



ADDENDUM NO. 01

Series of 2023

This Addendum No. 01 is issued to modify or amend items in the Bidding Documents for the **Provision of ICT and Technical Equipment for the Establishment of Smartclassrooms**. This shall form an integral part of the Bid Documents.

Name of Project:	Provision of ICT and Technical Equipment for the Establishment of Smartclassrooms
Location:	CSU Campus, Ampayon, Butuan City
Brief Description:	Provision of ICT and Technical Equipment for the Establishment of Smartclassrooms
Approved Budget for the Contract :	Php. 2,774,122.00
Source of Funds:	Regular Agency Fund (RAF) 2022 Continuing Appropriation
Contract Duration:	60 Calendar Days

Please be informed of the changes in the Bidding Documents as follows:

No.	Item	CHANGES/ AMENDMENT		
		Quantity	Lot	ITEM & DESCRIPTION
1.	<p>1. CEILING MICROPHONE 8 UNITS Overhead Condenser Microphone; at least 25 ft cable; at least cardioid microphone; with battery operated; Compatible Devices: Personal Computer, Smartphone, Radio, Radio, Smartphone; Connector Type: XLR Connector; Power Source: Phantom power,</p> <p>2. DIGITAL AUDIO PROCESSOR 8 UNITS Digital Audio vocal Reverb Effects Processor with Bluetooth DSP audio mixer sound effect Intelligent Anti-howling KTV Pre-stage Professional Microphone Sound Amplifier MICROPHONE -INPUT CONNECTOR at least 1/4 TRS BALANCED -INPUTIMPEDANCE at least 2K OHMS -THE FREQUENCY RESPONSE at least 20HZ TO 30KHZ, +1DB(MAX/MIN) PORT CONNECTION -LINE INPUT have at least RCA -INPUTIMPEDANCE at least 56K OHMS -RECEIVING THE MAXIMUM LEVEL + 18DBU UNBALANCE LINE OUT SPEAKERS -THE FREQUENCY RESPONSE at least 20HZ TO 30KHZ, +1DB(MAX/MIN) -HIGH FREQUENCY RANGE +7DB/10KHZ -LOW FREQUENCY RANGE 7DB/100HZ SUBWOOFER OUTPUT -TO ADJUSTLOW FREQUENCY 25 HZ,-250HZ,-18DB/OCT -THD TWIST 0.015% IN +4DBU,1 KHZ -OUTPUTIMPEDANCE 100OHMS ELECTRICAL POWER AC200-240V,50~60HZ</p> <p>3. AUDIO-TRACKING CAMERA 14 UNITS > track 360 panorama camera speaker follows webcam video conference web camera for meeting room > at least 360° Panoramic Auto-tracking Camera</p>	1	Lot	₱2,774,122.00



Panoramic View & Automatic Cruise
at least Four 1080p Lenses & Panoramic Meeting Video
Have AI Voice Tracking Camera
at least Eight Array Omnidirectional Microphones
White Balance+Low-light Processing Faster Transmission Speed
3.0 USB Faster Transmission Speed

**4. THERMAL SCANNER WITH FACIAL RECOGNITION AND MASK DETECTION
10 UNITS**

Facial Recognition System with Abnormal Temperature Thermal Imaging Scanner, Face Mask Detection

Active Area(mm): at least 152.267(H) mm×89.244(W)

Display Resolution: at least 1024×600

Color Depth: at least 16.7M

Viewing Angle: at least 170°/170°

Brightness: at least 250cd/m²

Contrast ratio: at least 500:1

Response Time: at least 10ms

Life Cycle: at least ≥60000

Mainboard

CPU: - 4 cores. Symmetric Multiprocessing (SMP) within a single processor cluster, and multiple coherent SMP processor clusters

- with ISA support at least Armv7-A, Thumb-2, TrustZone security technology, DSP extensions, Neon advanced SIMD, VFPv4 Floating Point, Hardware virtualization support, Large Physical Address Extensions (LPAE)

- at least Armv7 Memory Management Unit

- with Integrated L2 cache design for low power, Lower transaction latencies and improved OS support for cache maintenance, 64 bit load store path, 128 bit AMBA Axi Buses, Increase TLB size at least 256, runs at least 1.2+1.6 ghz

