Patients' Aid Foundation (PAF) Jinnah Postgraduate Medical Centre (JPMC)

Karachi.

TENDER FOR

Provision of Supply, Installation and Commissioning of Equipment & Civil work

for 6th Floor Surgical Complex at JPMC Karachi.

For The Financial Year 2023-2024

Tender No: V – Equipment for Lecture Hall

Technical Evaluation Report:

- 1. Tender was advertised on 2nd December 2023.
- 2. Following bidders participated in the tender: a. M/s F-Cube
- 3. Technical opening of the tender was held on 17th January 2024 after the extension of two weeks upon request of multiple bidders.
- 4. Technical evaluation was initiated with mandatory documents check list and M/s F-Cube is in compliance with requirements, and hence technically approved.

i. M/s F-Cube Technically Approved

S.No.	Equipment for Lecture Hall	M/s F-Cube
1	Projector (standard Warranty)	Epson- EB- TW7000 Philipines
1.1	Resolution: Native 4K resolution, providing a sharp and detailed image with a pixel count of 3840 x 2160.	4K Pro HD
1.2	Brightness: High brightness, measured in lumens, to ensure a clear and vibrant image, even in well-lit environments. Look for a specific lumen rating, such as 2500 ANSI lumens.	Yes
1.3	Contrast Ratio: A high contrast ratio, for example, 1,000,000:1, indicating a significant difference between the darkest and brightest parts of the image for better visual clarity.	40,000:1
1.4	Projection Technology: Utilizes laser technology as the light source, offering advantages such as improved color reproduction and a longer lifespan between 2,000 to 5,000 hours, compared to traditional lamp-based projectors.	5,000
1.5	Color Reproduction: Enhanced color gamut and accuracy for vivid and true-to-life color representation.	Yes

Technical Compliance Sheet

1.6	Lens Features: Adjustable lens settings, Lens shift, and zoom capabilities for precise control over the projected image size and position.	Yes
1.7	Connectivity: Multiple input ports, including HDMI and USB, ensuring compatibility with various devices such as Blu-ray players, gaming consoles, and streaming devices.	Yes
1.8	Dimensions and Weight: Consider the physical size and weight of the projector, important for installation and portability.	Yes
1.9	Additional Features: May include extra features such as 3D capability, built-in speakers, smart functionalities, and support for High Dynamic Range (HDR) content	Yes
2	Projector Screen Wall Mounted	-
2.1	Type: Motorized projector screen	Yes
2.2	Fabric Type: Lucky Fine Fabric	Yes
2.3	Dimensions: 20 feet width by 15 feet height	Yes
2.4	Aspect Ratio Compatibility: Includes 4:3 for standard formats and 16:9 for widescreen content, providing versatility in content projection.	Yes
2.5	Motorized Mechanism: Equipped with a reliable motor for smooth and quiet operation, featuring remote control and wall switch for convenience.	Yes
2.6	Viewing Angle: Offers a wide viewing angle range for clear image quality from various seating positions.	Yes
2.7	Installation: Designed for wall-mounted installation, ensuring stability and ease of setup.	Yes
2.8	Borders: Designed with borders for visual enhancement and effective framing of projected content.	Yes
2.9	Control Options: Includes remote control functionality and a wall-mounted switch for ease of use.	Yes
3	Sound System (Standard Warranty)	Bosch-CCS 1000 D
3.1	Maximum power: 75 W	Yes
3.2	Power tapping: 50 / 25 / 12.5 / 6.25 W	Yes
3.3	Sound pressure level at rated power / 1 W (1 kHz, 1 m): 108 dB / 91 dB (SPL)	Yes
3.4	Sound pressure level at rated power / 1 W (1 kHz, 4 m): 94 dB / 79 dB (SPL)	Yes
3.5	Effective frequency repair 00 Hz to 20 kHz	V
3.6	Effective frequency range: 90 Hz to 20 kHz	Yes
	Opening angle at 1 kHz / 4 kHz (-6 dB): horizontal 186° / 126°, vertical 84° / 62°	Yes
3.7		
3.7 3.8	Opening angle at 1 kHz / 4 kHz (-6 dB): horizontal 186° / 126°, vertical 84° / 62°	Yes
	Opening angle at 1 kHz / 4 kHz (-6 dB): horizontal 186° / 126°, vertical 84° / 62° Dimensions (W x D): 405x160x180mm 15.94x6.29x7.08in	Yes 255*180*154
3.8	Opening angle at 1 kHz / 4 kHz (-6 dB): horizontal 186° / 126°, vertical 84° / 62° Dimensions (W x D): 405x160x180mm 15.94x6.29x7.08in Woofer: 134.5 mm (5 in) Dome tweeter: 25.4 mm (1 in) Cabinet: Aluminum	Yes 255*180*154 Yes
3.8 3.9	Opening angle at 1 kHz / 4 kHz (-6 dB): horizontal 186° / 126°, vertical 84° / 62° Dimensions (W x D): 405x160x180mm 15.94x6.29x7.08in Woofer: 134.5 mm (5 in) Dome tweeter: 25.4 mm (1 in)	Yes 255*180*154 Yes Yes
3.8 3.9 3.10	Opening angle at 1 kHz / 4 kHz (-6 dB): horizontal 186° / 126°, vertical 84° / 62° Dimensions (W x D): 405x160x180mm 15.94x6.29x7.08in Woofer: 134.5 mm (5 in) Dome tweeter: 25.4 mm (1 in) Cabinet: Aluminum	Yes 255*180*154 Yes Yes Yes
3.8 3.9 3.10 3.11	Opening angle at 1 kHz / 4 kHz (-6 dB): horizontal 186° / 126°, vertical 84° / 62° Dimensions (W x D): 405x160x180mm 15.94x6.29x7.08in Woofer: 134.5 mm (5 in) Dome tweeter: 25.4 mm (1 in) Cabinet: Aluminum Front grille: Aluminum	Yes 255*180*154 Yes Yes Yes Yes
3.8 3.9 3.10 3.11 3.12	Opening angle at 1 kHz / 4 kHz (-6 dB): horizontal 186° / 126°, vertical 84° / 62° Dimensions (W x D): 405x160x180mm 15.94x6.29x7.08in Woofer: 134.5 mm (5 in) Dome tweeter: 25.4 mm (1 in) Cabinet: Aluminum Front grille: Aluminum Color: White (RAL 9010) (L) or Charcoal (RAL 7021) (D)	Yes 255*180*154 Yes Yes Yes Yes Yes

