

Technical Specification

4K 20x Optical zoom camera (1 quantity)			Compliance Yes/No
S No	Parameter	Specifications	
1	Sensor	1/2.8 inches CMOS, Effective pixels: 8.42 Megapixels or better	
2	Lens	f3.47mm-41.65mm, F1.84-F3.72	
3	Diagonal FOV	66.6°	
4	Horizontal FOV	60° ~ 3.5°	
5	Vertical FOV	35.7° ~ 2.0°	
6	Video Format	<u>YUY2: Max 1080P@30fps; MJPEG: 2160P@30fps; H.264 AVC/SVC: Max 2160P@30fps</u>	
7	Signal system	4K/30, 4K/25, 1080P/30, 1080P/25	
8	Scanning mode	Progressive	
9	Optical Zoom	20X Optical Zoom	
10	Digital zoom	16X Digital Zoom	
11	AI Feature	Presenter Framing, Group Framing, Humanoid Tracking, and Target Tracking	
12	Minimum illumination	0.5Lux@(F1.8,AGC ON)	
13	Shutter	1/30s- 1/10000s	
14	White balance	Auto indoor, outdoor, one push, manual VAR	
15	Backlight compensation	Support	
16	Digital noise reduction	2D AND 3D Digital noise reduction	
17	SNR	>55dB	
18	Pan angle	170°	
19	Tilt angle	-30° - 90°	
20	Pan speed	2.7° - 35.7°/s	
21	Tilt speed	2.7° - 31.5°/s	
22	Image flip	Support	
23	Present position	255	
24	Video compression	H.264/MJPEG	
25	Video stream	Dual Stream (First and Second Stream)	
26	First stream resolution	3840x2160, 1920x1080, 1280x720 etc.	
27	Second stream resolution	1920x1080, 1280x720, 1024x576 etc.	
28	Video bit rate	32kbs-20480kpbs	
29	Bit rate control	VBR, CBR	
30	Frame rate	50Hz1fps-25fps,60fps-30fps	
31	Audio compression	AAC	
32	Audio bit rate	96kpbs,128kpbs,256kpbs	
33	Protocols	NDI (Optional), TCP/IP, HTTP, RTSP, RTMP, Onvif, DHCP, SRT, GB/T28181, Multicast	
34	USB interface	1 x USB 3.0 Type-C	

35	HD output	1 x HDMI	
36	Network interface	1 x RJ45: 10M/100M/1000M Adaptive Ethernet	
37	Audio interface	1 x Line In (3.5mm jack)	
38	Control interface	1 x RJ45 (IN), 1 x RS232 IN (8Pin mini DIN, Max Distance: 30m), Protocol: VISCA/Pelco-D/Pelco-P	
39	Accessory	IR Remote Control and Wall Mount kit (included as standard accessory)	
40	Certifications	BIS (Indian), CE, FCC, RoHS, and CB Certification	
41	Warranty	3 years	
All in One DSP			
S No	Parameter	Specifications	
1	Digital Signal Processor	The DSP should have a 100% Full Duplex Echo Cancelling – no attenuation during full-duplex.	
2		The system should be Automatic echo cancellation(AEC).	
3		The system should be Automatic Gain Control (AGC).	
4		The system should be Dynamic Noise reduction.	
5		The should have frequency response between 20 Hz – 20 KHz	
6		The DSP should have USB port for integrating with Unified Software solutions like Skype, Lync, etc.	
		DSP Should have dual capability of Local Sound Reinforcement and Far end Audio to be sent for Video conferencing at the same time without any Noise and Echo. Whatever teacher or student speaks through Collar or hand-held microphone and Gooseneck microphone all should be Going to Far end Location over Video Conference and also should come out of Speakers for local Sound Reinforcement so that everyone present in class can also hear clearly.	
7		The DSP should have inbuilt Amplifier. It should come as one single unit as DSP-cum-Amplifier, from day 1. It should have inbuilt Receiver for Wireless Microphones from day 1.	
8	Wireless Microphone Features	2 no. of wireless Microphones should be supplied along with DSP from day one or more.	
9		The Microphone should have Frequency band of UHF 610MHz - 680MHz or better.	
10		The system should be Microphone Frequency Response- 80Hz~18KHz or better	
11		The system should have the facility to control the gain of microphone.	
12		The system should have LED indicator for status.	
13		Operating Range up to 100 Feet	
14	Amplifier Features	The system having inbuilt digital amplifier.	
15		The Amplifier should consist of a 200 Watts (100 WattsX2) at 8 Ohms or more	
16		4 no. of 50W wall mount Speakers should be supplied along with DSP from day one or more.	
17		The Amplifier should have S/N Ratio of >80dB.	
18		The Amplifier should be inbuilt with DSP from day 1. Amplifier & DSP should come as single unit.	
19	I/O Ports	Built-In 1 x Handheld, 1 x headband Microphone	
20		Unbalanced MIC input (1x 6.5mm phono jack) with gain control	