RAM: at least 128MB(Built-in)+256MB

ROM: at least 128MB

Camera

Pixel: at least 200W Binocular camera

Minimum illumination: Color 0.01Lux @F1.2(ICR);Black and white 0.001Lux @F1.2

White balance: Automatic

Wide dynamic range: at least ≥80db

Infrared lighting Support at least (850nm Infrared light)

White lighting: Support

Face Recognition

Face Database: at least 10000

Face recognition distance: at least 0.5-3M

Face recognition Speed: at least <200ms

Infrared temperature measurement

Temperature detection distance: at least 0.5-0.7M

Temperature detection range: at least 36~42.9°C

Temperature measurement accuracy: at least ±0.3°C

Temperature measurement Speed: 1-2S

External Interface

DC: 5.5mm*2.1mm DC12V

Ethernet: at least 1*RJ45

Wiegand: 1*Wiegand

Door magnetic detection: Support

Power

Power Input: DDC12V(±10%)

Power Consumption: at least 110W MAX

Others

IP Grade: at least IP65

Working Temperature: -10°C~50°C

Temperature measuring working temperature: 10~35°C,optimum working temperature 25°C

Working Humidity: 10%~90 %

at least Wall mounted Bracket or Gate Bracket

5. INTERACTIVE BOARD

7 UNITS



BIDS AND AWARDS COMMITTEE (BAC)



With minimum dimensions of 145 x 85 x 9 cm; Interactive Smart Board; HD Focus; Interactive LCD Display for Meeting and large classes

Display

Size: at least 75" Panel

Display size: at least 1650*928mm

Display Aspect Ratio: 16:9

Ultra High Resolution: UHD 3840*2160 (Pixels)

Display Color: 1.07B colors

Panel Brightness: 350 nits

Panel Contrast Ratio: 6400:1 (DCR)

Product Response Time: less than 5ms

Display Viewing Angles: 178 degree

Surface Treatment: Hardness: 7H

Anti-glare glass coating

OS: Must be android for compatibility issue

Quad core Processor, x64 bit, combined of 2 processors at least 2.8 Hz, L1 cache 96–128 KiB (64 KiB I-cache with parity, 32–64 KiB D-cache) per core, 1 - 4 Cluster

Multiple cluster, instruction set of instruction of set ARMv8-A.

Max. CPU clock rate: 400 MHz to 2.30 GHz

FSB speeds: 100 MHz to 118 MHz OC

L1 cache: 8–64 KiB

L2 cache: 128 KiB – 2 MiB

Instruction set of ARMv8-A

cores: 1–8 per cluster

CPU RAM: at least 3GB DDR4

Hard Disc Storage: at least 32GB storage

Touch

Touch Type: IR touch

Touch Resolution: 32767*32767

Touch Points: 20 points touch

I/O Interface

HDMI Port: 2.0*3 at least (3840*2160 @60Hz)

RGB/VGA Port*1

Audio Port: *1 (PC audio in)

RS232 Port: *1

OPS Slot: *1 PC Slot (proprietary)

HDMI: 1*(4k/60Hz)

Audio: *1 (Earphone out)

SPDIF Port: 1

RJ45 Port: *1

Type A Port: USB2.0: front*2(smart port for all), Rear*2 USB3.0: front*1

Type B Port: *2, for touch

12W*2 (Front position speakers)

HDMI Resolution: 3840*2160

At least Android 8.0 OS inside

Front 2 USB ports support Windows/Android

Others

Network port: 10M/100M for Android

Network port: 10M/100M/1000M for slot-in OPS

Power Voltage: 100-240V AC

Wall Mount (VESA): 500*400

Working Temperature: 0 to 40 degree

Working Humidity: 10%-90% RH

Physical(mm):1483.2*884*91.8mm

Packaging(mm):1600*1000*200mm

Net(kg) weight: 40kg

Gross(kg) weight: 48kg

OPS

OPS CPU: at least Cores 6, Thread 6, Max Turbo Freq. 4.0 Ghz, 9 MB Cache, Bus Speed: 8 GT

Graphics Card: Cores: 192, ROPS: 3, TMUS: 24, Base Clock: 350 MHz

Boost Clock: 1050 MHz, Memory Clock: System Shared, Pixel Rate: 3.150 GPixel/s

Texture Rate: 25.20 GPixel/s

FP16 (half): 806.4 GFLOPS (2:1)