3.16	Loudspeaker floor stand: Universal floor stand lightweight aluminum construction, foldable, M10 x 12 reducer flange.	Yes
3.17	Water and dust protection: according to EN 60529 IP 65	Yes
3.18	Note: aluminum extruded enclosure, two-way system, including wall bracket, EN54-24 certified.	Yes
4	Indoor SMD Display (Standard Warranty)	-
4.1	Area: 20 feet X 15 feet	
4.2	Main Specification	
4.3	Pixel Pitch: 2.5 mm	
4.4	Module Size: 320*160 mm	
4.5	Resolution: 128*64 dots	
4.6	LED: SMD1515	
4.7	Brightness: 800 – 1,200nits (Adjustable)	
4.8	Max Current: ≤5.2 A	Non- Complian
4.9	Pixel Density: 160000 dots/m ²	
4.10	Refresh Rate: ≥1920 Hz	
4.11	Port: HUB75E	
4.12	Standard Panel:	
4.13	Storage temperature range: -10°C to 50°C.	
4.14	Lamp surface temperature : $\leq 60^{\circ}$ C	
4.15	Storage humidity range: 10%RH-80%RH	
5	Walky Talky (Standard Warranty)	Mag One Motrola
5.1	Frequency Range: FRS frequency band.	Yes
5.2	Channels : 16 channels available.	Yes
5.3	Voltage: Operates on DC 3.7V.	Yes
5.4	Temperature Range : -10°C to +50°C.	Yes
5.5	Antenna : High-gain antenna (50 Ω impedance).	Yes
5.6	Mode: Operates in simplex mode.	Yes
5.7	Sensitivity: $< 0.2 \ \mu V.$	Yes
5.8	Occupied Bandwidth : ≤16KHz.	Yes
5.9	Audio Power: 1W.	Yes
5.10	Audio Distortion: ≤5%.	Yes
5.11	Current: 80mA (standby), 200mA (active).	Yes
5.12	Output Power: US: 0.5/2W.	Yes
5.13	Modulation Mode: 16KF3E.	Yes
5.14	Frequency Stability: 5ppm.	Yes
5.15	Spurious Radiation: 7.5uW.	Yes
5.16	Modulation Noise: <-40dB.	Yes
	Maximum Deviation: < ±5KHz.	Yes
5.17		100

