Adigrat University Smart Class Room National Bid for 2009 E.C

Rno	Item	Description	Unit	Qty	Unit price	Total Price	Remark
1	**Software**	should consider all the software license integrate with the existing infrastructure	set	1			
2	**Automatic Tracking System**	Multiple video sources supported, up to 4 video sources, including teacher close-up, platform panorama, student area panorama and PowerPoint. Advanced auto tracking technology, with image recognition and multiple frames comparison technology, system can work out the teacher position, then can easily auto tracking teacher's movement. Atuo-directing system supports supports Video Input Resolution: HD signal: 720p@50@60, 1080p@25@30@50@60 VGA signal(digital DVI): 640×480, 800×600, 1024×768, 1280×720, 1280×768, 1280×800, 1280×960, 1280×1024, 1366×768, 1400×1050, 1440×900, 1920×1080 VGA signal(analog): 640×480, 800×600, 1024×768, 1280×720, 1280×768, 1280×800, 1280×960, 1280×1024, 1366×768, 1400×1050, 1440×900	set	15			
3	**codec**	the bidding product must support IP bandwidth: 64Kbps-8Mbps The bidding product must support video protocols: H.263, H.263+, H.264, H.264HP, and H.264SVC; Supports video formats: 1080P50/60, 1080P25/30, 1080i50/60, 720P50/ 60, 720 P25/30, 4CIF and CIF. The bidding product must support endpoint IP backup to prevent conferences from disruption.	set	15			
4	**Digital Mic Array**	upport omni-directional sound pickup and up to 6-meter pickup distance. support POE with no additional power supply. support a sampling rate of 48KHZ.	set	15			
5	**HD Cameras**	support 12x optical zoom, 4x digital zoom, and the following video output resolutions: 1080p50/60 1080i50/60 1080p25/30 720p50/60 integrate a 2-megapixel and 1/3-inch CMOS imaging chip. support a horizontal angle of 72° and a maximum vertical angle of 44.5°. It must not use any external wide-angle lenses.	set	15			
6	**Cinema Videoconference System**	Codec: Standards and Protocols ITU-T H.323, IETF SIP Video Standards & Protocols H.261, H.263, H.263+, H.264 BP, H.264 HP, H.264 SVC, RTV Audio Standards & Protocols G.711, G.722, G.722.1*, G.722.1C*, G.728, G.719, G729, G.729A, AAC-LD, HWA-LD Dual Stream ITU-T H.239, BFCP Other Standards H.221, H.225, H.230, H.231, H.235, H.241, H.242, H.243, H.245, H.281, H.350, H.460, T.140, DTMF Network Standards & Protocols TCP/IP, FTP, FTPS, DHCP, SNMP, Telnet, SSH, HTTP, HTTPS with SSL/TLS, PPPoE, RTP, RTCP, SNTP, ARP, 802.1X, 802.1P, 802.1Q People Video Resolution: 1080p @ 60 fps from 1Mbps (Optional) 1080p @ 30 fps from 512 Kbps 1080i @ 60 fps from 512 Kbps 720p @ 50/60 fps from 512 Kbps 720p @ 25/30 fps from 384 Kbps 4SIF/4CIF from 128 Kbps SIF/CIF/QSIF/QCIF/SQSIF/SQCIF from 64 Kbps Dual Stream: Dual 1080p @ 60 fps (Optional); Dual 1080p @ 30 fps	set	3			The cinema videoconference will be installed in the graduation hall and it should be integrated to the existing university video conference facility. Besides, it should support duplex communication. The cinema screens shall be determined based on the site

			Bandwidth 64 Kbps to 8 Mbps Interfaces Audio Inputs 2 × XLR, 2 × RCA, 1 × HDMI, 1 × Display Port, 1 × HD-AI (Mic Array/Audio external) Audio Outputs 4 × RCA, 2 × HDMI, 2 × DVI-I / HDMI (DVI converted to HDMI) Video Inputs 2 × HD-VI /DVI, 2 × DVI-I / HDMI/VGA/YPbPr , 1 × HDMI / DVI, 1 × 3G-SDI, 1 × Display Port, 1 × CVBS/S-VIDEO (DVI-I multiplex) Video Outputs 2 × HDMI / DVI, 2 × DVI-I / HDMI / VGA / YPbPr, 1 × 3G-SDI, 1 × CVBS/S-VIDEO (DVI-I multiplex) USB Interfaces 2 × USB 2.0 Host COM Interfaces 2 × RS232 COM Connected Microphones Three VPM220 or three					survey.
		Array Microphone	Sensitivity 38 ± 2 dB Voice pickup distance 6 meters Voice pickup range 360	set	9			
		Camera	Lens specifications 2.38M pixels 1/2.8-inch CMOS imaging chip Video output pixels 1080p @ 50/60 fps,1080i @ 50/60 fps,1080p @ 25/30 fps, 720p @ 50/60 fps Zoom 12x optical plus 12x digital Focal length f = 3.9 mm to 46.8 mm Lens aperture (F#) F1.8 Maximum horizontal field of view 72º Maximum Vertical field of view 44.5º Pan/Tilt range Pan: +/-100º Tilt: +/- 30º Min. illumination 2 lux (50 IRE, F1.8) Automatic adjustment AWB (Auto White Balance), AE (Auto Exposure), AF (Auto Focus)	set	6			
		Projector	●Display: 0.67"(Aspect Ratio 16:10), DLP Technology ●Native Resolution: 1920 x 1200 (WUXGA) ●Brightness: 7500 ANSI Lumen (approx. 80% in Eco Mode) ●Contrast Ratio: 2100:1 ●Lamp: 2-Lamp System (2 x 400 W AC), 2 x 320 Eco Mode ●Lamp Life [hrs]:2000 (2500 Eco Mode) ●Lens: 6 optional bayonet lenses with lens memory/ Complete line of (6) bayonet-style lenses with built-in lens memory, electronic zoom, focus and lens shift/ ●Projection Distance [m]:0.8 (NP16FL) - 54 (NP21ZL) ●Screen Size (diagonal) [cm]:Maximum: 762 / 300"; Minimum: 127 / 50"	set	3			
		Screen	The screen should be considered and based on the site survey					
7	**Accessories**	All accessories such as docoration, furnitures, carpets, electrical equipments, fiber related componenets, UTP cable and related units, Network equipment, installations and other relevant materials for successsful deployment of the solution should be considered.						
8	Installation, Commissioning, and testing	Successful Bidders are required to install, commission, and test all smart class room facilities after delivery. Successful Bidders are required to extend the optic fiber lines to the smart class rooms from the near by building or the university data center. They are also required to make necessary splicing and expansion of fiber lines. Any form of deformations or changes to the building or other facilities during installation, commissioning, and testing must be patched or repaired or restored by the supplier/winner.						
9	Relevant Trainings & Visits	On-Site Trainings	Successful Bidders are required to arrange germane onsite trainings for the AdU-ICT staffs covering all concomitant expenses during & after installation & commissioning	num	5			
		On-factory Trainings & Visits	Successful Bidders are required to arrange visits to factories and on-factory trainings (on Facilities installation, configuration, & management) & certifications prior to the start of installation works covering all concomitant expenses (per-dime + certification fees + Air transport fares).	num	2			
					Total Price			