



PR-2024-0820-217895



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

## PURCHASE REQUEST

PPMP No. : 150-4-1535-2024-10-0-3

PR No.: TF-2024-08-01586

Date: 08-20-2024

Dept./Office: PCC

Category: IT Supplies and Equipment

Duration: 2024-01-01

to

Section/End-User: Mariles V. Bulawan

Project Title/Code: PCC-407/

2024-12-31

Funding Source: Trust Fund

Center Operation FY 2024

Item #	Item Description	Unit	Qty	Unit Cost	PAR/CS	Total Cost
1	24-Port Gigabit Stackable L3 Managed PoE+ Switch with 4 10G Slots, 24x 10/100/1000 Mbps PoE+ RJ45 Po	unit	1	49,999.00		49,999.00

### Specification:

#### HARDWARE FEATURES

24x 10/100/1000 Mbps PoE+ RJ45 Ports

4x 10G SFP+ Slots

2x USB 2.0 Ports

#### Interface

1x RJ45 Console Port

1x USB Type-C Console Port

1x RJ45 Management Port

#### Fan Quantity

Four Field-replaceable and Hot-swappable Fans

#### Power Supply

Two Field-replaceable and Hot-swappable Power Supply Modules (100–240 VAC, 50/60 Hz) Shipping with one PSM500-AC module by default, and another field-replaceable redundant power supply requires purchasing separately.

Standard: 802.3at/af compliant

#### PoE Ports (RJ45)

PoE+ Ports: 24 Ports, up to 30 W per port  
PoE Power Budget: up to 720 W\*

\*The total PoE budget varies with the power supply modules.

#### Dimensions (W x D x H)

17.3 x 16.5 x 1.7 in (440 x 420 x 44 mm)

#### Mounting

Rackmountable

#### Max Power Consumption

42.9 W (110 V/60 Hz) (With no PD connected)  
916.6 W (110 V/60 Hz) (With 720 W PD connected and powered by 2x PSM500-AC)

#### Max Heat Dissipation

146.29 BTU/hr (110 V/60 Hz) (With no PD connected)  
3,125.61 BTU/hr (110 V/60 Hz) (With 720W PD connected and powered by 2x PSM500-AC)

#### PERFORMANCE

#### Switching Capacity

128 Gbps per Unit

<p><b>Stacking</b></p> <p>Stacking Number: 4</p> <p>Stacking Port: 10G SFP+ Slot (all uplink ports can be used as stacking ports)</p> <p>Stack Bandwidth: 20 Gbps Per Port (Full-Duplex)</p>					
<p><b>Packet Forwarding Rate</b></p> <p>95.2 Mpps</p>					
<p><b>MAC Address Table</b></p> <p>32 K</p>					
<p><b>Packet Buffer Memory</b></p> <p>3 MB</p>					
<p><b>Jumbo Frame</b></p> <p>9 KB</p>					
<b>SOFTWARE FEATURES</b>					
<p><b>Quality of Service</b></p> <p>Various QoS features including Class of Service, Bandwidth Control, Voice VLAN, etc.</p>					
<p><b>L3 Features</b></p> <p>IP Interfaces, Static Routing, RIP, OSPF, VRRP, DHCP Server/Relay, ARP, IPv6 support, etc.</p>					
<p><b>L2 and L2+ Features</b></p> <p>Link Aggregation, Spanning Tree Protocol, IGMP/MLD Snooping, Multicast support, etc.</p>					
<p><b>Advanced Features</b></p> <p>Device Discovery, Batch Configuration, Firmware Upgrading, Network Monitoring, etc.</p>					
<p><b>ISP Features</b></p> <p>Ethernet Link OAM, Layer 2 Protocol Tunneling, DLDAP, DDM, sFlow</p>					
<p><b>VLAN</b></p> <p>VLAN management including 802.1Q VLANs, VLAN VPN, Voice VLAN, Private VLAN, etc.</p>					
<p><b>Security</b></p> <p>Various security features such as Port Isolation, Dos Defend, ARP Inspection, 802.1X, etc.</p>					
<b>MANAGEMENT</b>					
<p><b>Omada App</b></p> <p>Yes, requires Omada Hardware/Cloud-Based/Software Controller</p>					
<p><b>Centralized Management</b></p> <p>Omada Cloud-Based/Hardware/Software Controller</p>					
<p><b>Cloud Access</b></p> <p>Yes, requires Omada Hardware/Cloud-Based/Software Controller</p>					
<p><b>Zero-Touch Provisioning</b></p> <p>Yes, requires Omada Cloud-Based Controller</p>					
<p><b>Management Features</b></p> <p>Web-based GUI, CLI, SNMP, SDM Template, DHCP/BOOTP Client, etc.</p>					
<b>OTHERS</b>					
<p><b>Package Contents</b></p> <p>SG6428XHP Switch, Power Cord, RJ45 Console Cable, Installation Guide, Rackmount Kit, Rubber Feet</p>					
<p><b>System Requirements</b></p> <p>Compatibility with various operating systems</p>					
<p><b>Environment</b></p> <p>Operating and storage temperature/humidity specifications</p>					
2	Printer, All-in-One Refillable Ink Tank Borderless Colored Inkjet	unit	2	16,000.00	32,000.00
<b>Specification:</b>					
<b>Type</b>					
<ul style="list-style-type: none"> <li>Printer Type: Print, Scan, Copy, Fax with ADF</li> </ul>					
<b>Printing Technology</b>					