5.19	Adjacent Channel Power: >65dB.	Yes
5.20	Intermediation Sensitivity : 8 ~12mv.	Yes
6	LCD 55" (Standard Warranty)	Samsung UHD 4K CU8000
6.1	Screen Size: 95 inches (measured diagonally).	
6.2	Resolution: Must be 4K Ultra HD (3840 x 2160 pixels).	
6.3	Display Technology: LED (Light Emitting Diode) for bright and vibrant colors.	
6.4	HDR (High Dynamic Range): Some models support HDR for improved contrast and color range.	
6.5	Smart TV Features: Built-in smart features for streaming apps, web browsing, and connectivity.	Non-Compliant Offered item is
6.6	Refresh Rate: Higher refresh rates (e.g., 60Hz, 120Hz) for smoother motion.	55"
6.7	Connectivity: Multiple HDMI and USB ports, Wi-Fi, Bluetooth, etc.	
6.8	Sound: Audio features such as Dolby Digital, DTS, and built-in speakers.	
6.9	Dimensions and Weight: Physical dimensions and weight of the TV.	
6.10	Additional Features: Smart remote control, voice control, ambient mode, and various picture and sound settings.	
7	LCD 55" (Standard Warranty)	Samsung UHD 4K CU8000
7.1	Active Display Area: 1209.6 (H) mm \times 680.4 (V) mm	Yes
7.2	Resolution: $3840 \times 2160@60$ Hz	Yes
7.3	Backlight: LED	Yes
7.4	Pixel Pitch: 0.315 (H) mm \times 0.315 (V) mm	Yes
7.5	Brightness: 350 cd/m ²	Yes
7.6	Viewing Angle: 178° (H)/178° (V)	Yes
7.7	Color Depth: 8 bit	Yes
7.8	Contrast Ratio: 1200:1	Yes
7.9	Response Time: 8 ms	Yes
7.10	Refresh Rate: 60 Hz	Yes
7.11	Haze: 1%	Yes
7.12	Reliability: 7×18 H	Yes
7.13	Color Gamut: 72% NTSC	Yes
7.14	Video & Audio Output: Speaker (8 Ω 5 W) × 2, Audio-Out × 1	Yes
7.15	Data Transmission Interface: USB 2.0×1	Yes
7.16	Power Supply: 100 to 240 VAC, 50/60 Hz	Yes
7.17	Power Consumption: $\leq 145 \text{ W}$	Yes
7.18	Product Dimensions (W \times H \times D): Without stand: 1230.08 mm \times 713.39 mm \times 85.55 mm (48.43" \times 28.09" \times 3.37")	Yes
7.19	With stand: 1230.08 mm × 786.86 mm × 267.87 mm (48.43" × 30.98" × 10.55")	Yes
7.20	Net Weight: $16.2 \pm 0.5 \text{ kg} (35.7 \pm 1.1 \text{ lb.})$	Yes
7.21	Gross Weight: 21.4 ± 0.5 kg (47.2 ± 1.1 lb.)	Yes

