

Republic of the Philippines VISAYAS STATE UNIVERSITY

Visca, Baybay City, Leyte

PURCHASE REQUEST

PPMP No.: **PPMP-2025-092424-0063**

Dept./Office: ICTMC PR No.: GF-2024-11-03136 Date: 11-14-2024

Section/End-User: Marco L. Cabras Category: Office Equipment

Funding Source: General Fund - CO Project Title/Code: For ICT Equiptment Upgrade

Item #	Item Description	Unit	Qty	Unit Cost	PAR/ICS	Total Cost
1	1 Lot Hybrid Solar Power System (Solar Generator)	lot	1	1,500,000.00	SEAN O. VILLAGONZALO	1,500,000.00

Specification:

2 set(s) Hybrid Solar power system (Solar generator)

Including installation, training and commissioning.

Can use solar, grid attached & battery as power source

- * Smart Inverter 3 phase with 14Kw rated output power
 - 10 years warranty optional to 20 years
 - Can support multiple inverters in parallel to a single or 3 phase system
 - Output AC Rated Grid voltage of 220v/230v
 - Output AC Rated Grid frequncy of 50/60 hz
 - Rated grid output current 63.6A/60.9A
 - Iput grid AC voltage range of 187-253
 - Max input current of 95.5A/91.3A
 - Input AC grid side frequency range 45-55Hz/55-65Hz

Protection

- -Surge protection
- DC reverse-polarity protection
- Groud fault monitoring
- Integrated AFCI 2.0
- Protection class/Over voltage category

Solar Panel

- N-type solar Panel
- Complete with mounting

Battery Lithium-Ion

- Lithium Ion Battery 40-60 V Battery voltage range
- Battery communication CAN/RS485

	<u> </u>								
	Complete wiring, cabine	et, termin	ation and mo	unting					
2	CCTV Augmentation for Main Campus	lot	1	2,000,000.00	MARCO L. CABRAS	2,000,000.00			
	Specification:		•			•			
	# Description				C	Qty Unit			
	PTZ 4MP 25X 150M IR								
	4 MP 25X Powered by DarkFig	ghter IR	Network Spee	ed Dome					
	1/2.8" Progressive Scan CMO	S. High	quality imagin	g with 4 MP resolution	1				
	Focuses on human and vehicl	e targets	classification	based on deep learni	ing				
	Excellent low-light performance	e with po	owered-by-Da	rkFighter technology					
	25× optical zoom and 16× digi	tal zoom	provide close	e up views over expan	sive areas				
	1 WDR, HLC, BLC, 3D DNR, de	fog, regi	onal exposure	e, regional focus	3	0 unit			
	Expansive night view with up t	o 150 m	IR distance						
	24 VAC & PoE (802.3at)								
	Efficient H.265+/H.265 compre	ession te	chnology						
	With Mounting brackets, screw	vs and a	dhesive						
	1 Year warranty								
	Must be compatible with Existi	ng HiKV	ision NVR						
	Bullet Type IP Camera								
	4 MP ColorVu Fixed Bullet Ne	twork Ca	amera CCTV I	P Camera H.265+ PC	E IP67 Outdoor IP Camera				
	High quality imaging with 4 MF	resolut	ion						
	Efficient H.265+ compression	technolo	gy						
	Clear imaging against strong b	acklight	due to 130 dE	3 WDR technology	8	35 unit			
	Focus on human and vehicle t	argets c	lassification ba	ased on deep learning					
	,								
	24/7 colorful imaging								
	Water and dust resistant (IP67	')							
1 Year Warranty									
	Must be compatible with existing fleet								
	4MP Colorvu Lite PoE Audio Dome IP Network Camera H.265 Built-in Mic Network CCTV Camera								
	4 MP ColorVu MD 2.0 Fixed Dome Network Camera								
	High quality imaging with 4 MP resolution								
	24/7 colorful imaging								
3 Support Human and Vehicle Detection									
	Water and dust resistant (IP67) and vandal resistant (IK08) Clear imaging even with strong back lighting due to 120 dB WDR								
	Efficient H.265+ compression		-						
	ELECTROMECHANICAL WORKS								
3	and Activation of Precision Airconditioning Unit for VSU's Data Center.	lot	1	1,700,000.00	JEROME G. GODOY	1,700,000.00			

