer Compatibility UXGA, SXGA, WXGA, HD, XGA, SVGA, VGA, Mac

Dated Official Seal Signature of the Tenderer/Constituted Attorney

Video Compatibility PAL (B, D, G, H, I, M, N, 576i/p), NTSC (M, 4.43/3.58 MHz, 480i/p), SECAM (B, D, G, K, K1, L) HD (1080i, 720p) Horizontal Scan Rate 15.375 - 91.146 kHz Vertical Scan Rate 24 - 85Hz 1073.4 million colors (10 bit) Displayable Colors Noise Level 33 / 35dB (Eco / Bright mode) Power Supply Universal AC 90 – 264V, 50/60Hz with PFC input Power Consumption 328W±15% @ 110VAC (Power mode: Active); 320W±15% @ 220VAC (Power mode: Active) Warranty on Laser Projector 3 years onsite warranty Mount: good quality OEM recommended ceiling mount to be provided

Make & Model offered: To be entered by bidder

6. 55" Touch Display-

1 no.

| | 55" Touch Display | | |
|-------|-------------------------|---|--|
| | Screen Size | 55" | |
| | Panel Technology | IPS | |
| | Back Light Type | Direct | |
| | Aspect Ratio | 16:9 | |
| | Native Resolution | 3840x2160 (UHD) or more | |
| | Refresh Rate | 60Hz | |
| | Brightness | 440nit(wo Glass, max), 390nit (wo Glass, typ) 400nit(w Glass, typ), 350nit (w Glass, typ) or more | |
| PANEL | Contrast Ratio | 1200:1 or more | |
| | Dynamic CR | 5000:1 or more | |
| | Color gamut | NTSC 72% | |
| | Viewing Angle(H x V) | 178°(H/V) or more | |
| | Color Depth | 10bit(8bit + FRC) or more | |
| | Response Time | 8ms or less | |
| | Surface Treatment(Haze) | Haze 25% | |
| | Life time | ≥30000 Hours or more | |

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| | | Operatio | n Hours (Hours/Day) | 16/7 or more |
|---------------------|--------|------------|------------------------|--|
| | | Portrait / | ['] Landscape | No/Yes |
| | | | Digital | HDMI (3) HDCP2.2 or equivalent |
| | | | Analog | (1, VGA) |
| | | Audio In | | (1) |
| | Input | RS232C II | N | (1) |
| | | RJ45(LAN | 1) | (1) |
| Connectivity | | | | USB3.0 Type A(4) |
| (Jack Interface) | | USB | | USB2.0 Type A(1) |
| | | | | USB Type-C(1, USB-PD, DP-Alt,) or equivalent |
| | | DP Out | | No, HDMI Out (1) |
| | Output | Audio Out | | Yes (1, Optical 1(SPDIF)) |
| | Сифи | Touch US | SB | Yes (2) |
| | | RJ45(LAN) | | Yes (1) |
| | | Bezel Wid | dth | T/R/L/B : 18/18/18/45mm or less |
| | | Weight(H | lead) | 26.1Kg or less |
| | | Monitor | Dimension(W x H x D) | 1271×774×87mm |
| Key Feature | HW | Internal I | Memory | 32GB |
| Ney i editire | 1100 | Wi-Fi | Built-in | Yes (Slot type) |

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| | | | Auto Brightness sensor | Yes |
|-----------|-----------------|----------------------------|------------------------|--|
| | | Power In | dicator | Yes |
| | | OS ver. | | Android 11.0 |
| | SW | Power | Smart Energy Saving | Yes (Energy Saving) |
| | | | Wake on LAN | Yes |
| Environme | ent Conditions | Operatio | n Temperature | 0 ~ 40 °C or more |
| | The Contactions | Operatio | n Humidity | 10 ~ 90 % RH or more |
| PC | OWER | Power Su | pply | 100-240V [~] 50/60Hz 3.5A or less |
| | | Power Ty | pe | Built-In Power |
| | | Тур. | | 170 or less |
| | | Max. | | 395 |
| Power C | onsumption | BTU (British Thermal Unit) | | 0 BTU/Hr(Typ.), 0 BTU/Hr(Max) |
| | | DPM | | ≤0.5W or less |
| | | Power off | | ≤0.5W or less |
| SC | DUND | Speaker | | Yes (15W x 2) |
| CEPTI | FICATION | Safety | | CB / NRTL or equivalent |
| CENTI | IOTION | ErP / Ene | rgy Star | Yes / Yes |
| OPS Co | mpatibility | OPS type | compatible | Yes (Slot) |
| 313 60 | paciamey | OPS Power built in | | Yes |

