

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

TENDER NO. I-18012/2/24(338)

Technical Specification

1) Android Tab 12-inch (02 Nos.)

Processor Speed: 2.0GHz or Higher
Processor Core: Octa-Core
Display Size: 31.50 cm (12 inches) or more
Display Type: TFT or equivalent
Resolution: 2560 x 1600 (WQXGA) or higher
Aspect Ratio: 16:10
Touchscreen: Multitouch, Capacitive
Operating System: Android 13 or Higher
Memory (RAM): 8 GB or more
Internal Storage: 128 GB or Higher
Wi-Fi: 802.11 a/b/g/n/ac/ax 2.4G+5GHz, HE80, MIMO, 1024-QAM (Wi-Fi 6 support)
Bluetooth: Minimum Version 5.3
USB: Type-C
Battery Capacity: 10,090 mAh or Higher
Rear Camera: Minimum 8.0 MP + 8.0 MP (autofocus)
Sensors: Accelerometer, Gyroscope, Ambient Light Sensor, Compass
Video Playing Format: MP4, M4V, 3GP, 3G2, AVI, FLV, MKV, WEBM
Video Playing Resolution: UHD 4K (3840 x 2160)@30fps
Audio Playing Format: MP3, M4A, 3GA, AAC, OGG, OGA, WAV, AMR, AWB, FLAC,
MID, MIDI, XMF, MXMF, IMY, RTTTL, RTX, OTA
Accessories: USB Cable, Charger
Warranty (including accessories): 1 year all over India

Make & Model offered: _____

(To be entered by bidder)

Dated:

Signature of the Tenderer with official seal

2) Dual Band Wi-Fi Router (02 Nos.)

Type: Dual-Band Wireless Router

Standards: IEEE 802.11ac/n/g/b/a wireless LAN, IEEE 802.3u

Ports: 1 x Gigabit WAN Port (10/100/1000 Mbps)

4 x Gigabit LAN Ports (10/100/1000 Mbps)

Antennae: Four external 5 dBi antennas

Frequency Bands: WLAN 2.4 GHz, WLAN 5 GHz

Speed: Concurrent dual-band wireless for connections 1200 Mbps or Higher

Security Protocols: WPA3/WPA2/WPA/WEP/WPS (PBC)

MU-MIMO: Multi-User Multiple-Input Multiple-Output support for simultaneous connections

Buttons: Power On/Off, WPS/Reset

Mounting: Desktop or Wall Mountable

Features: • Web setup wizard • Router, Access Point, Repeater, Client modes • Wi-Fi client smart adjustment • Rate limitation for wireless network/separate MAC addresses • Periodic scan of channels, automatic switch to least loaded channel • Auto negotiation of channel bandwidth in accordance with environment conditions (20/40 coexistence) • Firewall - Network Address Translation (NAT) • DMZ (Demilitarized Zone) • Stateful Packet Inspection (SPI) • Guest Wi-Fi network • Guest Wi-Fi / MBSSID support • STBC support • WMM (Wi-Fi QoS) • VPN IPsec/PPTP/L2TP tunnels • IPsec / PPTP / L2TP / PPPoE pass-through

Power Supply: DC 12V/1.5A

Package Contents: Router, Power Adapter, Ethernet Cable

Warranty: 2-year

Make & Model offered: _____

(To be entered by bidder)

Dated:

Signature of the Tenderer with official seal

3) HDMI Cable Active 2.1 Ver (20m) -06 Nos.

HDMI Cable (2.1 ver.) – 20 m

- Length: 20 meters
- Connector: Male-to-Male (Gold-Plated)
- Material Core: Copper
- Cable Type: Active HDMI cable 2.1 version
- Data Transfer Rate: 48 Gigabytes Per Second
- Resolution Support: Ultra HD Resolution up to 8K@60Hz, 4K@120Hz
- HDR Support: Supports Dynamic HDR Display
- Compatible design to work with all HDMI A-Type connector Devices- TV, Video walls, Gaming Consoles, Projectors etc.
- Warranty: 3 Years

Make & Model offered: _____
(To be entered by bidder)

4) HDMI Cable (3M)-01 No.