FP32 (float): 403.2 GFLOPS



FP64 (double): 100.8 GFLOPS (1:4)
Graphics Memory: at least 64GB
Resolution up to 4096*2304@60Hz
OPS Type: 260-pin DDR4 SO-DIMM*2
RAM Capacity: 8GB (up to 16GB)
Operating System: must be compatible with Windows to avoid compatibility issue
Net Dimension: M. 2-2242(22*42mm)/2280(22*80mm)
Hard disc Capacity: 128GB SSD (up to 512GB)
Display Port: *1(optional)
HDMI Port: *1 (max resolution 3840*2160@24Hz)
Audio: *1 Earphone out
RJ45 Port: *1 rj45 (Gigabit)
USB: USB3.0*4, USB 2.0*2

6. VIDEO STATION

7 UNITS

54 Inch Smart TV, Flicker Free & Low bluelight, Surround Audio, at least HDR10, Cast Play, Boundless Screen 4.0, with Free Wall Bracket

General:

Screen type: at least LED
HD Technology & Resolution: at least 3840x2160 Pixels

at least Smart TV

at least HDMI: 3 ports

at least USB: 2 ports

Wi-Fi type: dual band 2T2R

at least Build in Wi-Fi: Yes

Wall Mount Included: Yes

Video Features

Brightness: at least 465

Contrast Ratio: at least 4000:1

View Angle: at least 178

LED Display Type: at least DLED

Aspect Ratio: 16:9

Refresh Rate: at least 60

Audio Features

Number of Speakers: 2

Speaker Output RMS: 30

Smart TV Features

Number of Cores: 4

Processor: 4 Multi-Cores Quad, Single shared L2 cache and L1 Memory, 64bit

Graphic Processor: Low Power, OpenGL ES 1.1 or 1.2, L2 Cache 512KB, 8 Multi-core scaling, mmu, antialiasing 4x to 16x AA GPU

Ram Capacity: at least 2 GB

Storage Memory Clocking Speed: 16 GB

Operating System: at least Android

Screen Mirroring: Yes

Build in Wi-Fi: Yes

Ethernet (RJ45): 1

Other Internet Features: RJ45 Port, Dual Band WiFi, Play Store, Eco System, Voice Search

7. FIBER OPTIC CABLE

at least 2,200 METERS

- 250um fiber optical cable, sheathed, at least metal reinforced core, core are filled with water blocking fillers, armored, moisture barrier, filler rope for Direct Burial, Double Sheath Armored, Multi Tube 12 Cores, Single Mode OS2, PE/LSZH Sheath/Flame Retardant PE/Anti-Rodent PE

8. OPTICAL FIBER DISTRIBUTION BOX

15 PIECES

at least Fully loaded 24 Port SC/UPC-Duplex patch panel, OS2, - 1U Metal Housing 480 x 243 x 44 mm, Black RAL 9005, - Slide-out tray with changeable front plate, 4 sets 12 color pigtauls OS2 with SC connector, Including fiber adapters, pigtauls, and splice tray, With 2 pcs. PG13.5 cable clamp, 6 pcs. cable tie, Including 4 sets of M6 screws and nuts