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| 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 Controller(include battery 2ea), Wifi module |
|-----------------|--------------------|----------------------------------|--|
| | Optional | | Wall Mount(WM-L000S), Floor Stand(ST-000F) |
| | | Available object size for touch | Ø2 mm ↑ . |
| | | Response Time | ≤5ms or less |
| | | Accuracy | ±1mm or less |
| | | Interface | USB2.0 |
| Special Fetures | Touch | Active Pen Interface | N/A |
| Special Council | | Protection Glass Thickness | 3T(Anti-Glare) |
| | | Protection Glass Transmission | 88% or more |
| | | Operating System | Windows 7/8/10/Linux/Mac/Android |
| | | Support | (Linux/Mac Support one point touch) |
| | | Multi touch point | Max 40 points or more |
| | SoC | | Quad core A55 or equivalent |
| Android | GPU | | Mali G52MP2 |
| System | Internal Memory | Storage | 32GB or more |
| | ciriory | RAM | 4GB or more |

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| | Wi-Fi | 802.11a/b/g/n/ac/ax (WiFi 6) |
|----------|-----------|------------------------------|
| | LAN | Gigabit LAN |
| E | Bluetooth | Bluetooth 5.0 |
| Warranty | | 03 Years or More |

| Make & Model offered: | |
|-----------------------|-------------------------|
| | To be entered by bidder |

7. 3KVA TRUE ONLINE UPS WITH INBUILT ISOLATION TRANSFORMER

03 nos.

| Parameter | Required Specifications |
|---------------------------------|--|
| Rating | 3KVA/2400W On-Line UPS with Inbuilt Isolation Transformer. |
| Input AC Parameters | |
| Input Voltage | 160 - 280V |
| Frequency | 50 Hz; Tolerance (45-55) Hz |
| Input power factor | > 0.98 |
| Isolation Transformer (Inbuilt) | UPS should be fully isolated by double conversion and inbuilt isolation transformer within the UPS cabinet itself. External transformer shall not be considered. |
| Output AC Parameters | |
| Rated apparent/active power | 3000 VA/2400W |
| Output Voltage | 220/230 V AC |
| Frequency | 50 +/- 0.5 Hz |
| Crest Factor | 4:1 or higher |
| Over load | 110% for 30 seconds, 125% for 10 seconds |
| Output Power Factor | 0.8 |
| Indication & Controls | |
| Display & Level Indications | LED mimic diagram + LCD Display with measurements (Input / Output / Bypass V & Hz, Battery V & capacity level indicator, Load% & level Indicator) |
| Audio Alarm operation | Suitable Alarms for Battery Operation / Overload |
| Communication Ports | 1 x Intelligent-Slot (for SNMP), 1 x RS232 or USB Serial Port. |
| Battery Backup & Other Details | The system must be capable of providing requisite battery back-up time of 30minutes, using 12V, VRLA Sealed Maintenance Free Batteries. |
| | Battery Bus Voltage: ≥72 Volt DC |
| Required VAH | 2496VAH |
| Battery make | EXIDE/QUANTA |
| Environmental | |
| Operating Temperature: | 0 Degree C to 40 Degree C |
| Relative humidity | 0% to 95%, non-condensing |
| Certifications | • CE Certification(IEC 62040-1 & IEC 62040-2) |

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| After Sales Support & Manufacturer's Credibility Support | The bidder and OEM should not have been blacklisted or debarred from business at any point of time during last 10 years by any Govt./PSU undertaking. Undertaking to this effect must be submitted. Vears comprehensive warranty |
|---|--|
| | Bidder should have a dedicated Toll Free No. for service call logging & resolution Bidder and OEM should have manufacturing facility in INDIA and own service centre at KOLKATA The bidder and OEM should not have been blacklisted or debarred from |
| | Copies of the above certifications should be submitted with the technical Bid (compulsory). |
| | RoHS Compliance E-Waste (EPR authorisation from CPCB, Govt of India) |
| | BIS Certification Partis Committees |
| | • ISO 9001, ISO 14001,ISO2 7001, ISO 45001,ISO 50001 certified. |

| Make & Model offered: _ | |
|-------------------------|-------------------------|
| | To be entered by bidder |