HDMI Cable (2.1 ver.) – 3 m

- Length: 3 meters
- Connector: Male-to-Male (Gold-Plated)
- Material Core: Copper
- Cable Type: Active HDMI cable 2.1 version
- Data Transfer Rate: 48 Gigabytes Per Second
- Resolution Support: Ultra HD Resolution up to 8K@60Hz, 4K@120Hz
- HDR Support: Supports Dynamic HDR Display
- Compatible design to work with all HDMI A-Type connector Devices- TV, Video walls, Gaming Consoles, Projectors etc.
- Warranty: 3 Years

Make & Model offered: _____
(To be entered by bidder)

Dated:

Signature of the Tenderer with official seal

5) Mini Display Port to HDMI adapter 4K Compatible (08 Nos.)

- High-Definition support of up to 4k x 2k (3840 x 2160) at 30Hz
- Adapter transmits audio and video from Mini DisplayPort to HDMI
- Plug-and-play capability

Make & Model offered: _____
(To be entered by bidder)

6) 5.1 Surround Sound Speaker System (01 No.)

5.1 Surround Sound Speaker System

Peak Power: 1,000 Watts

Total System Power Output: 500 Watts RMS

Subwoofer: 165 Watts RMS

Satellite Speakers: 5 x 67 Watts RMS (Wall-mountable design)

Digital optical input: 2

Digital coaxial input: 1

Six-channel direct input: 1

RCA input: 1

3.5 mm input: 1

Headphone jack: 1

Control console: 1

Stackable Satellites: 4

Wall mountable Center channel speaker: 1

Wall mountable Subwoofer: Ported

Side-firing Remote: Infrared

THX Certification: Ensures theater-quality sound

Dolby Digital and DTS: Supports multi-channel decoding for rich surround sound

Wireless Remote: Full-function remote control

Compatibility: Works with any device with either a headphone jack (3.5 mm), RCA, six-channel direct, digital coaxial input or optical inputs: Computers, TVs, Blu-ray/DVD players

Warranty: 1- year onsite all over India

Make & Model offered: _____
(To be entered by bidder)

Dated:

Signature of the Tenderer with official seal

7) Sound Blaster 24 Bit (01 No.)

Sound Blaster 24bit

Dynamic Range (DNR): 114 dB

Audio Technology: X-Fi, Sound Blaster Acoustic Engine, Super X-Fi, GameVoice Mix

Max. Playback Quality: Sampling Rate (Playback):

Direct Mode: Playback Resolution (Optical Out): PCM 16/24-bit / 48.0, 96.0, 192.0 kHz

Dolby Digital Live: 16-bit, 48.0 kHz

Playback Resolution (Stereo): PCM 16/24-bit / 48.0, 96.0, 192.0 kHz

Surround 7.1: PCM 16/24-bit / 48.0, 96.0 kHz

Max. Recording Quality: Mic-in: 16/24-bit / 48.0, 96.0 kHz, Line-in:

16/24-bit / 48.0, 96.0 kHz, Optical-in:

16/24-bit / 48.0, 96.0 kHz

Recording Resolution: Mic-in: 16 / 24-bit / 48.0, 96.0 kHz

Line-in: 16 / 24-bit / 48.0, 96.0 kHz

Optical In: 16 / 24-bit / 48.0, 96.0 kHz

Platform: USB 2.0, USB 3.0

Connectivity Options (Main): 1 x TOSLINK Optical Out, 1 x 1/8" Rear Out, 1 x 1/8" Center / Sub Out, 1 x 1/8" Headphone / Headset Jack, 1 x 1/8" Ext. Mic-in Jack, 1 x 1/8" Front-out, 1 x 1/8" Side Out Jack, 1 x USB-C port for PC / Mac, 1 x 1/8" Optical / Line-in Combo Jack

Headphone Amp: Supported Headphone Impedance: 32–600Ω, High Gain: 150–600Ω (2.3V RMS @ 150Ω, 2.9V RMS @ 600Ω), Output Impedance: 10Ω, Low Gain: 32–149Ω (1.2V RMS @ 32Ω)

Max Channel Output: 7.1 Channels

Supported Operating Systems: Windows® 10 or above

Accessories: Optical Cable, USB-A to USB-C Cable

DAC: Dynamic Range (Stereo): 114 dB, THD+N (Stereo): 0.001%

ADC: Dynamic Range: 104 dB, THD+N: 0.0017%

Warranty: 2-year onsite all over India

Make & Model offered: _____
(To be entered by bidder)

8) Digital Optical Audio Toslink Cable 1.8m (01 No.)