Specification:

1

ElectromechanicalWorksforPACUandCondenser

HaulingandpositioningofPACUandcondenser

Supply&Installationofrefrigerantpipew/ insulation

Supply&Installationofpipe supports

Supply&installationofElectricalWiresfromtapping point to PACU

Supply&installationofElectricalandControlWires with conduit from PACU to Condenser

Supply&Installationofwaterlineanddrainline,tap to nearest point

FlushingandLeaktestingofpipes

Vacuumingofthesystem

Supplyof Refrigerant

Housekeepingworks

SupplyandinstallationofGroundingSystem

2

Supplyandinstallationofthe following:

MDP, UPS-DP, PACU-DP and its breakers

WiringfromMDPtoUPS-DP

WiringfromUPS-DPtoUPSlocation

WiringfromMDPtoPACU-DP

Supplyandinstallof25kVA3phXmer

Supplyandinstallinput/outputbreakersof25kVA 3ph Xmer

Laptop, 13.3", Retina Display, M1 Chip (8 Cores)	unit	5	75,000.00	NORMAN O. VILLAS	375,000.00
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Specification:

Display:

Size: 13.3 inches (diagonal)Resolution: 2560 x 1600 pixels

• Brightness: 400 nits

• Color Support: Wide color (P3), True Tone technology

• Technology: LED-backlit, IPS

Processor:

• Chip: M1

• Cores: 8-core CPU (4 performance, 4 efficiency), 8-core GPU

• Neural Engine: 16-core

Battery and Power:

• Battery Life: Up to 15 hours wireless web, Up to 18 hours Apple TV app movie playback

• Battery: 49.9 watt-hour lithium polymer

• Adapter: 30W USB-C Power Adapter

Charging and Expansion:

• Ports: Two Thunderbolt/USB 4 ports

• Support: Display Port, Thunderbolt 3 (up to 49Gb/s), USB 4 (up to 40Gb/s), USB 3.1 Gen 2 (up to 10Gb/s)

Memory:

• Storage: 512GB unified memory (configurable to 1TB or 2TB)

Keyboard and Trackpad:

• Keyboard: Backlit Magic Keyboard with 78 (US) or 79 (ISO) keys, ambient light sensor

• Trackpad: Force Touch trackpad with Multi-Touch gestures, pressure sensing capabilities

• Touch ID: Yes

Wireless:

• Wi-Fi: 802.11ax Wi-Fi 6, IEEE 802.11 a/b/g/n/ac compatible

• Bluetooth: 5.0

Camera:

• FaceTime HD Camera: At least 720p

Video Support:

• Built-in Display: Full native resolution at millions of colors

• Thunderbolt 3 Video Output: Native Display Port over USB-C, with support for VGA, HDMI, DVI, and Thunderbolt 2 via adapters

Audio:

• Speakers: Stereo, Wide stereo sound

• Playback: Dolby Atmos

• Microphone: Three-mic array with directional beamforming

• Headphone Jack: 3.5 mm

and Security Upgrade

Specification:

Enterprise Campus Aggregation

Unifi ECS-Aggregation

Must be compatible with existing VSU Unifi Controller

1.8 Tbps high-density 100G/25G Layer 3 Etherlighting aggregation switch with MC-LAG support for high availability system design.

(48) 25G SFP28 and (6) 100G QSFP28 ports

Multi-Chassis Link Aggregation (MC-LAG) support*

Layer 3 automatic failover (VRRP) support**

BGP Dynamic Routing***

(2) included hot-swappable power modules, with 1+1 redundancy

(5) included hot-swappable fan modules, with 4+1 redundancy

2

unit

3M 100G Direct Attach Cable Must be compatible with Unifi Enterprise Campus Aggregation UnifiECS 6 unit

USW-Pro-Aggregation

Must be compatible with existing Unifi Controller

A 32-port, Layer 3 switch made for high-capacity 10G SFP+ and 25G SFP28 connections.