- Printer Language: ESC/P-R, ESC/P Raster
- Print Direction: Bi-directional printing
- Technology: PrecisionCore Printhead
- Nozzle Configuration: 400 x 1 nozzles Black, 128 x 1 nozzles per Color (Cyan, Magenta, Yellow)
- Minimum Droplet Size: 3.3 pl
- Maximum Resolution: 4800 x 1200 dpi (with Variable-Sized Droplet Technology)
- Automatic 2-sided Printing: No

#### **Print Speed**

- Photo Default - 10 x 15 cm / 4 x 6 " 2: Approx. 69 sec per photo (Border) / 90 sec per photo (Borderless)
- Draft, A4 (Black / Color): Up to 33.0 ppm / 20.0 ppm
- ISO 24734, A4 Simplex (Black / Color): Simplex: Up to 15.0 ipm / 8.0 ipm
- First Page Out Time from Ready Mode (Black / Color): Approx. 10 sec / 16 sec

#### **Copying**

- Maximum Copies from Standalone: 99 copies
- Maximum Copy Resolution: 600 x 600 dpi
- Maximum Copy Size: Legal
- Copy Quality: Standard / High
- ISO 29183, A4 Simplex Flatbed (Black / Color): Up to 10.8 ipm / 5.5 ipm
- ISO 29183, A4 ADF (Black / Color): Approx. 60 sec / 82 sec

#### **Scanning**

- Scanner Type: Flatbed color image scanner
- Sensor Type: CIS
- Optical Resolution: 1200 x 2400 dpi
- Maximum Scan Area: 216 x 297 mm
- Scanner Bit Depth (Color): 48-bit input, 24-bit output
- Scanner Bit Depth (Grayscale): 16-bit input, 8-bit output
- Scanner Bit Depth (Black & White): 16-bit input, 1-bit output

#### **Scan Speed**

- Scan Speed (Flatbed / ADF (Simplex)): 200dpi, Black: 12 sec / Up to 4.5 ipm
- 200dpi, Color: 29 sec / Up to 4.5 ipm

#### **ADF Specifications**

- Support Paper Thickness: 64 – 95 g/m
- Paper Capacity: 30 sheets

#### **Fax Function**

- Type Of Fax: Walk-up Black-and-White and Color Fax Capability
- Receive Memory / Page Memory: 1.1 MB, Page memory up to 100 pages
- Error Correction Mode: ITU-T T.30
- Fax Speed (Data Transfer Rate): Up to 33.6 kbps, Approx. 3 sec/page
- Fax Resolution: Up to 200 x 200 dpi
- Transmission Paper Size (Flatbed): Letter, A4