7.22	Packing List: Monitor \times 1, Remote control \times 1, Quick start guide (multilingual) \times 1, EU energy	Yes
7.22	efficiency label \times 1, 1.5-meter power cable \times 1, Screw pack \times 1	Yes
8	Auxillary Speaker (Standard Warranty)	Bosch-Lb20 PC75-5 Singapore
8.1	Maximum power: 45 W	Yes
8.2	Rated power: 30 W (30 / 15 / 7.5 / 3.75 W)	Yes
8.3	Sound pressure level at rated / 1 W (1 kHz, 1 m): 105 / 90 dB (SPL)	Yes
8.4	Effective frequency range (-10 dB): 100 Hz to 18.5 kHz	Yes
8.5	Opening angle 1 kHz / 4 kHz (-6 dB): 160° / 81° (horizontal) / 150° / 90° (vertical)	Yes
8.6	Rated input voltage: 15.5/70/100 V	Yes
8.7	Rated impedance: 8 / 163 / 333 ohm	Yes
8.8	Transducers: 127 mm (5") woofer, 13 mm (0.51 ") dome tweeter	Yes
8.9	Dimensions (H x W x D): 250 x 160 x 140 mm, (9.84 x 6.30 x 5.51 in)	Yes
8.10	Weight: 2.4 kg (5.29 lb)	2.7Kg
8.11	Supplied with adjustable mounting bracket	Yes
8.12	Complies with international installation and safety regulations	Yes
8.13	Water resistant: IP65 rated.	IP 54
9	Main Speaker (Standard Warranty)	Bosch-LB1- UMx0E Singapore
9.1	Cabinet loudspeaker 50 W, aluminum extruded enclosure, two-way system, including wall-mounted bracket,	Yes
9.2	Provision for internal mounting of the optional line / loudspeaker supervision board	Yes
9.3	EN 54-24 certified	Yes
9.4	Water and dust protection: according to EN 60529 IP 65	EN 60849
9.5	Sound pressure level at rated power / 1 W (1 kHz, 1 m): 108 dB / 91 dB (SPL)	Yes
9.6	Effective frequency range (-10 dB): 90 Hz to 20 kHz	Yes
9.7	Rated input voltage: 20 / 70 / 100 V	Yes
9.8	Rated impedance: 8 / 100 / 200 ohm	Yes
9.9	Connector: 3-pole screw block	Yes
9.10	Dimensions: nterfa 405x160x180mm 15.94x6.29x7.08in	Yes
9.11	Woofer: 134.5 mm (5 in)	Yes
9.12	Dome tweeter: 25.4 mm (1 in)	Yes
9.13	Cabinet Aluminum	Yes
9.14	Front grille: Aluminum	Yes
9.15	Top and bottom: ABS	Yes
9.16	Color White (RAL 9010) (L) or Charcoal (RAL 7021) (D)	Yes
9.17	Weight: nterfa 5.58 kg (12.30 lb)	Yes
9.18	Operating temperature: -25 °C to +55 °C (-13 °F to +131 °F)	Yes

9.20	Relative humidity <95%	Yes
9.21	Maximum power:75 W	Yes
9.22	Rated power (PHC): 50 W	Yes
10	Cordless Microphone set Wireless Mic Kit with Headset (Standard Warranty)	Bosch- MW1- HTX-F4
10.1	Wireless Technology Analog UHF	Yes
10.2	Number of RF Channel Frequencies 8	Yes
10.3	Included Transmitters 2 x Bodypack	Yes
10.4	Diversity Non-Diversity	Yes
10.5	RF Channel Scanning Auto-Scan	Yes
10.6	Max Operating Range 160' / 48.8 m	Yes
10.7	Max Transmitters per Band 1	Yes
10.8	Built-In Recorder No	Yes
10.9	Encryption No	Yes
10.10	Deviation ±40 kHz	Yes
10.11	Modulation FM	Yes
10.12	SNR 105 dB	Yes
10.13	THD <1 %	Yes
10.14	Receiver Type Plug-In / Portable	Yes
10.15	Antenna 1 x Flexible Whip, Fixed	Yes
10.16	Number of Audio Channels 2	Yes
10.17	Audio I/O 1 x ¹ /4" TS Female Unbalanced Output	Yes
10.18	Network I/O No	Yes
10.19	Word Clock I/O No	Yes
10.20	USB/Lightning Connectivity No	Yes
10.21	Standalone Audio Interface Capable No	Yes
10.22	Power Requirements AC/DC Power Adapter	Yes
10.23	AC/DC Power Adapter 12 to 15 VDC (Included	Yes
10.24	AC Input Power 120 to 220 VAC, 50 / 60 Hz	Yes
10.25	Dimensions 5.3 x 6.8 x 1.7" / 13.5 x 17.3 x 4.3 cm	Yes
10.26	Transmitter Type Bodypack	Yes
10.27	RF Output Power > 10 mW	Yes
10.28	Audio I/O 1 x 1/8" / 3.5 mm TS Female	Yes
10.29	Muting Off/On Switch	Yes
10.30	Auto-Level Control No	Yes
10.31	Sync Method Proprietary	Yes
10.32	Power Requirements Battery	Yes
10.33	Battery Type 2 x AA	Yes
10.34	Display & Indicators 1 x LED (Channel, Power, Sync)	Yes
10.35	Microphone Type Headset	Yes
10.36	Sound Field Mono	Yes
10.37	Output Connector 1 x 1/8" / 3.5 mm TS Male Unbalanced	Yes

