



Republic of the Philippines
VISAYAS STATE UNIVERSITY
Visca, Baybay City, Leyte

PURCHASE REQUEST

PPMP No. : **PPMP-2024-080824-0341**PR No.: **STF-2024-09-01643**Date: **09-04-2024**Dept./Office: **CVM**Category: **IT Supplies and
Equipment**Section/End-User: **Joel M. Israel**Funding Source: **Special Trust Fund**Project Title/Code: **CVM Laboratory Share1**

Item #	Item Description	Unit	Qty	Unit Cost	PAR/ICS	Total Cost
1	24 Ports PoE+ Managed Gigabit Switch with SFP	unit	1	28,000.00		28,000.00

Specification:

- **Interfaces:**
 - (24) 10/100/1000 RJ45 Ports
 - (2) 1G SFP Ethernet Ports
- **Networking Management:** Ethernet In-Band
- **Total Non-Blocking Throughput:** 26 Gbps
- **Switching Capacity:** 52 Gbps
- **Forwarding Rate:** 38.69 Mpps
- **Power Method:**
 - 100-240VAC, 50/60 Hz, Universal Input Power Supply
 - AC/DC, Internal, 120W
- **Voltage Range:** 100 to 240VAC
- **Max Power Consumption (Excluding PoE Output):** 25W
- **LED Indicators:**
 - RJ45 Data Ports
 - SFP Data Ports
 - PoE
 - Speed/Link/Activity Link/Activity
- **ESD/EMP Protection:**
 - Air: ±16 kV
 - Contact: ±12 kV
- **Shock and Vibration:** ETSI300-019-1.4 Standard
- **Operating Temperature:** -5 to 40°C (23 to 104°F)
- **Operating Humidity:** 10 - 90% Non-condensing
- **Certifications:** CE, FCC, IC
- **PoE Specifications:**
 - **Total Available PoE:** 95W
 - **PoE Interfaces:** Ports 1-16 PoE+ IEEE 802.3af/at (Pins 1, 2+; 3, 6-)
 - **Max. PoE Wattage per Port:** 802.3at 32W
 - **Voltage Range:**
 - 802.3af Mode: 44-57V

- 802.3at Mode: 50-57V

- **Compatibility:** Should be compatible with the existing **Unifi** access points and Unifi controller.

2	24-Port Gigabit Stackable L3 Managed PoE+ Switch with 4 10G Slots, 24x 10/100/1000 Mbps PoE+ RJ45 Po	unit	3	49,999.00		149,997.00
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Specification:

Hardware Features

- **Ports:**
 - 24x 10/100/1000 Mbps PoE+ RJ45 Ports
 - 4x 10G SFP+ Slots
 - 2x USB 2.0 Ports
 - 1x RJ45 Console Port
 - 1x USB Type-C Console Port
 - 1x RJ45 Management Port
- **Fan:**
 - Four field-replaceable and hot-swappable fans
- **Power Supply:**
 - Two field-replaceable and hot-swappable power supply modules (100–240 VAC, 50/60 Hz)
 - Default shipping with one PSM500-AC module; additional redundant power supply sold separately
- **PoE Ports:**
 - Standard: 802.3at/af compliant
 - PoE+ Ports: 24, up to 30 W per port
 - PoE Power Budget: up to 720 W (varies with power supply modules)
- **Dimensions:**
 - 17.3 × 16.5 × 1.7 in (440 × 420 × 44 mm)
- **Mounting:**
 - Rackmountable
- **Power Consumption:**
 - Max: 42.9 W (no PD connected)
 - Max with 720 W PD connected and 2x PSM500-AC: 916.6 W
- **Heat Dissipation:**
 - Max: 146.29 BTU/hr (no PD connected)
 - Max with 720 W PD connected and 2x PSM500-AC: 3,125.61 BTU/hr

Performance

- **Switching Capacity:** 128 Gbps
- **Stacking:**
 - Up to 4 units
 - 10G SFP+ Slot for stacking
 - 20 Gbps per port (Full-Duplex)
- **Packet Forwarding Rate:** 95.2 Mpps
- **MAC Address Table:** 32 K
- **Packet Buffer Memory:** 3 MB
- **Jumbo Frame Support:** 9 KB

Software Features

- **Quality of Service (QoS):** Class of Service, Bandwidth Control, Voice VLAN, etc.
- **Layer 3 Features:** IP Interfaces, Static Routing, RIP, OSPF, VRRP, DHCP Server/Relay, ARP, IPv6 support
- **Layer 2 and L2+ Features:** Link Aggregation, Spanning Tree Protocol, IGMP/MLD Snooping, Multicast support
- **Advanced Features:** Device Discovery, Batch Configuration, Firmware Upgrading, Network Monitoring
- **ISP Features:** Ethernet Link OAM, Layer 2 Protocol Tunneling, DLDP, DDM, sFlow
- **VLAN:** 802.1Q VLANs, VLAN VPN, Voice VLAN, Private VLAN
- **Security:** Port Isolation, DoS Defend, ARP Inspection, 802.1X

Management

- **Omada App:** Yes, with Omada Hardware/Cloud-Based/Software Controller
- **Centralized Management:** Omada Cloud-Based/Hardware/Software Controller
- **Cloud Access:** Yes, with Omada Hardware/Cloud-Based/Software Controller
- **Zero-Touch Provisioning:** Yes, with Omada Cloud-Based Controller
- **Management Features:** Web-based GUI, CLI, SNMP, SDM Template, DHCP/BOOTP Client

Others

- **Package Contents:** SG6428XHP Switch, Power Cord, RJ45 Console Cable, Installation Guide, Rackmount Kit, Rubber Feet
- **System Requirements:** Compatibility with various operating systems
- **Environment:** Operating and storage temperature/humidity specifications

This switch is ideal for high-demand environments needing robust performance, flexibility, and advanced features.