(28) 10G SFP+ ports

(4) 25G SFP28 ports 15 unit

DC power backup-ready

Layer 3 switching

10G Single-Mode Optical Module

20 packs

UACC-OM-SM-10G-D-20

SFP+ transceiver that supports 10G connections up to 10 km using single-mode fiber with a duplex

LC UPC connector. 10 packs

Max data rate: 10 Gbps

Compatible with SFP+ and SFP interfaces

Duplex LC UPC connector

Supports single-mode fiber connections up to 10 km

25G Single-Mode Optical Module

UACC-OM-SFP28-LR

SFP28 transceiver that supports 25G connections up to 10 km using single-mode fiber with a duplex

LC UPC connector.

Max data rate: 25 Gbps

Compatible with SFP28, SFP+, and SFP interfaces

Duplex LC UPC connector

Supports single-mode fiber connections up to 10 km

1G Bidirectional Single-Mode Optical Module

UACC-OM-SM-1G-S-20

FP transceiver that supports 1G connections up to 3 km using single-mode fiber with a simplex LC

UPC connector.

Max data rate: 1 Gbps

20 packs

30

unit

Compatible with SFP interfaces

Simplex LC UPC connector

Supports single-mode fiber connections up to 3 km*

10G Bidirectional Single-Mode Optical Module

20 packs

UACC-OM-SM-10G-S-20

SFP+ transceiver that supports 10G connections up to 10 km using single-mode fiber with a simplex

LC UPC connector.

Max data rate: 10 Gbps 2 packs

Compatible with SFP+ and SFP interfaces

Simplex LC UPC connector

Supports single-mode fiber connections up to 10 km*

OS2 Duplex LC UPC Fiber Patch Cable 3 Meters	100	units
USW-Pro-24-POE	60	units
GYTC8S 24 CORES FIGURE 8 3KM/ ROLL, 8 FIBERS PER TUBE, ARMORED, W/ MESSENGER 2.4mm	4	Reel

Unifi Lite 8 PoE

Must be compatible with existing VSU unifi controller

8-port, Layer 2 PoE switch supporting silent fanless cooling.

(4) GbE PoE+, (4) GbE ports

52W total PoE availability*

Wall mountable

Mechanical

Dimensions 99.6 x 163.7 x 31.7 mm (4 x 6.4 x 1.3")

Weight 295 g (10.4 oz)

Enclosure material Polycarbonate

Hardware

Management interface Ethernet In-Band

Networking interface (8) GbE RJ45 ports

PoE interface (4) PoE/PoE+ (Pins 1, 2+; 3, 6-)

Total non-blocking throughput 8 Gbps

Switching capacity 16 Gbps

Forwarding rate 11.904 Mpps

Power method 54V DC, 1.1A power adapter

Power supply 54V, external, 60W

Supported voltage range 50—57V DC

Max. power consumption 8W (Excluding PoE output)

Total available PoE 52W*

*With an external 60W power adapter.

Max. PoE wattage per port by PSE PoE+: 30W

Button Factory reset

Ambient operating temperature -15 to 40° C (5 to 104° F)

Ambient operating humidity 10 to 90% noncondensing

Certifications CE, FCC, IC

Switching Features

Layer 2 features IGMP snooping

STP / RSTP with priorities and port-level disable

Port isolation

Storm control

Voice VLAN

Port mirroring

LACP port aggregation

Multicast / broadcast rate limiting

MAC address blocking

Flow control

802.1X control

Jumbo frames

Proprietary loop protection

DHCP snooping / guarding

Egress rate limit

LLDP-MED

Port restricted by MAC

Device isolation with ACLs

Layer 3 features -

LEDs

System Status

Ethernet PoE

Speed/link/activity

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30

units

Outdoor STP Cat 5e Outdoor Category 5e cable designed to resist harsh weather damage and electromagnetic interference.