10.38	Microphone2 Type Lavalier	Yes
10.39	Color Black	Yes
10.40	Sound Field Mono	Yes
10.41	Outputs 1 x 1/8" / 3.5 mm TS Male Unbalanced	Yes
11	Wireless Microphone System (Standard Warranty)	Bosch-MW1- RX-Fx & MW1-HTx-F4
11.1	Wireless Audio Control for up to (4) Microphones & (4) Transmitters	Yes
11.2	UHF System for Wide Area Signal Range Coverage	Yes
11.3	Simple & Hassle-Free Operation	Yes
11.4	Independent & Adjustable Channel Volume Controls	Yes
11.5	Digital LCD Display with Channel & Frequency Readout	Yes
11.6	Wireless Operation Range: Up to 164 ft.	Yes
11.7	LED Audio Signal Indicator Lights	Yes
11.8	RF (Radio Frequency) & AF (Audio Frequency)	Yes
11.9	(8) XLR Balanced Output Jacks	Yes
11.10	(2) ¹ / ₄ ^{**} Mixed Outputs	Yes
11.11	Rack Mountable	Yes
11.12	Digital LCD Display Channel Readout	Yes
11.13	Image & Spurious Rejection: >70 dB	Yes
11.14	Receiving Sensitivity: -105 dB	Yes
11.15	Signal / Noise Ratio: -105dB	Yes
11.16	Border Upon Channel Rejection: > 70 dB	Yes
11.17	Audio Output Level: 0-300 mV	Yes
11.18	Power Requirements: 13-15V DC nominal 1500 mA	Yes
11.19	T.H.D.: < 1%	Yes
11.20	Power Supply: 110/220V (13-15V Power Adapter)	Yes
11.21	Receiver Dimensions (L x W x H): 18.9" x 7.8" x 3.9"	Yes
	Handheld Mic / Body-Pack Transmitter Specifications:	Yes
11.23	Includes (4) Microphones & (4) Bodypacks	Yes
11.24	Digital LCD Display Channel Readout	Yes
12	Conference Controller (Standard Warranty)	Bosch- CCS1000D
12.1	Microphone capacity	Yes
12.2	Simultaneous interpretation channel	Yes
12.3	Frequency Response: Covers 80Hz to 16KHz.	Yes
12.4	Signal-to-Noise Ratio (SNR): Exceeds 78dB(A).	Yes
12.5	Dynamic Range: Greater than 80dB.	Yes
12.6	Total Harmonic Distortion (THD): Less than 0.05%.	Yes
12.7	Main Power Input: Compatible with 100-120VAC/200-240VAC (switchable).	Yes
12.8	Audio Input: LINEIN1: 775mVrms balanced; Output: Phoenix terminals 775mVrms balanced.	Yes

12.0	Audio Output : LINEOUT1: 1Vrms balanced; 16 multi-function output Phoenix terminals: 1Vrms balanced.	N.
12.9		Yes
12.10	Output Load: Supports loads greater than 1KΩ.	Yes
10.11	Extension Port : 1 port available for connecting conference system extension equipment.	X 7
12.11	DANTE/NC Port : 1 port for connecting external devices with DANTE protocol.	Yes
12.12	WIFI Network Port : 1 port for connecting to a wireless AP (Access Point).	Yes
12.13		Yes
12.14	PC Network Port: 1 port for connection to a computer.	Yes
12.15	Delegates Output Interface: 4 interfaces for connecting conference speaking units.	Yes
12.16	RS-232 Interface : 2 channels, one for camera tracking, another for docking external equipment.	Yes
12.17	RS-485 Interface: 1 interface for camera tracking.	Yes
12.18	Static Power Consumption: 30W.	Yes
12.19	Output Power Consumption: 320W.	Yes
12.20	Wired Microphone Connection: Utilizes a special cable with 6 pins.	Yes
12.21	Touch Screen: Equipped with a 4.3-inch full-color touch screen.	Yes
12.22	Color: Black.	Yes
12.23	Dimensions : $484 \times 303 \times 88$ mm (Length × Width × Height).	Yes
13	Conference Unit Mic (Standard Warranty)	Bosch-CSSD-DL
13.1	Type: Back Electret Condenser	Yes
13.2	Polar Pattern: Cardioid	Yes
13.3	Sensitivity: $-40 \text{ dB} \pm 2 \text{ dB}$	Yes
13.4	Frequency Response: 40 Hz – 20kHz	Yes
13.5	Power Supply: Phantom 48V DC or 3V (2 x 1.5V AAA type batteries)	Yes
13.6	Controls: ON/OFF switch	Yes
13.7	Output connector: XLR Male	Yes
13.8	Output Impedance: 75 Ω	Yes
13.9	Gooseneck Length: 445 mm	Yes
13.10	Dimensions: 115 x 30 x 140 mm	Yes
13.11	Net Weight: 0.50 Kg	1 Kg
14	2 Channel Feedback Suppressor (Standard Warranty)	Bosch- LBB1968/00
14.1	Input Channels and Plugs: 2 XLR and TRS multi-use plug analog inputs	Yes
14.2	Output Channels and Plugs: 2 XLR male plug + 2 TRS male plug analog outputs	Yes
14.3	Input Impedance: Balanced: 20KΩ	Yes
14.4	Output Impedance: Balanced: 100Ω	Yes
14.5	Input Range: ≤+20dBu	Yes
14.6	Frequency Response: $20 \text{ Hz} - 20 \text{kHz} (\pm 0.5 \text{dB})$	Yes
14.7	Signal-to-Noise Ratio (SNR): ≥103dB @ 1kHz 20dBu (A-weighted)	Yes
	Total Harmonic Distortion (THD): <0.012% OUTPUT=0dBu/1kHz	Yes
14.8		. ~
14.8 14.9	Channel Separation: 82dB (1kHz)	Yes
	Channel Separation: 82dB (1kHz) Howling Search and Suppression: Fully automatic notch filter	Yes Yes

