

Annexure - II

Technical requirement for LED Video Wall Display with Accessories

Sl. No.	Parameter	Specification	Minimum Required Specification
1	Type of Display	Display Technology	Indoor Active LED (SMD) Full Color Video Wall
2	Screen Size	Overall display area	Width: 25.1 ft × Height: 14.1 ft (Approx.)
3	Diagonal Size	Overall diagonal dimension	346 inches (Approx.)
4	Pixel Pitch	Determines image clarity and resolution	≤ 2.5 mm
5	LED Configuration	Pixel type	SMD 3-in-1 (RGB)
6	Brightness	Visibility in indoor environment	≥ 500 nits
7	Refresh Rate	Smooth and flicker-free performance	≥ 3840 Hz
8	Display Resolution	Pixel matrix based on size and pitch	≥ 3040 × 1710 pixels (Approx. for 2.5 mm pitch)
9	Viewing Angle	Optimum horizontal/vertical viewing	150° (H) × 140° (V) or better
10	Contrast Ratio	Image depth and brightness control	≥ 4000:1
11	Color Uniformity / Accuracy	Consistent brightness and color	Delta E < 2 or equivalent
12	Cabinet Material	Structure for rigidity and modularity	Die-cast aluminum or equivalent
13	Cabinet Size	Standardized for modular assembly	640 × 480 mm or OEM equivalent
14	Weight per Cabinet	Ease of mounting	≤ 10 kg (approx.)
15	Ingress Protection (Front/Rear)	Protection from dust and humidity	IP20 (front), IP20 (rear)
16	4K Active LED Controller	Control system for video processing	4K Active LED Controller with HDMI, DVI, VGA, LAN, and USB inputs; supports real-time calibration, picture-in-picture, and multi-source display

17	Signal Transmission	Data and control connectivity	CAT6 or optical fiber cables as per OEM standard
18	Power Supply	Electrical requirements	230V AC, 50Hz with auto protection and redundancy
19	Power Consumption	Energy efficiency	Average $\leq 350 \text{ W/m}^2$
20	Operating Temperature / Humidity	Environmental conditions	0°C to 45°C / 10% to 80% RH (non-condensing)
21	Wall Mounting Installation & Mounts	Installation and alignment system	Heavy-duty metallic frame for wall mounting; includes brackets, fasteners, and alignment fixtures as per OEM standard
22	Buffers for Active LED	Signal and power stabilizers	OEM-specified Active LED Buffers to ensure uniform power distribution and stable signal transmission
23	Accessories	Complete installation components	All required OEM accessories, cables, connectors, power cords, and protective components
24	Software Features	Display management and control	User-friendly software with remote monitoring, scheduling, brightness control, and configuration tools
25	Audio Integration (Optional)	For multimedia support	Compatible with external audio systems
26	Warranty	OEM-backed support	Minimum 3 years comprehensive onsite warranty covering all components
27	Certifications	Product and OEM compliance	BIS / CE / ROHS / ISO 9001 / ISO 14001 certified
28	Training & Documentation	User training and technical literature	Onsite training for staff and submission of operation, configuration, and maintenance manuals

General Conditions

1. The bidder shall supply, install, test, and commission the complete LED Video Wall system with **4K Active LED Controller, buffers, mounting structure, and all accessories** to ensure full functionality.
2. All materials and accessories shall be **OEM-specified, brand new, and compliant with the tendered specifications.**
3. The installation shall include all **civil/carpentry works, cable management, and alignment** required for safe and aesthetic installation.
4. The work shall be carried out under the supervision of the **HOD – IT Department** and completed **within 4 weeks** from the date of purchase order.
5. The system should be delivered fully functional, tested, and commissioned to the complete satisfaction of the School.

All vendors are required to go through tender documentation carefully and submit the required documents without fail.

All prospective vendors are required to conduct a site visit prior to submission of their quotation to obtain any necessary clarifications. Please note that once submitted, the quoted price shall be considered final and no revision will be permitted after the award of the contract.

Date:

Signature of the Vendor/Supplier