21		Balanced 48v/12v phantom mic inputs (2x Phoenix ports) with separate gain controller	
22		Line input - 1 x 2RCA	
23		Line Output - 1 x 2RCA	
24		USB voice interface X 1 or more	
25		It should have 1 X RS232 port for controlling	
26	Form Factor	The system should be standard 19 inches Rack Mountable or better.	
27	Certification	Proposed product must have CE, RoHS, FCC certification. Copy to be attached as proof.	
28	Local Content	The offered product shall have a minimum local content of 50% or more, in compliance with Government guidelines.	
29	Warranty	3 years	
Active LED 2.5 Pixel Pitch (16.8 ft in width and 9.45 ft in height)			
S No	Parameter	Required Parameters	
1	Video Wall Size	The minimum required size is 16.8 ft in width and 9.45 ft in height. This size must be achieved using a combination of video wall cabinets of the specified dimensions, with a permissible variation of $\pm 2\%$.	
2	Video Wall Technology	Micro LED (Indoor) SMD or better	
3	Module Size (WxHxD)	320mm x 160mm x 15mm or better	
4	Total Resolution	Min. *2048 x 1152* pixels	
5	Pixel Pitch (mm)	2.5 mm or better	
6	Pixel Density	160000 pixel/m ² or Higher	
7	Processing	12 Bit or Higher	
8	Pixel per Tile	Minimum 128*64 px (HxV)	
9	Horizontal Viewing Angle	Minimum ≥ 150	
10	Vertical viewing	Minimum ≥ 130	
11	Refresh Rate	Minimum 3840Hz or higher refresh rate for flicker free experience on video wall	
12	Colour Temperature	Between 3000~15000 (Adjustable)	
13	Video Frame Rate	Minimum 30Hz or better	
14	Contract Ratio	5000:1	
15	Average time without failures	≥ 5000 hrs	
16	LED Lifetime, Typical(hrs)	30000 or better	
17	HDR Compatible	HDR10 / HDR10+ / HDR10 Pro	
18	Operating Hours	24x7	
19	Operating Temp Range	-20-+40 / Humidity 10%-60%RH	
20	Brightness	on screen brightness minimum 450 cd/m ² or better	

21	IP Protection	Min IP30 or better	
22	Maintenance	Maintenance of tiles or LED's should be Easy and Damage free process	
23	Certifications (Bidder to provide proof of certifications)	Video wall should have all safety and international certificates: Minimum BIS, CE, FCC and RoHS	
24	10% Spare LED Modules along with Cards to be supplied in Spares to be kept at Site		
25	Module Support	Each Cabinet will support 6 Modules	
26	Cabinet Size (WxH)	640x480mm or better	
27	Cabinet Type	Cabinet should include Receiving card and Power supply for each module	
28	Features	Pixel level brightness and chroma calibration, Quick adjustment of dark or bright lines, Individual gamma adjustment for RGB, Image rotation in 90° increments, mapping function, setting of a pre-stored image in receiving card,	
29	Mounting structure	Mounting structure with MS/Aluminium extrusion, weather-resistant powder-coated finish, and corrosion-resistant MS brackets.	
30	Warranty	3 years	
Sending Card/ Video Wall Controller			
S No	Parameter	Required Parameters	
1	Features	LED display controller with supports 1x DVI input, 2x HDMI input, 1x 3G-SDI, and 4x Ethernet outputs, supports input resolutions up to 1920×1200@60Hz. It should support 2.6 million pixels	
2	Interfaces	3 types of input connectors 1x 3G-SDI 2x HDMI 1.3 1x DVI 1x OPT	
		4x Gigabit Ethernet outputs	
		1x light sensor connector	
		1x type-B USB control port	
		2x UART control ports They are used for device cascading. Up to 4 devices can be cascaded.	
3	Electrical Specifications	Input voltage AC 100-240V~50/60Hz Rated power consumption 35 W	
4	Warranty	3 years	
Wall Mount Speakers (Combined Output of 200W)			
S No	Parameter	Specifications	
1	Enclosure Material	The system should be made of ABS Plastic	
2	Woofers type	The system should be having polypropylene cone woofer	
3	Woofers size	The system should be having woofer size of 5.25" or higher	
4	Tweeter type	The system should be having Titanium dome type Tweeter	
5	Tweeter size	The system should be having Tweeter size of 1" or higher	