14.12	Q Value Range: 10-50	Yes
14.13	Frequency Resolution: 1Hz	Yes
14.14	Howling Search Time: 0.1~0.5S	Yes
14.15	FFT Length: 1024	Yes
14.16	Acoustic Gain: 4~8dB	Yes
14.17	System Gain: 0dB	Yes
14.18	Notch Filter: Dual channel, 12 static + 12 dynamic points for each	Yes
14.19	Crossover: Three high and low pass filters: Butterworth, Bessel, Linkwitz-Rayleigh	Yes
14.20	Equalizer: 31-band graphic equalizer + 8-band parametric equalizer	Yes
14.21	Display: 2-inch IPS true color screen, resolution 320*240; 48 LED indicators for notch filter status	Yes
14.22	Processor: 48kHz sampling frequency, 40-bit DSP processor; 32-bit A/D and D/A conversion	Yes
14.23	Dimensions: 484×206×45mm (L×D×H)	Yes
14.24	Net Weight: 2.4kg	3 Kg
15	Digital Audio Matrix Processor (Standard Warranty)	Bosch-PLM- 8M8 PLENA
15.1	Input Channel: Pre-amplifier, Delayer, Extender, Compressor, 31-band graphic equalizer, 4 Dnate inputs	Yes
15.2	Output Channel: 15-band parametric equalizer, Delayer, CROSSOVER, FIR filter, High and low pass filter, Limiter	Yes
15.3	Dnate Interface: 2	Yes
15.4	Sampling Rate: 48K	Yes
15.5	Frequency Response: 20Hz-20kHz ±0.5dB	Yes
15.6	THD + Noise: $<0.002\%$ @1kHz, 4dBu	Yes
15.7	D/A Dynamic Range (A-weighted): 120dB	Yes
15.8	A/D Dynamic Range (A-weighted): 120dB	Yes
15.9	Input Impedance (Balanced): 20KΩ	Yes
15.1	Maximum Output Impedance (Balanced): 100Ω	Yes
15.11	Channel Separation: 1kHz, 100dB	Yes
15.12	Input KCMR: 60Hz, 80dB	Yes
15.13	Maximum Output Level: +20dBu, balanced	Yes
15.14	Maximum Input Level: +20dBu, balanced	Yes
15.15	Working Temperature: 0°C-40°C	Yes
15.16	Power Supply: AC110V-220V, 50Hz/60Hz	Yes
15.17	Power Consumption: <40W	Yes
15.18	Size (Width x Depth x Height): 482×258×45(mm)	Yes
15.19	Net Weight: 2.56kg	Yes
15.20	Gross Weight: 3.56kg	Yes (6Kg)
16	Digital Mixer (Standard Warranty)	Bosch-PLE- 2MA240
16.1	Mic input: 24 channels of XLR	11