- Transmission Paper Size (ADF): A4, Letter, 8.5 x 13", Legal, Oficio 9, Mexico-Oficio, Indian-Legal
- Receiving Paper Size: A4, Letter, Legal
- Speed Dial / Group Dial: Up to 100 numbers, 99 groups
- Fax Features: PC Fax (Transmission / Receive), Automatic Redial, Address book, Broadcast Fax (Mono Only), Transmit Reservation, Polling Reception

#### **Paper Handling**

- Number of Paper Trays: 1
- Standard Paper Input Capacity: Up to 100 sheets of Plain Paper (80 g/m<sup>2</sup>), 20 sheets of Premium Glossy Photo Paper
- Output Capacity: Up to 30 sheets of Plain Paper (80 g/m<sup>2</sup>), Up to 20 sheets of Premium Glossy Photo Paper
- Maximum Paper Size: 215.9 x 1200 mm (8.5 x 47.24")
- Paper Feed Method: Friction feed
- Paper Size: A4, A5, A6, B5, B6, 100 x 148 mm, Indian-Legal (215 x 345 mm), Letter, 8.5 x 13", Legal 8.5 x 14", 3 x 5", 4 x 6", 5 x 7", Envelopes #10, DL, C6
- Print Margin: 0 mm top, left, right, bottom via custom settings in printer driver\*3

#### **Supported OS and Applications**

- Operating System Compatibility:

#### **Noise Level**

- PC Printing/ Premium Glossy Photo Paper Best Photo: Sound Power (Black / Color) 5.3 / 5.3 B(A), Sound Pressure (Black / Color) 38 / 39 dB(A)
- PC Printing / Plain Paper Default\*4: Sound Power (Black / Color) 6.7 / 6.0 B(A), Sound Pressure (Black / Color) 54 / 47 dB(A)

#### **Dimensions and Weight:**

- Dimensions (W x D x H): 375 x 347 x 237 mm
- Weight: 5.2 kg

#### **Electrical Specifications**

- Rated Voltage: AC 220 – 240 V
- Rated Frequency: 50 – 60 Hz
- Operating: 12 W
- Sleep: 0.9 W
- Power Off: 0.2 W
- Standby: 7.1 W

#### **Interface**

- USB: USB 2.0
- Network: Ethernet, Wi-Fi IEEE 802.11b/g/n, Wi-Fi Direct
- Network Protocol: TCP/IPv4, TCP/IPv6
- Network Management Protocols: SNMP, HTTP, DHCP, APIPA, PING, DDNS, mDNS, SLP, WSD, LLTD

#### **Printer Software**

- Operating System Compatibility:

#### **Control Panel**

- LCD Screen: 1.44" Color LCD Panel

### Key Features

- Multifunction printer: Print, copy, scan, fax wirelessly with LCD screen
- Ultra-low-cost printing: Save up to 90% on printing costs
- Up to 3 years of ink in the box: Includes 6,600 pages in black and 5,900 in color
- Hassle-free ink tank system: Enjoy mess-free refills with key-lock bottles and front-facing tanks
- Smart Panel app: Wirelessly set up, monitor, print, scan, copy and more from your smart device

3	VOIP Phone	unit	1	15,000.00	15,000.00
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### Specification:

- Audio Features
  - HD voice: HD handset, HD speaker
  - Smart Noise Filtering
  - Narrowband codec: PCMU (G.711A), PCMA (G.711?), G.723.1, G.729, G.729A, G.729B, G.729AB, G.726, iLBC
  - DTMF: In-band, Out-of-band (RFC 2833) and SIP INFO
  - Full-duplex hands-free speakerphone with AEC
  - VAD, CNG, AEC, PLC, AJB, AGC
- Phone Features
  - 2 VoIP accounts
  - Call hold, mute, DND
  - One-touch speed dial, hotline
  - Call forward, call waiting, call transfer
  - Group listening, SMS, emergency call
  - Redial, call return, auto answer
  - Local 5-way conferencing
  - Direct IP call without SIP proxy
  - Ring tone selection/import/delete
  - Set date time manually or automatically
  - Dial plan
  - XML Browser, action URL/URI
  - Integrated screenshots
  - RTP-XR, VQ-RTCPXR
  - Enhanced DSS Key
  - Directory
  - Local phonebook up to 1000 entries
  - Black list
  - XML/LDAP remote phonebook
  - Smart dialing
  - Phonebook search/import/export
  - Call history: dialed/received/missed/forwarded
  - IP-PBX Features