Specifications

Box dimensions 330 x 330 x 340 mm (13 x 13 x 13.4")

Box weight 12.6 kg (27.78 lb)

Cable length 305 m (1000 ft)

Cable color White

Cable type Category 5e

Shielding type STP

Flame rating VW-1 (UL1581)

UV resistance ASTM G 151/154

Conductor wire gauge 24 AWG

Conductor type Solid bare copper

Jacket material Thermoplastic elastomer (TPE)

Jacket diameter 6 mm (0.24")

Bend radius Min. 24 mm (0.94")

Storage temperature -30 to 75°C (-22 to 167°F)

Installation temperature -20 to 60°C (-4 to 140°F)

Ambient operating temperature -40 to 80°C (-40 to 176°F)

Anti-crosstalk divider No

Ripcord Yes

Standards TIA/EIA-568-B.2

ISO/IEC 11801

	6	Replacement batteries for APC various APC UPS	lot	1	1,300,000.00	JEROME G. GODOY	1,300,000.00
Specification: Quantity UPS Model Replacement Battery							

30

boxes

2	SMC3000RMI2U	APCRBC151
4	SMT3000I	APCRBC55
6	SMT1000RMI2U	APCRBC132
6	SMT1500RMI2U	APCRBC133
2	SMC1000I-2U	APCRBC124
2	SRV2KRI	APCRBCV201
3	SRV3KRI	APCRBCV202
1	SUA1000I	RBC6

2 Back-UPS Pro 1500

APCRBC124

7 Upgrade of Wireless Network for VITA Campuses	lot	1	7,068,182.00	NORMAN O. VILLAS	7,068,182.00
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Specification:

300 units of Unifi NanoHD

- Networking Interface:
 - o 1 x 10/100/1000 Ethernet Port
- Buttons: ResetPower Method:
 - o 802.3af PoE
 - Power Supply: UniFi Switch (PoE)
- Power Save: SupportedBeamforming: Supported
- Maximum Power Consumption: 10.5W
 Supported Voltage Range: 44 to 57VDC
- TX Power:
 - 2.4 GHz: 23 dBm5 GHz: 26 dBm
- MIMO:
 - 2.4 GHz: 2x25 GHz: 4x4
- Radio Rates:
 - 2.4 GHz: 300 Mbps5 GHz: 1733 Mbps
- Antennas:
 - ∘ 2.4 GHz: (2) Single-Port, Single-Polarity Antennas, 2.8 dBi each
 - ∘ 5 GHz: (2) Single-Port, Dual-Polarity Antennas, 3 dBi each
- Wi-Fi Standards: 802.11 a/b/g/n/r/k/v/ac/ac-wave2
- Wireless Security:
 - ° WEP
 - ° WPA-PSK
 - WPA-Enterprise (WPA/WPA2, TKIP/AES)
 - ° 802.11w/PMF
- BSSID: 8 per Radio
- Mounting: Wall/Ceiling (Kits Included)
- Operating Temperature: -10 to 70°C (14 to 158°F)
- Operating Humidity: 5 to 95% Non-condensing
- Certifications: CE, FCC, IC
- Advanced Traffic Management:
 - VLAN: 802.1Q
 - Advanced QoS: Per-User Rate Limiting
 - o Guest Traffic Isolation: Supported
 - o WMM: Voice, Video, Best Effort, and Background
- Concurrent Clients: 200+
- Supported Data Rates (Mbps):
 - ° **802.11a:** 6, 9, 12, 18, 24, 36, 48, 54 Mbps
 - ° **802.11b:** 1, 2, 5.5, 11 Mbps
 - o 802.11g: 6, 9, 12, 18, 24, 36, 48, 54 Mbps
 - 802.11n: 6.5 Mbps to 300 Mbps (MCS0 MCS15, HT 20/40)
 - o 802.11ac: 6.5 Mbps to 1.7 Gbps (MCS0 MCS9 NSS1/2/3/4, VHT 20/40/80)
 - 802.11ac (VHT 160): 58 Mbps to 1.7 Gbps (MCS0 MCS9 NSS1/2)