Digital Optical Audio Toslink Cable

- Length: 1.8m or above
- Connector Type: Optical
- Cable Type: Fiber Optic
- Connector: Male-to-Male
- Compatible Devices: Home Theatres, Blu-ray Players, Gaming consoles
- Outer Material: Polyvinyl Chloride (PVC)

Make & Model offered: _____
(To be entered by bidder)

9) 6.0 KVA Online UPS (01 Set)

6.0 KVA Online UPS with Backup time 60 minutes (at full load)

Capacity: 6.0 kVA
Input Voltage: 230V, Input voltage ranges: AC Single phase 160V - 260V 50Hz
Output Voltage: 230V +/-1% 50 Hz
Output Frequency: 50/60 Hz +/- 3 Hz sync to mains
Efficiency at Full Load: 94 %
Technology: Double Conversion Online
Wave type: Sine wave
Harmonic distortion: 1 %
Load Crest Factor: 3: 1
input connectors: 1 hard wire 3-wire (1P + N + E)
Input protection type: Circuit breaker
Certifications: BIS
Audible Alarm: Alarm when on battery and distinctive low battery alarm
Control panel: Multi-function LCD status and control console
Protections: Overload, Short Circuit, Surge, and Battery Deep Discharge
Surge energy rate: 600 J
Standards: IEC/EN 62040-1, IEC/EN 62040-2
UPS warranty: 2 years repair or replace all over India
Batteries: 20 External battery 12V 42AH Sealed maintenance free (SMF), VRLA
Battery with battery rack, connection cable and UPS to battery power Connector.
Battery warranty: 2-year full replacement warranty

Make & Model offered: _____
(To be entered by bidder)

Dated:

Signature of the Tenderer with official seal

10) Line Laser Measuring Instrument (05 Nos.)

Line Laser Measuring Instrument

Type: Cross Line Laser with 5 Beams (2 horizontal, 2 verticals, 1 plumb point)

Tripod thread : 5/8"

Colour of laser line : red

Working range: With receiver: 50 meters

Without Receiver: 15 meters

Accuracy: Horizontal laser line: ± 0.2 mm/m*; Vertical laser lines: ± 0.3 mm/m* (*plus use-dependent deviation)

Laser diode: 630 – 650 nm, Class 2, < 1mW

Working range laser points: max.5 m (bottom)

Self-Leveling Range: $\pm 3^\circ$

Power Supply: 4 x 1.5 V LR6 (AA)

Color of plumb points: red

Plumb point accuracy: ± 0.7 mm/m* (*plus use-dependent deviation)

Projection Modes: Multiple configurations (vertical, horizontal, cross-line, or combination)

Operating Modes: Single vertical or horizontal line, Cross-line mode, Plumb point projection for precise alignment

Accessories: Carrying case, Wall mount or magnetic bracket, Laser target plate, tripod for extended versatility

Warranty: 1-year onsite all over India

Make & Model offered: _____

(To be entered by bidder)

Annexure F

- List of items to be procured: -

Sl. No.	Name of the item	Qty.	Whether Quoted (Yes/No) To be entered by the bidder
01.	Android Tab 12-inch	02 Nos.	
02.	Dual Band Wi-Fi Router	02 Nos.	
03.	HDMI Cable Active 2.1 ver. – 20m	06 Nos.	
04.	HDMI Cable – 3m	01 No.	
05.	Mini Display Port to HDMI adapter 4K compatible	08 Nos.	
06.	5.1 Surround Sound Speaker System	01 No.	
07.	Sound Blaster 24 Bit	01 No.	
08.	Digital Optical Audio Toslink Cable 1.8m	01 No.	
09.	6.0 KVA Online UPS	1 Set	
10.	Line Laser Measuring Instrument	05 Nos.	

Dated:

Signature of the Tenderer with official seal