- • Busy Lamp Field (BLF), Bridged Line Appearance (BLA)
- • Anonymous call, anonymous call rejection
- • Hot-desking, voice mail
- • Flexible seating
- • Call park, call pickup
- • Executive and Assistant
- • Centralized call recording
- • Visual voice mail
- • Call recording
- • Display and Indicator
- • 2.3" 132x64-pixel graphical LCD with backlight
- • LED for call and message waiting indication
- • Dual-color (red or green) illuminated LEDs for line status information
- • Intuitive user interface with icons and soft keys
- • Multilingual user interface
- • Caller ID with name and number
- • Power saving
- • Feature keys
- • 2 line keys with LED
- • 6 features keys: transfer, message, headset, redial, mute, hands-free speakerphone
- • 5 navigation keys
- • Volume control keys
- • Interface
- • Dual-port Gigabit Ethernet
- • Power over Ethernet (IEEE 802.3af), class 1\*
- • 1 x RJ9 (4P4C) handset port
- • 1 x RJ9 (4P4C) headset port
- • Other Physical Features
- • Color: Classic Grey
- • Wall mountable
- • External Yealink AC adapter
- • AC 100-240 V input and DC 5 V/0.6 A output
- • Power consumption (PSU): 2-3 W
- • Power consumption (PoE): 3-4 W
- • Dimension (W x D x H x T):
- • 188 x 189 x 162 x 50 mm
- • Operating humidity: 10-95%
- • Operating temperature: -10 to +45°C (+14 to 113°F)
- • Storage temperature: -30 to +70°C (-22 to +158°F)
- • Management
- • Configuration: browser/phone/auto-provision
- • Auto provision via FTP/FTP/HTTP/HTTPS for mass deploy

- • Auto-provision with PnP
- • Zero-sp-touch, TR-069
- • Phone lock for personal privacy protection
- • Reset to factory, reboot
- • Package tracing export, system log
- Network and Security
- • SIP v1 (RFC2543), v2 (RFC3261)
- • Call server redundancy supported
- • NAT traversal: STUN mode
- • Proxy mode and peer-to-peer SIP link mode
- • IP assignment: static/DHCP
- • HTTP/HTTPS web server
- • Time and date synchronization using SNTP
- • UDP/TCP/DNS-SRV (RFC 3263)
- • QoS: 802.1p/Q tagging (VLAN), Layer 3 ToS
- DSCP
- • SRTP for voice
- • Transport Layer Security (TLS 1.3)
- • HTTPS certificate manager
- • AES encryption for configuration file (AES256)
- • Digest authentication
- • OpenVPN, IEEE802.1X, L2TP VPN
- • IPv6
- • LLDP/CDP/DHCP VLAN
- • ICE
- • WPA2/WPA3
- • Secure boot
- • GARP (Generic Attribute Registration Protocol)

• NOTE: Must be compatible with existing Yearstar S300 Server for auto provisioning

**TOTAL**

**96,999.00**

Purpose: Center Operation

Checked by:

**NORMAN O. VILLAS**

Funds Available:

**NICK FREDDY R. BELLO**

TWG - IT Supplies and Equipment

(OIC) HEAD, ACCOUNTING OFFICE

Prepared by:

**MARILES V. BULAWAN**

Noted by:

**FRANCISCO G. GABUNADA JR.**

Approved by:

**PROSE IVY G. YEPES**

Designation:

UNIT HEAD, PROJECT LEADER

PRESIDENT, VSU

Signature:

Printed Name: