



Ministry of Culture  
Government of India



**National Council of Science Museums**

**33 Block GN, Saltlake Sector V**

**Bidhannagar, Kolkata 700 091**

I-18012/7/22(479)

Technical Specification

**Touch display 23 to 24 inch**

**12 nos.**

<b>Description</b>	Features
<b>Screen Size</b>	23.5-inch or more up to 24 inch max
<b>Resolution</b>	FHD1, 1920 X 1080 or more
<b>Panel</b>	IPS, 3-sided microedge
<b>Brightness</b>	300 nits or more
<b>Contrast Ratio</b>	1000: 1 static or more 5000000: 1 dynamic
<b>Panel Features</b>	flicker free
<b>Special Features</b>	Integrated touch technology / integrated capacitive panel
<b>Ports</b>	DisplayPort 41.2, HDMI 1.4, 4 USB-A 3.2 Gen1, USB-B, VGA
<b>Certificate</b>	EPEAT, Energystar, TCO Certified (but this is less important)
<b>Ergonomics</b>	Height, tilt, pivot, swivel
<b>Warranty:</b>	1 year onsite warranty at Manipur

**Make & Model offered:** .....

**(To be filled by bidder)**

Dated

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**NON Touch display 23 to 24 inch**

**8 nos.**

- Description** Features
- Screen Size** 23.5-inch or more up to 24 inch max
- Resolution** FHD1, 1920 X 1080 or more
- Panel** IPS, 3-sided microedge
- Brightness** 300 nits or more
- Contrast Ratio** 1000: 1 static or more  
5000000: 1 dynamic
- Panel Features** flicker free
- Ports** DisplayPort 4.1.2, HDMI 1.4, 4 USB-A 3.2 Gen1, USB-B, VGA
- Certificate** EPEAT, Energystar, TCO Certified (but this is less important)
- Ergonomics** Height, tilt, pivot, swivel
- Warranty:** 1 year onsite warranty at Manipur

**Make & Model offered:** .....

**(To be filled by bidder)**

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## **Mini computer**

**40 nos.**

**Form Factor** Ultra Small Form Factor

**Chassis** Tool-less Chassis (Tool-less Hard Drive, Memory & Optical drive Removal)

**Chipset** Commercial Class Intel® Q670 Chipset

**Processor** Intel 12th Generation Core i5-12500T Processor with 2.0 GHz base frequency & Up to 4.4 GHz max. turbo frequency 18 MB cache, 6 cores, 12 threads or better

**Memory** 8 GB DDR4-3200 Memory expandability up to 64 GB with 2 DIMM Slots

**Storage** 256 GB PCIe NVMe SSD \_\_\_ For MII we need to add 1 TB HDD or Total storage should be 512 GB PCIe NVMe SSD

**Graphics** Intel® UHD Graphics 770 or more

**Audio** Integrated audio controller with internal speaker of at least 2W

**Operating System** Microsoft Windows 11 Professional with OEM Recovery DVD or option of Cloud Recovery

**Networking** Integrated Intel Gigabit 10/100/1000 Ethernet Controller

Intel® Wi-Fi 6E AX211 802.11ax 2x2 with Bluetooth®

**Ports** Video: **2 DisplayPort ,1 HDMI , 1 VGA or two HDMI**

USB: 2 USB 3.2 Gen 1, 2 USB 3.2 Gen 2, 1 USB Type C 3.2 Gen 2X2

**Slots** 2 M.2 PCIe for WLAN & Storage

1 SATA port

Bays 1 Internal Bay

**Power Supply** 65 W with 88% average efficiency or better

**Security** Hardware based endpoint security controller TPM 2.0 Integrated Intrusion Sensor or better. Support for chassis cable lock devices & Support for chassis padlocks devices. Drive lock option for HDD to secure Data. Integrated protection from malware that lurks on malicious websites Integrated real-time detection and prevention of zero-day threats and advanced persistent threat (APT) attacks for Windows applications

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**Manageability** Out of band management independent of the power state and operating system state of PC. ntegrated utility to enables hardware level testing outside the operating system & Drivers should be available on OEM Website for download

