Technical requirement for Interactive LED Panel(ILP) with Inbuilt Teaching Software

Ser.no	Parameters	Specification	Minimum Required Specification of ILP
1	Mandatory Technical Parameters	BIS	Only BIS Marked
		Display Aspect Retio	16:09
		Display Resolution Pixels	4K 3480x2160
		Touch Technology	Optical Touch Technology or better
		Back Light Technology	LED
		Touch Interface	Touch Sensitive as well as Pen Drive
		Bluetooth Connectivity	Yes
		Provision for Inbuilt Speaker	Yes
		Wifi Connectivity	Yes
		Display type	LED
		Inbuilt NFC authentication	Yes, minimum 4 cards
		Onsite Warranty	minimum 3 Years
Technical Brief of Requirement			
2	Sizes	Required Sizes	75" and 86"
3	Display	Display Type, Resolution & Refresh Rate	IPS Ultra HD 4K A+ Display 3840*2160 (pixels) with 60Hz refresh rate,
		LED View Angle	Direct LED, HDR Display, with wide viewing angle of 178°(H) / 178°(V)
		Led Lifetime	LED lifetime of 40,000 Hours (minimum)
		Surface	Matte finish AG Surface with 4mm Toughened Glass MoHS Level 7 hardness,
		Contrast Ratio	1.07 Billion Colors, Dynamic Contrast 100,000: 1, 1300: 1 (typ.),
		Brightness	450 nits (Max), 400 nits (Typ)
4	Touch Technology	Technology	Edge Optical Touch Techology or Equivalent
		Display & AG Glass Gap	for touch accuracy, No Gap between glass and display
		Touch Points	Min 40 Simultaneous touch points (Windows), 20 Simultaneous touch points (Android)
		Touch Resolution	32767x32767
		Accuracy	± 0.3 mm
		Response Time	< 4 ms (typ.) or better
		Touch Object Size	≧1.6 mm
5	Systems and Chipset	Interactive Panel CPU:	Android 14.0 (Upgradable), ARM A73 Octa Core + ARM A53 Octa Core CPU and GPU Mali G52, 8GB RAM, 128GB Flash, Wifi 2.4Ghz and 6.0Ghz, Bluetooth 5.2 or better
		OPS System Spec	Intel core i5 13th Gen Processor, 8 GB RAM and 1 TB HDD, with 256 GB SSD with Windows 11 Orginal OS or better
6	Wireless	Bluetooth 5.2	Yes
		802.11 a/b/g/n Dual Band 2.4G and 5GHz	Yes
		Hotspot Support	Yes
7	Memory & Storage	RAM	8 GB
		Storage	32GB Onboard with Infinite Cloud Storage on OEM Whiteboard app
8	Speakers	Stereo Speakers with Surround	Front Firing, Hi-Fi, Stereo Sound output with 20W x 2, with 8Ω impedance, built-in subwoofer & Surround
		Sound	Bass reflex with dual passive radiators.
9	Ports	Ports	Front: USB 3.0 x1 (Shared), USB 2.0 x 1 (Android), USB Type C x 1, Touch USB x 1, HDMI x 1, Back & BottomSide: HDMI IN x 2, VGA IN x 1, VGA Audio x 1, Touch USB x 1, USB 3.0 x 1, USB 2.0 x 1, MicroSD Card x 1 Bottom: LAN x 1, SPDIF x 1, Audio OUT x1, RS232 x 1
10	Power Consumption	Voltage	Voltage: 100 V ~ 240 V/AC, 50/60 Hz
		Power	Max watt with OPS: ≤300W
		StandBy	Stand-by: <0.5 W
11	Enviornment	Temperature	Working Temp: 0°C ~ 40°C , Storage Temp: Minus 10°C ~ 60°C,
		Humidity	Working Humidity: 10% to 80% RH Non-Condensing, Storage humidity: 5% to 90%
12	Accessories	In the box:	Antenna x 2, Remote, Power Cable, USB touch Cable, HDMI Cable (1.5M), User Manual, Wall Mount Set
13	Wireless Casting & screen Sharing	Native Support for Airplay & MiraCast	Yes
		Multi- Device Casting	Upto 4 Devices simultaneously