6	Frequency response	It should be frequency bandwidth 90HZ – 20 kHz	
7	Impedance	It should have impedance of 8 ohms or higher	
8	SPL (Sound Pressure Level)	It should have SPL of 90dB or higher	
9	Power (RMS)	It should have 50 watts or higher Power (RMS)	
10	Connectors	It should have 1 (one) pair metal binding terminal type connectors	
11	Type of Mounting	It should be wall-mounting or higher	
12	Dual axis Mounting	It can be mounted vertically or horizontally in both axis	
13	Warranty	3 years	
	ATC		
1	The OEM should have a minimum of Four or more direct support staff in Odisha to ensure immediate technical support. An official confirmation on the OEM's letterhead or relevant documentation must be provided.		
2	The OEM must be certified with valid ISO 9001:2015, ISO 45001:2018, ISO 27001:2022, ISO 14001:2015, and ISO 50001:2018 certifications. Copies of the relevant certificates must be submitted as proof.		
3	The OEM should have established office in India for a minimum of 15 years. A valid certificate of incorporation or equivalent document must be provided as proof.		
2	The OEM must be a Make in India manufacturer with a factory located in India. Relevant proof must be submitted.		
3	Manufacturer authorization: Wherever Authorized Distributors / Dealers are submitting the bid, Manufacturers Authorization Form (MAF)/Certificate with OEM details such as name, designation, address, e-mail Id and Phone No. required to be furnished along with the tender.		
4	Data sheet of the product(s) offered in the bid, are to be uploaded along with the bid documents. Buyers can match and verify the Data Sheet with the product specifications offered. In case of any unexplained mismatch of technical parameters, the bid is liable for rejection.		
3	Dedicated/ toll free Telephone No. for service support, Escalation Matrix for Service support.		
4	Only OEMs with a manufacturing unit in India, possessing a valid and up-to-date factory license, certified quality processes audited and acknowledged through On-Site or Virtual Assessment, and a recognized domestic R&D facility shall be eligible. The Factory License, OEM Assessment Report (abridged), and Recognition Letter for in-house R&D issued by DSIR or any Government of India-recognized certification authority must be submitted along with the MII Declaration.		
5	OEM must have a minimum average annual turnover of ₹85 Crores over the last three audited financial years (2021–22, 2022–23, and 2023–24), Proof must be provided through audited statements or CA-certified certificates.		

CORRIGENDUM

Bid/RA Section	Seller Query/Representation	Amendments
Bid Eligibility Criteria	<p>The tender mandates that the OEM must have a minimum average annual turnover of ₹85 Crores over the last three audited financial years (FY 2021–22, 2022–23, and 2023–24). We respectfully submit that this condition is highly disproportionate, arbitrary, and not commensurate with the scope or value of the subject tender, which is of a very small scale. 1. Violation of GFR 2017 – Rule 173 & 176 As per General Financial Rules (GFR) 2017, qualification criteria must be: Relevant to the nature of work Proportionate to the estimated tender value Non-restrictive and competition-friendly An ₹85 Crore turnover threshold for a small-value procurement bears no rational nexus with technical capability, product performance, or delivery capacity, thereby violating the proportionality principle mandated under GFR.</p>	May be applicable as per GeM rule.
	<p>Representation Against Mandatory 15-Year OEM Establishment in India The tender condition requiring the OEM to have an established office in India for a minimum of 15 years, supported by a certificate of incorporation, is arbitrary, excessive, and not proportionate to the scope or value of the subject procurement. 1. Contrary to GFR 2017 Principles As per General Financial Rules (GFR) 2017, bidder qualification criteria must be: Relevant and proportionate to the nature and value of the procurement Non-restrictive and aimed at ensuring fair competition A 15-year establishment requirement has no rational nexus with product quality, technical competence, delivery capability, or warranty support, particularly for a limited-scope tender.</p>	May be applicable as per GeM rule.
	<p>As per GeM General Terms & Conditions (GTC), where onsite warranty support is provided, the OEM/bidder is responsible for providing service at the installation site, irrespective of the physical location of service personnel. Therefore, insisting on pre-existing manpower stationed within a specific state is redundant and beyond contractual necessity.</p>	May be applicable as per GeM rule.
Terms and Conditions	<p>The clause requiring the OEM to have a minimum of four direct support staff in Odisha is geographically restrictive and limits fair competition, We request revision of this clause to allow Pan-India technical support with a defined response time, as immediate support can be ensured through a national service network and deployment of engineers when required.</p>	May be applicable as per GeM rule.