	Compatibility: Should be compatible	atible wit	h existing Unil	Fi Controller							
8	Upgrade of Wireless Network for VSU Main	lot	1	6,729,920.00	NORMAN O. VILLAS	6,729,920.00					
	Specification:										
	Hardware	(4) 4/5									
	Networking interface		2.5 GbE RJ45	port							
	Management interface	Etherr Blueto									
	Power method	PoE+									
	Power supply		PoE switch).5A PoE adar								
	Supported voltage range	44—5	7V DC								
	Max. power consumption	22W									
	Max. TX power	00 4D	_								
	2.4 GHz	22 dB 26 dB									
	5 GHz	26 dB									
	6 GHz										
	МІМО	2 x 2 (DL/UL MU-MI	MO)							
	2.4 GHz		4 (DL/UL MU-MIMO)								
	5 GHz 6 GHz	4 x 4 (DL/UL MU-MI	MO)							
	Max. data rate 2.4 GHz	573.5	Mbps (BW40)	1							
	5 GHz		4.8 Gbps (BW160)								
	6 GHz	4.8 Gl	4.8 Gbps (BW160)								
	Antenna gain										
	2.4 GHz		3.2 dBi								
	5 GHz	5.3 dE 6 dBi	5.3 dBi								
	6 GHz	0 abi									
	LEDs	White	/blue								
	Button	Reboo	ot and factory-	reset							
	Mounting	Wall,	ceiling (Include	ed)							
	Ambient operating temperatur	∍ -30 to 60° C (-22 to 140° F)									
	Ambient operating humidity	5 to 9	to 95% noncondensing								
	Certifications	CE, F	CC, IC								
	Software										
	WiFi standards	802.1°	802.11a/b/g/n/ac/ax (WiFi 6/6E)								
	Wireless security		WPA-PSK, WPA-Enterprise (WPA/WPA2/WPA3)								
	BSSID		8 per radio								
	VLAN	-	802.1Q								
	Advanced QoS		ser rate limiting	n							
				9							
	Guest traffic isolation	Suppo	Supported								

Concurrent clients 600+

Yes*

Zero-wait DFS

*Supported with upcoming firmware versions.

Supported Data Rates (Mbps)

802.11a 6, 9, 12, 18, 24, 36, 48, 54 Mbps

802.11b 1, 2, 5.5, 11 Mbps

802.11g 6, 9, 12, 18, 24, 36, 48, 54 Mbps

802.11n 6.5 Mbps to 600 Mbps (MCS0 - MCS31, HT 20/40)

802.11ac 6.5 Mbps to 3.4 Gbps (MCS0 - MCS9 NSS1/2/3/4, VHT 20/40/80/160)

802.11ax (WiFi 6/6E) 7.3 Mbps to 4.8 Gbps (MCS0 - MCS11 NSS1/2/3/4, HE 20/40/80/160)

Should be compatible with existing WIreless Controller and Existing fleet of Unifi Access Points

9	Video Conferencing System	unit	5	175,000.00	NORMAN O. VILLAS	875,000.00
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Specification:

Ultra-HD imaging system supports: 4K, 1440p, 1080p, 900p, 720p, and SD at 30fps 1080p, 720p at 30 fps and 60 fps Smooth motorized pan, tilt and zoom Pan: ±90° Tilt: +50° / -90° 15x HD zoom 90° field of view Adaptive pan and tilt speed up to 70°/second (slows when zoomed in for easier control) Automatic inversion detection to correct image orientation and camera controls when mounted upside down Autofocus 3 camera presets Kensington® security slot Video mute/unmute LED indicator Standard tripod thread Lens parks at -90° in sleep mode for assured

High-performance 3" (76mm) driver Patent pending suspension system eliminates vibration-induced camera shake and audio interference Mini XLR cable (9.6 ft (2.95m)) connects to Rally Display Hub for both signal and power