**Certifications** FCC,CE, RoHS, UL, EPEAT, Energy Star, TCO, MIL STD 810

ISO 9001,14001,20001,27001 for OEM

**Dimension:18 x 18 x 4 cm or less**

**Warranty** 5 Years onsite at Manipur

**Make & Model offered: .....**  
**(To be filled by bidder)**

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## Projector Long throw

**2 no.**

Display Technology DLP/LCD

**Native Resolution 1080p 1920 x 1080 or more**

**Brightness 5,000 Lumens or more**

**Contrast 300,000:1 (w/ Extreme black)**

**Light Source Laser phosphor**

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

**Throw Ratio 1.4 – 2.24 :1**

**Zoom Type 1.6x Manual**

**Lens Shift 100% ~116% vertical**

I/O Connectors HDMI 1.4a x1, HDMI 2.0 x1, VGA in x1, VGA out x1, Video x1, USB Power (5V/1.5A), Micro USB (for service), Audio in x 2, Audio out x1, Mic in x 1, 12V out x1, RS232 x 1, 3D sync x 1, RJ 45 x 1 (support web control)

Speaker (Watts)10W x 2

Keystone Correction ±30° Vertical, ±30° Horizontal

Weight (Kg) 5.5 or less

Dimensions (W x D x H) (mm) 340 x 280 x 120 or less

Aspect Ratio 16:9 Native, 4:3 Compatible

Offset 100% – 116% ±5%

Projection Screen Size 20.2”~320.4”

Projection Distance 1.0 ~ 10 M

Projection Lens F/2.5~3.26; f=20.91~32.62mm, 1.6x Manual Zoom

Uniformity 85%

Computer Compatibility WUXGA, 1080P, UXGA, SXGA+, SXGA, WXGA+, WXGA, 720P, XGA, SVGA, VGA  
Compression, VESA standards, PC & Macintosh compatible

Video Compatibility 480i/p, 576i/p, 720p/1080i (50/60Hz), 1080p (50/60Hz)

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3D Support Full 3D

Horizontal Scan Rate 15.375~91.146 KHz

Vertical Scan Rate 50 ~ 85 Hz (120Hz for 3D feature)

Displayable Colors 1073.4 million colors (10 bit)

Power Supply 100-240V, 50/60Hz, auto-switching

Power Consumption Bright : MAX 292W @110VAC, MAX 282W @220VAC; Eco: MAX 235W @110VAC, MAX 227W @220VAC

360-operation Yes

Portrait Mode Yes

Mount: good quality OEM recommended ceiling mount to be provided

Warranty on Laser Projector 3 years onsite warranty at Manipur

**Make & Model offered: .....**

**(To be filled by bidder)**

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# Projector Ultra short throw

**6 no.**

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  $\pm 15^\circ$  Vertical,  $\pm 15^\circ$  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, PLink

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

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

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

Displayable Colors 1073.4 million colors (10 bit)

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 filled by bidder)**

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# **Television 43” - 6nos**

**Display Commercial Signage –**

**Display Size(Diagonal)** 43" or more upto 45"

**Resolution** 3840X2160(UHD) or more

**Backlight Unit Type** Direct/Edge or equivalent

**Brightness** 300 nit or more

**Dynamic Contrast Ratio** (Dynamic MCI(Hz)) 1000000:1

**Static( Panel) Contrast Ratio** 1200 : 1

**Refresh Rate** 60Hz

**Speaker** (Sound Output) 10W + 10 W

Input Interface HDMI IN(3(2.0)), Headphone Out (Phone Jack type)

Jack Interface USB 2.0,Digital Audio Out (Optical), External Speaker Out(3.5mm Phone Jack)

Power Supply( Voltage Hz) AC 120V-50/60 Hz

**Max Power Consumption** 120 or Less

Typical Power Consumption 98 or Less

Screen Share Miracast, Smart Share

Signage Features , NTP Server Setting, RTC(Real Time Clock), Time Scheduler, NTP Sync Timer, BEACON, Embedded CM(Content Manager)

**Make & Model offered: .....**

**(To be filled by bidder)**

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