<p>Terms and Conditions</p>	<p>how will u control the display & which content will u play ?</p>	<p>The Active LED will be centrally controlled through the proposed controller provided as part of the solution, enabling seamless management of power on/off, input source selection, content scheduling, and operational control. The content to be played on the Active LED will primarily include official presentations, live video feeds, content, training and awareness videos, and other authorized multimedia content as required by the department from time to time. All content usage will be strictly limited to official purposes, and control access will be restricted to authorized personnel to ensure secure and efficient operation of the Active LED.</p>
	<p>Please mention exact size since there is a lot of discrepancy in sizes ? please mention exact size. Since GEM bid mention different size & ATC mention different size. Pls clarify</p>	<p>The size specification mentioned in the GeM bids ATC shall be treated as the final and binding requirement for this procurement. Any variation observed between the GeM bid and the Approved Technical Compliance (ATC) document may be considered inadvertent. To avoid ambiguity and ensure uniformity for all bidders, the exact size as specified in the GeM bid is to be complied with while submitting the offer. All bidders are requested to quote strictly in accordance with the size mentioned in the GeM bid document.</p>
	<p>Our offered OEM offers onsite warranty & as per GEM GTC it says: Availability of Service Centres: Bidder/OEM must have a Functional Service Centre in the State of each Consignee's Location in case of carry-in warranty. (Not applicable in case of goods having on-site warranty). If service center is not already there at the time of bidding, successful bidder / OEM shall have to establish one within 30 days of award of contract. Payment shall be released only after submission of documentary evidence of having Functional Service Centre. Hence our offered make offers OEM onsite warranty so not applicable of having service centre. If required we shall open service centre within 30 days of award of contract otherwise our payment can be hold.</p>	<p>May be applicable as per GeM rule.</p>
	<p>how will u send this content to the display.</p>	<p>The content will be delivered to the display through the Active LED controller provided as part of the solution, using standard interfaces such as HDMI, USB, or network connectivity. Content upload and playback will be controlled by authorized personnel for official use only.</p>

	<p>ALSO REQUEST YOU TO TAKE GEM RITES ISSUED VENDOR ASSESSMENT REPORT AGAINST OEM STATUS- SINCE THE CONDITION, FAVOURS ONLY PEOPLELINK "Only OEMs with a manufacturing unit in India, possessing a valid and up-to-date factory license, certified quality processes audited and acknowledged through On-Site or Virtual Assessment, and a recognized domestic R&D facility shall be eligible. The Factory License, OEM Assessment Report (abridged), and Recognition Letter for in-house R&D issued by DSIR or any Government of India-recognized certification authority must be submitted along with the MII Declaration."</p>	<p>Any Government of India-recognized certification authority must be submitted along with the MII Declaration</p>
	<p>REQUEST FAIRNESS AND TRANSPARENCY, THIS BID IS RESTRICTED FOR JUST PEOPLELINK WHICH WILL BE BREACH OF COMPETITION COUNCIL OF INDIA RULES.</p>	<p>The tender conditions have been framed in a fair, transparent, and non-discriminatory manner, in line with GeM guidelines and applicable Government procurement rules. All eligibility and technical criteria are generic, objective, and uniformly applicable to any OEM capable of meeting the stated requirements. The bid does not favor or restrict participation to any particular brand or manufacturer, and therefore does not violate the principles of fair competition or any provisions of the Competition Council of India. Accordingly, the procurement process remains open, competitive, and compliant with all applicable regulations.</p>
	<p>Sir please share structure specifications ? who shall provide structure ? same will be pole mounted or wall mounted ?</p>	<p>The proposed solution is for an Indoor Active LED display. The mounting structure (wall-mounted) along with all required structural accessories shall be provided by the successful bidder/OEM as part of the scope of supply. The structure shall be designed as per site conditions and OEM recommendations to ensure safety, stability, and proper load bearing. Pole mounting is not envisaged for this requirement.</p>
	<p>PLS REMOVE CONDITION OF OEM TURNOVER OF RS 85 CRORES WHICH FAVOURS PEOPLE LINK DIRECTLY BECAUSE AS PER GEM BID OEM TURNOVER SHOULD BE 119 LAKHS AND NOT 85 CRORES, THIS IS BEING DONE TO RESTRICT THE BID TO PEOPLELINK.</p>	<p>The eligibility criteria, including the minimum average annual turnover requirement, have been framed after due consideration of project requirements, service continuity, and risk mitigation. The turnover criterion is independent of any specific OEM, is uniformly applicable to all OEMs, and is intended to ensure financial stability and long-term support capability. The condition does not restrict participation to any particular brand or manufacturer and is in compliance with GeM and applicable procurement guidelines. Accordingly, the tender condition is upheld.</p>