3	CCTV IP Camera	piece	6	4,000.00		24,000.00
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Specification:

- **Resolution:** 2MP (1920x1080)
- **Type:** Dome
- **Lens:** 2.8mm or 4mm fixed lens
- **IR Range:** 30 meters
- **WDR (Wide Dynamic Range):** Yes
- **Built-in Microphone:** Yes
- **Power Supply:** 12V DC

4	UPS, at least 500 w	piece	4	2,550.00		10,200.00
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Specification:

Recharging Time: at most 4 Hours

5	Wifi Access Point (Existing fleet of VSU Access Points)	unit	2	12,000.00		24,000.00
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Specification:

- **Type:** WiFi Access Point
- **Model:** UAP-nanoHD
- **Dimensions:** 160 x 160 x 32.65 mm (6.30 x 6.30 x 1.29 inches)
- **Weight:** 300 g (10.6 oz); with Mounting Kits: 315 g (11.1 oz)

- **Networking Interface:** (1) 10/100/1000 Ethernet Port
- **Buttons:** Reset
- **Power Method:** 802.3af PoE
- **Power Supply:** UniFi Switch (PoE)
- **Power Save:** Supported
- **Beamforming:** Supported
- **Maximum Power Consumption:** 10.5W
- **Supported Voltage Range:** 44 to 57VDC

TX Power:

- **2.4 GHz:** 23 dBm
- **5 GHz:** 26 dBm

MIMO:

- **2.4 GHz:** 2x2
- **5 GHz:** 4x4

Radio Rates:

- **2.4 GHz:** 300 Mbps
- **5 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
- **Guest Traffic Isolation:** Supported
- **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
- **802.11g:** 6, 9, 12, 18, 24, 36, 48, 54 Mbps

- **802.11n:** 6.5 Mbps to 300 Mbps (MCS0-MCS15, HT 20/40)
- **802.11ac:**
 - 6.5 Mbps to 1.7 Gbps (MCS0-MCS9 NSS1/2/3/4, VHT 20/40/80)
 - 58 Mbps to 1.7 Gbps (MCS0-MCS9 NSS1/2, VHT 160)

TOTAL

236,197.00

Purpose: for college use

Checked by:

NORMAN O. VILLAS

Funds Available:

ALICIA M. FLORES

TWG - IT Supplies and Equipment

HEAD, BUDGET OFFICE

Signature:

Printed Name:

Designation:

Prepared by:

JOEL M. ISRAEL

Noted by:

HARVIE P. PORTUGALIZA

UNIT HEAD, PROJECT LEADER

Approved by:

PROSE IVY G. YEPES

PRESIDENT, VSU

- ☒ Original PPMP
☐ Revised (Changed items, same budget)
☐ Supplemental



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SCAN HERE



PPMP-2024-0827-218689

PROJECT PROCUREMENT MANAGEMENT PLAN (PPMP)

CY 2024

Unit/Office/Dept/Div: **College of Veterinary Medicine**

Project Code: **CVM Laboratory Share1**

Purpose: **for office Internet Access**

Total Budget : **270,000.00**

Funding : **STF**

PPMP #: **PPMP-2024-080824-0341**

General Description	Quantity	Unit	Unit Cost	Estimated Budget	Schedule/Milestone of Activities (in quantities)											
					Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Construction and Electrical Supplies																
15 kV, 110 kV BIL, Type C standard polymer cutout w/100A, 10kAIC fuseholder with 15k lighting arrest	1	unit	14,000.00	14,000.00												1
Sub-Total				14,000.00												
IT Supplies and Equipment																
24 Ports PoE+ Managed Gigabit Switch with SFP	1	unit	28,000.00	28,000.00												1
CCTV IP Camera	6	piece	4,000.00	24,000.00												6
24-Port Gigabit Stackable L3 Managed PoE+ Switch with 4 10G Slots, 24x 10/100/1000 Mbps PoE+ RJ45 Po	3	unit	49,999.00	149,997.00												3
UPS, at least 500 w	4	piece	2,550.00	10,200.00												4
Wifi Access Point (Existing fleet of VSU Access Points)	2	unit	12,000.00	24,000.00												2
Sub-Total				236,197.00												
Grand Total				250,197.00												

Prepared by:

JOEL M. ISRAEL

Submitted by:

HARVIE P. PORTUGALIZA
 Unit Head/Project Leader

Date: **09/02/2024**

*Funding Sources: General Fund(GF), Trust Fund(TF), Special Trust Fund(STF), IGP, Supplemental or Augmentation

Note: Please make a separate PPMP for each funding source.

Categorize the entries such as Office Supplies, Office Appliance & Equipment, Office Furniture, Laboratory Supplies, IT Equipment, Construction & Electrical Supplies, Farm & Agricultural Supplies, Feeds & Feed Ingredients, Medical & Dental Supplies, Auto Supplies