14	**Intelligent Features**	Auto Lesson Creation on Any Topic with NEP Guidelines	Yes
		Instant Customised Lesson Plan based on teaching Profile & dificulty levels	Yes
		Auto Quiz Creation on Any Topic, with various level of Difficulty	Yes
		Auto Assignment & Homework	Yes
		Take Student Attendance from	Yes
		Student & Parent app available on	Yes
15	**Multi-User Collaboration**	Live Multi Student Collaborationwith Live cursor tracking	Yes
		Teacher Can manage & control Writing permissions for students	Yes
16	**Build in Stabilizer**	Integrated digital power stabilizer with safe shutdown. Works under extreme fluctuation and board power range 80-300V	Yes
17	**Warranty**	OEM Onsite Warranty	3 Years / 5 Years
18	**In Built TeachingSoftware specification**	White boarding software, Lecture Recording Software, Remote Panel Management Software, classroom addressing Software, Classroom monitoring Software, Text recognition/ Shape recognition with Intelligent Search Option	1. Ability to access online/offline curated content curriculum for lessons creation. 2. Import documents & multi-media in lessons, share lesson. 3. Live Virtual Teaching using Audio & Video on Lesson consuming less than 1Mbps bandwidth, with option to control enable & disable Audio and video of remote students 4. Create and share assignments, tests, and get analytics & insights of the student performance, 5. Always Ready to Connect to smart devices, like mobile and tablets, receive files wirelessly from mobile devices. 6. STEM Tools draw shapes, use math tools, like protractor and compass, solve equations and formulas, and simulate physics and chemistry lab experiments 7. Whiteboard: Pen, colours, Highlighter and Eraser, Multi-background, Creativity Tools, Smart Draw, Shapes. 8. Presentation Tools: Screen Curtain, Spotlight, Presentation mode 9. Productivity Tools: Media import, (Docs, sheets, PDF, slides), Stopwatch & Document Scanner, Snipping tool 10. Built-in Chrome Browser for Secure and fast browsing experience, Built-in Office Viewer App. + 11. Support for installing MS Office Apps. 12. Support for Android apk installation, Support for 3rd Party VC Apps like Microsoft Teams, Zoom, Google meet. 13. Infinite canvas with multi writing and palm erasing gesture support. 14. Auto Lesson Creation on Any Topic with NEP Guidelines 15. Auto Customised Lesson Plan based on Class Profile, & various levels. 16. Auto Quiz Creation on Any Topic, with various level of Difficulty 17. Student and Parent notification on their App.
19	**Software Upgrade**	Lifetime software upgradation and Updating on the air	Yes
20	**AMC**	Annual Maintence Contract after the warranty period	Yes (in Percentage)
21	**Certifications**	OEM must STQC/ERTL certification for the product	Yes
		OEM must have certification from BIS, ISO 9001, 14001, and must have ISO 27001 for Data Security compliance for the product.	Yes

Required Documents

Documents	Declaration on letter head with GSTIN Certificate	OEM participating in the Bid must have presence in India for at least 5 years and operating.
	Declaration on letter head along with few PO copies	OEM must have proven track record of supplying Interactive Panel solution in not less than 10,000 Classrooms Projects in India
	Declaration on letter head along with client details	OEM of Interactive LED Panel should have good exposure of Indian education ecosystem & should have rich experience of supplying in-classroom interactive teaching equipment across India & must have supplied in bulk
	Certificate attach	OEM must STQC/ERTL/other certifications for the product approved by the Indian Government
	Certificate attach	OEM must have certification from BIS, ISO 9001, 14001, and must have ISO 27001 for Data Security compliance for the product.
	Declaration on Letterhead	The Bidder/OEM participating in the bid must not have been blacklisted for fraudulent practices by any Central Government / State Government / Central PSU/ State PSU/ Government Undertakings / University/ Educational Institutions inIndia in the last three years and at the time of submission of the bid.
	Declaration on Letterhead	On-site Support by OEM during the warranty period and AMC period
	Declaration on Letterhead	OEM participating in the Bid must declare that the offered interactive panel and educational software belongs to the same OEM (software should not be sourced via some 3rd party) and will not be declared End-of-life within 5 years of installation.