	Sir please share application? how will u play the content & control the display ?	The application is for official indoor Active LED purposes such as presentations, informational and training content. Content will be played and the Active LED will be controlled through the Active LED controller provided as part of the solution, using standard interfaces and secure access, and will be operated only by authorized personnel.
	Please mention installation location ?	Please read the tender the consignee location is mentioned in the Tender
	Pls share estimated cost ?	Please read the tender the estimate is also mentioned in the Tender
	OUR OEM OFFERS ONSITE WARRANTY, HENCE REQUEST TO ACCEPT AS PER GEM BID PAGE NO. 7 POINT NO. 14 SAYS Availability of Service Centres: Bidder/OEM must have a Functional Service Centre in the State of each Consignee's Location in case of carry-in warranty. (Not applicable in case of goods having on-site warranty). If service center is not already there at the time of bidding, successful bidder / OEM shall have to establish one within 30 days of award of contract. Payment shall be released only after submission of documentary evidence of having Functional Service Centre., HENCE IF WE ARE AWARDED CONTRACT, WE WILL OPEN SERVICE CENTRE IF REQD BY BUYER.	May be applicable as per GeM rule.
	REQUEST YOUR COMPLIANCE AND BE FAIR TRANSPARENT.	The procurement process is being conducted in a fair, transparent, and compliant manner, strictly in accordance with GeM guidelines and applicable Government procurement rules. All conditions have been framed objectively and are uniformly applicable to all bidders. The request is noted; however, the bid terms remain unchanged.
Bid Eligibility Criteria	who shall provide power and signal cable ?? pls mention	The successful bidder/OEM shall provide all required power and signal cables as part of the scope of supply, including interconnections between the Active LED display, controller, and associated equipment, to ensure complete and functional installation.

ATC		
	Bid requirement	Amendments
1	The OEM should have a minimum of Four or more direct support staff in Odisha to ensure immediate technical support. An official confirmation on the OEM's letterhead or relevant documentation must be provided.	as per GeM rule.

2	The OEM must be certified with valid ISO 9001:2015, ISO 45001:2018, ISO 27001:2022, ISO 14001:2015, and ISO 50001:2018 certifications. Copies of the relevant certificates must be submitted as proof.	No change
3	The OEM should have established office in India for a minimum of 15 years. A valid certificate of incorporation or equivalent document must be provided as proof.	as per GeM rule.
2	The OEM must be a Make in India manufacturer with a factory located in India. Relevant proof must be submitted.	No change
3	Manufacturer authorization: Wherever Authorized Distributors / Dealers are submitting the bid, Manufacturers Authorization Form (MAF)/Certificate with OEM details such as name, designation, address, e-mail Id and Phone No. required to be furnished along with the tender.	No change
4	Data sheet of the product(s) offered in the bid, are to be uploaded along with the bid documents. Buyers can match and verify the Data Sheet with the product specifications offered. In case of any unexplained mismatch of technical parameters, the bid is liable for rejection.	No change
3	Dedicated/ toll free Telephone No. for service support, Escalation Matrix for Service support.	No change
4	Only OEMs with a manufacturing unit in India, possessing a valid and up-to-date factory license, certified quality processes audited and acknowledged through On-Site or Virtual Assessment, and a recognized domestic R&D facility shall be eligible. The Factory License, OEM Assessment Report (abridged), and Recognition Letter for in-house R&D issued by DSIR or any Government of India-recognized certification authority must be submitted along with the MII Declaration.	Any Government of India-recognized certification authority must be submitted along with the MII Declaration
5	OEM must have a minimum average annual turnover of ₹85 Crores over the last three audited financial years (2021–22, 2022–23, and 2023–24), Proof must be provided through audited statements or CA-certified certificates.	as per GeM rule.