



क्षेत्रीय आयुर्वेद अनुसंधान संस्थान, तिरुवनन्तपुरम

(केंद्रीय आयुर्वेदीय विज्ञान अनुसंधान परिषद, आयुष मंत्रालय, भारत सरकार)
पूजपुरम, तिरुवनन्तपुरम -695012, केरल

REGIONAL AYURVEDA RESEARCH INSTITUTE, THIRUVANANTHAPURAM
(Central Council for Research in Ayurvedic Sciences, Ministry of AYUSH, Govt. of India)

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SCOPE OF WORK

Introduction: -

Regional Ayurveda Research Institute, Trivandrum (RARI) is a peripheral unit of Central Council for Research in Ayurvedic Sciences (CCRAS), an autonomous body under Ministry of AYUSH, Govt of India, situated at Poojappura, Thiruvananthapuram. The institute undertake, co-coordinate, aid and promote research in Ayurvedic Sciences with special emphasis on Life Style related disorders. The institute intends to setup a video conferencing system for a group of 10 to 15 people as per the directions of CCRAS Headquarters vide letter No. HQ-IT014/5/2023-IT dated 04.12.2023. The above said work shall be completed through procurement from GeM via online Bids. The detailed specification regarding the VC setup is attached herewith

Technical Specifications - Video Conference System		
SI No.	Parameter	Specification
PTZ Camera - 1 no		
1	Resolution	4K, 1440p, 1080p, 900p, 720p, and SD at 30fps 1080p, 720p at 30 fps and 60 fps
2	Zoom	15x HD zoom (5x optical + 3x digital)
3	Pan	180° (±90°)
4	Tilt	140° (+50° / -90°)
5	Field of View - Diagonal	90°
6	Field of View - Horizontal	82°
7	Field of View - Vertical	52°
8	Autofocus	Required
9	Camera presets	Minimum 3
10	Video mute/unmute LED indicator	Required
11	Wide Dynamic Range (WDR)	Required
12	Low-light compensation	Required
13	Video noise reduction	Required
14	Low-light saturation optimization	Required
15	Renders natural skin tones for each participant on camera	Required
16	Reduces backlighting and glare without darkening the entire image.	Required
17	Privacy	Lens parks at -90° in sleep mode for assured privacy
18	Kensington security slot	Required
19	Human figure detection	Required
20	Auto-frame participants at meeting start	Required

21	Auto-frame participants on-demand	Required
22	Auto-reframe participants during meetings	Required
Microphone - 2 nos		
23	Pickup Range	Pickup range: 15 ft / 4.5m diameter
24	beamforming	Four microphones with eight beamforming elements
25	Mute button with LED status indicator	Required
26	Daisy chain	Support minimum 5 nos
27	Acoustic Echo Cancellation	Required
28	Voice Activity Detector	Required
29	Background noise suppression	Required
30	Frequency Response	90Hz – 16kHz
31	Sensitivity	>-27 dB +/-1dB @ 1Pa
32	Microphone data rate	48 kHz or better
33	Very low distortion broadside beamforming algorithm steers the factory-paired microphones directly at the talker for the best voice pickup and noise reduction	Required
34	Beam focus refresh rate	8ms (125 times/second)
Speaker - 2 nos		
35	Driver Size	High-performance 3" (76mm) or higher
36	Sensitivity	95+/-2 dB SPL at ½ meter
37	Distortion	200Hz–300Hz <2.5%, 300Hz–10kHz < 1% @7.5W
38	Sampling rate	48 kHz
39	Anti-Vibration Suspension	Required
40	Peak-limiting algorithm eliminates even momentary speaker clipping to prevent distortion	Required
Table Hub & Display Hub - 1 each		
41	Connection Between Table Hub & Display Hub	Single cable (CAT6A) connection
42	Bluetooth wireless technology	Required
43	Table Hub Connectivity	HDMI Type A for wired content sharing 12 Pin connector for microphone USB Type C (Ultra HD / 4K capable) USB Type A (reserved for future capability) USB Type B (connects to meeting room computer) RJ45 (Ethernet)
44	Display Hub Connectivity	HDMI Type A (x2) (connects to displays) USB C (connects to PTZ Camera) USB Type B (connects to meeting room computer) RJ45 (connects to Table Hub) Mini XLR (x2) (connects to Speakers)
Remote Control - 1 no		
45	RF remote control	Required

65" Display - 1 no		
	Display Panel	
46	Diagonal Size	65" or higher
47	Resolution	3,840 x 2,160 (16:9)
48	Brightness (Typ.)	350 nit
49	Contrast Ratio (Typ.)	4,000:1
50	Panel type	IPS/VA
51	Color Gamut	NTSC 72%
52	Operation Hour	16/7
	Connectivity	
53	Input	3x HDMI 2.0, 2x USB 2.0
54	Output	1x Stereo mini Jack
55	WiFi / BT	Required
56	External Control	RS232C (In/Out), RJ45
57	Speaker	2x10W
	Features	
58	Temperature Sensor	Required
59	Ambient Sensor	Required
60	Auto Level	Required
61	Wi-Fi (2.4/5.0GHz dual) and BT	Required
62	Auto Source	Required
63	Switching & Recovery	Required
	Certification	
64	Safety	60950-1/62368-1
65	EMC	Class B
66	Security	802.1 x (WPA2 Enterprise): EAP-TLS, EAP-TTLS, EAP-PEAP
67	Mounting	Wall mount Bracket Included
	10 Meter Active HDMI Cable - 1 no	
68	Resolution	4K60Hz 4:4:4
69	Hybrid Optical with Fibre & Copper Wire	Required
70	HDCP	HDCP 2.2
71	Bandwidth	18 Gbps
72	Support ARC function	Required
	Cables, Mounts & Installation - 1 Lot	
73	Cables, Wall-Mounting Fixture, Installation & Integration	Should be included