Camera to Display Hub 6.5 ft (2m) USB 3.1 Type C to USB Type C 3.1 Conference Room Computer to Display or Table Hub 6.5 ft (2m) USB 3.1 Type A to USB Type B Display Hub to Table Hub 16.4 ft (5m) CAT6A Ethernet cable (supports customer-supplied cables up to 164 ft (50 m) Display Hub to Speaker (x2) 9.6 ft (2.95m) Mini XLR (supports customersupplied extension cables up to 9.8 ft (3m)) Conference Room Computer to Displays (x2) 6.5 ft (2m) HDMI A Mic Pod 9.6 ft (2.95m): Hardwired with 12 pin connector Power Outlets to Power Supplies (x2) 3.2 ft (1m) Power Supplies to Table Hub / Display Hub (x2) 4.9 ft (1.5m)

Pickup range: 15 ft / 4.5m diameter Four microphones with eight beamforming elements Mute button with LED status indicator Captive cable: 9.6 ft (2.95m) Daisy chain up to 7 Rally Mic Pods Recommended participants: Rally (one Mic Pod): 10 Rally Plus (two Mic Pods): 16 Additional participants per Mic Pod: 6 Recommended participants for Rally with 7 Mic Pods: 46

HDMI Type A (x2) (connects to displays) Power input USB C (connects to Rally Camera) USB Type B (connects to meeting room computer) RJ45 (connects to Table Hub) Mini XLR (x2) (connects to Rally Speakers) Powers one or two Rally Speakers

RightLight with Wide Dynamic Range (WDR) RightSight automatic camera control1 RightSound Mic Matrix RightSound Anti-Vibration Speakers Plug-and-play USB connectivity Certified for Skype for Business and ready for Teams Certified for Google Hangouts Meet Hardware Zoom Certified Cisco Compatible Compatible with BlueJeans, BroadSoft®, Vidyo™, and other video conferencing, recording, and broadcasting applications that support USB cameras

RF remote control (line of sight not required) CR2032 batteries (included)

Speaker: 1 (Rally) or 2 (Rally Plus) Mic Pod: 1 (Rally) or 2 (Rally Plus) Table Hub Display Hub 2 x Power Supplies Remote Control USB C to C cable USB A to B cable CAT6A 2 x HDMI A to A cable Documentation

UVC/plug-and-play compatible Windows® 10, 8.1, 7 macOS® 10.10 or later Chrome OS

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	TOTAL							28,756,102.00		
Purpose: For ICT-MIS use										
Checked by:							Funds Available:			
NORMAN O. VILLAS							ALICIA M. FLORES			
	TWG - Office	Equipm	nent				HEAD, BUDGET OFFICE			
	Prepared by:			Noted	by:			Approved by:		
Signature:										
Printed Name:	MARCO L. CAE	BRAS			S	EAN O. VII	LLAGONZALO	PROSE IVY G. YEPES		
Designation:					UNI	T HEAD, PI	ROJECT LEADER	PRESIDENT, VSU		

Plug-and-play USB connectivity Certified for Skype for Business and ready for Teams Certified for Google Hangouts Meet Hardware Zoom Certified Cisco Compatible Compatible with BlueJeans, BroadSoft®, Vidyo™, and other video conferencing, recording, and broadcasting applications that support USB cameras

RF remote control (line of sight not required) CR2032 batteries (included)

Speaker: 1 (Rally) or 2 (Rally Plus) Mic Pod: 1 (Rally) or 2 (Rally Plus) Table Hub Display Hub 2 x Power Supplies Remote Control USB C to C cable USB A to B cable CAT6A 2 x HDMI A to A cable Documentation

UVC/plug-and-play compatible Windows® 10, 8.1, 7 macOS® 10.10 or later Chrome OS

	TOTAL			28,756,102.00						
Purpose: For I	Purpose: For ICT-MIS use									
Checked by:	NORMANO. VILLAS		Funds Available:	A M. FLORES MIL- 80 -24						
	TWG - Office Egyipment	HEAD, B	UDGET OFFICE							
Signature: Printed Name:	Prepared by: MARCO L CABRAS	Noted by: SEAN O. VI	LLAGONZALO	Approved by: PROSE IVY G. YEPES						
Designation:		UNIT HEAD, P	ROJ ⊭ CT LEADER	PRESIDENT, VSU						