16.2	Line input: 24 channels of stereo/single-plug interface	3
	Intelligent output: 2 sets of stereo main outputs, 8 marshalling and auxiliary outputs, 1	
16.3	set of stereo monitoring output, 1 headphone monitoring output	Yes
16.4	USB interface: 2 USB ports for stereo recording/playback/system update	Yes
16.5	Screen: A 7-inch HD IPS touch screen, resolution: 1024×600	Analogue
16.6	Phantom power: +48VDC	Yes
16.7	AD/DA: Support 24bit/48Khz	Yes
16.8	DSP processor: 32-bit floating point	Yes
16.9	Frequency response: 22Hz~22KHz at 0dBu±1.5dB	Yes
16.10	Distortion: <0.01% at 0dBu 1KHz	Yes
16.11	Maximum input level: +20dBu±0.5dBu	Yes
16.12	Microphone input gain: 0dBu-50dBu	Yes
16.13	Microphone input SNR: 111dB	Yes
16.14	Line input gain: -20dBu-+30dBu	Yes
16.15	Noise (bus noise): -91dB	Yes
	Audio processor: 12 effects: Hall, Room, Plate, Delay, Stdelay, Tremolo, Flanger,	
16.16	Chorus, DelayRev, StdelayRev, FlangerRev, ChorusRev	Yes
	Noise gate: Threshold range: -84dBu-20dB; entry time: 0.5ms-200ms; release time:	
16.17	10ms-1000ms	Yes
	Compressor: Threshold range: -30dBu-+20dB; entry time: 10ms-150ms; release time:	
16.18	10ms-1000ms; ratio: 1:1toLimit; gain: 0dBu-+24dB	Yes
16.19	Equalizer: 21Hz-19.2KHz +/-24dB	Yes
16.20	ADC, DAC dynamic range: 114dB	Yes
16.21	Internet: Network port, with external router, can connect to iPad for remote control	Yes
16.22	Power voltage: AC 90-240V 50/60Hz power supply	Yes
16.23	Working temperature: Working temperature 0-40°C; storage temperature -20-45°C	Yes
16.24	Size: 530×540×210mm	Yes
16.25	Weight: 12Kg	12.5Kg
17	6 Pin Conference Table	Bosch
	Must comprise six pins suitable for audio, video, or data transmission during	
17.1	conferences.	Yes
17.2	Durable and reliable construction for uninterrupted transmission.	Yes
17.3	Connector compatibility and reliability for various conference systems.	Yes
18	RVVP 2*1.5 Audio Cable	Schneider
18.1	Two conductors with a diameter of 1.5 square millimeters each.	Yes
18.2	RVVP (Reinforced PVC Insulation) for enhanced durability and signal integrity.	Yes
18.3	Suitable for audio transmission with low interference and high-quality sound output.	Yes
19	EVJV 2*2.5 Speaker Cable	Schneider
19.1	Two conductors, each sized at 2.5 square millimeters.	Yes
19.2	Designed specifically for speaker connections with robust insulation.	Yes

19.3	Ensures clear and reliable audio signal transmission to speakers.	Yes
20	Lecture Hall Chairs	SeatUp Turkey
20.1	Seat centers 55 cm Overall height 95 ± 1 cm	Yes
20.2	Seat height 44 ± 1 cm	Yes
20.3	Seat width 48 ± 1 cm Armrest Width 6 cm	Yes
20.4	The back and seat foams are produced as molded foam in aluminum molds.	Yes
20.5	(Foam Standard MVSS 302)	Yes
20.6	Back foam molded on the metal frame (EN 12727 / 3.1)	Yes
20.7	Seat foam molded on the metal frame (EN 12727/3.1)	Yes
20.8	The PU Ladder /Scotchguard Fabric has a flammability property (B1, DIN EN 1021)	Yes
20.9	Seat has a durable metal feet(EN 12727 / 3.1)	Yes
20.10	Seat cushion has a shutdown feature with the weight system	Yes
20.11	Writing table has ant panic system and the table is covered with membranes.	Yes
20.12	Metal parts are painted with epoxy polyester based powder paint. (60 mic.)	Yes
20.13	Note (SCOTCHGUARD Fabric)	Yes
20.14	Or Equivalent	
21	Acoustic Panels	ProSound
21.1	Acoustic Panels Including wood framing of MDF 12mm and acoustic insulation with imported soft finish fabric	Yes

---End of Document---