<p>9. DATA CABINET 14 PIECES at least Wall mounted, 6U Metal Housing, 2 built-in, heavy-duty exhaust fan, Built-in surge protected power strip, Tinted front door</p> <p>10. FIBER PATCH CABLE (SHORT) 100 PIECES at least LC to SC 9/125µm, OS2 Singlemode Duplex, UPC Polish, LSZH, 0.5 meter</p> <p>11. FIBER PATCH CABLE (LONG) 100 PIECES at least LC to SC 9/125µm, OS2 Singlemode Duplex, UPC Polish, LSZH, 1 meter</p> <p>12. FTTH PRE-TERMINATED OUTDOOR DROP CABLE 28 PIECES at least LC to LC UPC Full Duplex, Single Mode Fiber Optic Cable, Outdoor, Cable Length: 1000 meters, Reinforcement Material</p> <p>13. FTTH PRE-TERMINATED OUTDOOR DROP CABLE 28 PIECES at least LC to LC UPC Full Duplex, Single Mode Fiber Optic Cable, Outdoor, Cable Length: 300 meters, Reinforcement Material</p> <p>14. CORE/AGGREGATION SWITCH 1 PIECE at least 24 x 10GE ports, 2.56 Tbps Switching Capacity, 1920 Mpps Packet Forwarding Rate, Redundant Power Supply, IEEE802.3ad (Link Aggregation Control Protocol), IEEE802.1p, IEEE802.1Q, IEEE802.1D (STP), IEEE802.1w (RSTP), IEEE802.1s (MSTP), IGMP Snooping, MLD Snooping, Jumbo Frame (9 KB), IEEE802.1ad (QinQ and selective QinQ), and GVRP L2 Protocols, BGP4, OSPFv2, RIPv1, RIPv2, MBGP, LPM Routing, Policy-based Routing, Routing Policy, ECMP, WCMP, VRRP, IGMP v1/v2/v3, PIM-SSM/SM/DM, MSDP, and Any-RP L3 Protocols - DHCP Client, DHCP Relay, DHCP Server, DNS Client, UDP Relay, ARP Proxy, and Syslog Other Protocols, Cloud Managed</p> <p>15. ACCESS SWITCH 7 PIECES at least 48 x 10/100/1000 Mbps copper with auto-negotiation, 4 x 1GE/10GE SFP+ ports, 131 Mpps Forwarding Rate, 176 Gbps Switching Capacity, IEEE 802.3af and IEEE 802.3at compliant, PoE+ supported, PoE Supported Cloud Managed</p> <p>16. SFP+ TRANSCEIVER 26 PIECES at least 10G BASE-LR, LC Full Duplex, IEEE 802.3ae, SFF-8472, SFF-8431, SFF-8432, SFP+ MSA Compliant, CPRI, eCPRI, Must be compatible with Ruijie devices</p> <p>17. SFP TRANSCEIVER 10 PIECES at least 1000 BASE-LX, LC Full Duplex, SFF-8472 MSA Compliant, IEEE 802.3ah-2004, IEEE 802.3z, Must be compatible with Ruijie devices</p>			
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For the Provision of ICT and Technical Equipment for the Establishment of Smartclassrooms:

*The provider must submit a copy of NTC dealer's permit for wireless data network equipment and devices.

*Provision 1 Year Warranty in all Items.

*It Should be On-site Delivery CSU Main Campus

Submission of Bids

Shall be done through electronic means and/or Hard Copies:

- For electronic submission, shall use of a two-factor security procedure consisting of an archive format compression and password protection to ensure the security, integrity and confidentiality of the bids submitted;
- Allow access to a password-protected Bidding Documents on the opening date and time. The passwords for accessing the file will be disclosed by the Bidders only during the actual bid opening which may be done through video conferencing;



- c. Only duly accomplished password-protected and compressed Bidding Documents (ZIP/RAR) sent to csu.bacsecretariat@carsu.edu.ph shall be accepted by the CSU Bids and Awards Committee. Password - Protected and compressed bidding Documents (ZIP/RAR) using Google Drive will not be Accepted;
- d. Inclusion of additional details for all ongoing government and private, including awarded but not yet started contracts reflecting details/data as follows: Name of Contact Person, Contact Numbers and Email Address;
- e. Inclusion of additional details for the Single Largest Completed Contract (SLCC) reflecting details/data as follows: Name of Contact person, Contact Numbers and Email Address;
- f. Prospective Bidders are encouraged to submit the hard copy (duly sealed and signed) consisting of 1 original copy, copy1 and copy 2 aside from the soft/ e-copy (password-protected) of their Bidding Documents on or before the schedule of the opening of bids. The same is established for the security in the part of the bidders in anticipation that there might be technical problems and/or power outage encountered during the conduct of virtual Opening of Bids; and
- g. For the submission of hard copies, Bidders shall submit their bids through their duly authorized representative using the forms specified in the Bidding Documents in two (2) separate Sealed and Signed bid envelopes, and which shall be submitted simultaneously. The first shall contain the technical component of the bid, including the eligibility requirements under Section 23.1 of the IRR of R.A 9184 for the procurement of Goods and Infrastructure Projects, and the second shall contain the financial component of the bid.

guidance and information of all concerned.

ALEXANDER T. DEMETILLO, D.Eng.
Vice BAC Chairperson