

# 10-Port Managed GbE Switch with 8-port 802.3at PoE+ and 2-port SFP PS800GM/PS800GMA/PS800GME



PS800GM series, a 10-port Gigabit Layer-2 Managed PoE+ Switch, is a standard Gigabit Ethernet switch that meets all IEEE IEEE 802.3/u/x/z/ab/af/at standards. The switch includes 8-Port 10/100/1000Mbps RJ-45 with PoE+ function and 2-Port Gigabit SFP for Fiber. It is an ideal solution for applications of wireless AP, IP phones, IP cameras, and IP HDMI TV-Wall of digital signage. It can be managed through Ethernet port using Webbased management, associated with SNMP agent. With the SNMP agent, the network administrator can manage the switch, configure and control in an efficient way. The overall network management is enhanced to meet the network efficiency and to accommodate high bandwidth applications.

In addition, the switch features comprehensive and useful functions such as DHCP Snooping (Including Option 82), QoS (Quality of Service), Spanning Tree, RSTP/MSTP, VLAN, Port Trunking, Port Security, MVR, SNMP/RMON, LLDP and IGMPv3 Snooping capability.

PS800GM supports the Power saving by reducing the power consumption. It could efficiently save the switch power with auto detecting the client idle and cable length to provide different power.

Yoda Communications, Inc. <u>www.yoda.com.tw</u> 2F, No. 3-1, Industry East Road IX, Science Based Industrial Park, HsinChu, Taiwan Tel:+886-3-563-2323 Fax:+886-3-563-6420



# Key features

- 8 x RJ-45 ports for Gigabit Ethernet connection with PoE+ capacity
- 2 x SFP ports flexible for fiber connection
- Support Jumbo Frame size up to 9KB
- IEEE 802.1x Access control improve network security
- Port Mirroring helps supervisor monitoring network
- Support Q-in-Q tagging
- IEEE802.1q tag-base VLAN, 4094 entries and port-base VLAN.
- IEEE 802.1d Compatible, 802.1w Rapid Spanning Tree and 802.1s Multiple Spanning Tree
- Unknown Unicast/Broadcast/Multicast Storm Control
- IP-MAC-Port binding for LAN security
- Support QoS (QCL/QCE) for traffic control
- Support ACL based on Ethernet Type / ARP / IPv4 for packets permit or deny, rate limitation and port copy
- DHCP Snooping & DHCP option 82
- IGMPv3 Snooping & IGMP Proxy
- SSH/SSL/TACACS+/RADIUS (Optional for project requirement) for security network management
- Support "power saving" for Green Ethernet requirement
- Support LLDP (Link Layer Discovery Protocol) provides a standards-based method for enabling switches to advertise themselves
- IEEE802.3at/af Power Over Ethernet
- AC/DC dual power backup (Optional)
- 120 or 250 watts, external or internal power diversified options

### **Technical Specifications**

### Standard compliance

- IEEE 802.3 10Base-T Ethernet
- IEEE 802.3u 100Base-TX Fast Ethernet
- IEEE 802.3ab 1000Base-T Ethernet

#### Yoda Communications, Inc. <u>www.yoda.com.tw</u>

2F, No. 3-1, Industry East Road IX, Science Based Industrial Park, HsinChu, Taiwan



- IEEE 802.3z 1000Base-X Ethernet
- IEEE 802.3ad Port trunk with LACP
- IEEE 802.3x Flow Control capability
- IEEE 802.1q VLAN
- IEEE 802.1p Class of Service
- IEEE 802.1x Access Control
- IEEE 802.1d Spanning Tree
- IEEE 802.1w Rapid Spanning Tree
- IEEE 802.1s Multiple Spanning Tree
- IEEE 802.3ad Link Aggregation Control Protocol (LACP)
- IEEE 802.3at/af
- IPv6/IPv4 supported
- RoHS Compliance
- Power Saving green ethernet Requirement
- LLDP automated device discovery protocol for easy mapping by network management applications
- Performance
  - Switching capacity:
    - 8 Gigabit Ethernet ports with non-blocking wise speed performance.
    - 16Gbps switch capacity
    - 8 K MAC addresses
    - Supports Jumbo frame, up to 9K
    - Unknown Unicast/Broadcast/Multicast Storm Suppression
    - Port Mirroring
  - VLAN
    - Port-base VLAN
    - IEEE802.1q tag-base VLAN, up to 4k active VLANs
    - Support the Q-in-Q tagging
  - Support MVR
  - QoS
    - Supports Port Based, 802.1p and Diffserv (IPv4 ) QoS packet classification

Yoda Communications, Inc. www.yoda.com.tw

2F, No. 3-1, Industry East Road IX, Science Based Industrial Park, HsinChu, Taiwan



- Supports two scheduling, Weighted and Strict Priority
- Supports 802.1p QoS with four level priority queue

### Protocol

# LACP

- Port trunking with 4 trunking group
- Up to 4 ports for each group.

# Multicasting

- Supports IGMPv3 snooping including active and passive mode
- Supports IGMP proxy including active and passive mode

# STP/RSTP/MSTP

802.1d/1w/1s

# Network Security

- 802.1x access control for port based and MAC based authentication
- Management Access Policy Control (ACL)
- Access control List
- IP-MAC-Port binding
- DHCP Snooping (Including DHCP Option 82)
- SSL/ SSH for Management
- TACACS+ for Management Authentication

### PoE Features

- 8 x IEEE802.3at/af PoE+ PSE ports
- Endpoint with 54VDC power through RJ-45 pin 1, 2, 3, 6
- PoE-PSE activity LED indicator
- Supports per port PoE state setting
- Auto detect powered device and consumption monitoring
- Supports per port power budget
- Smart feature for PD Enable/Disable, PD detection, power level
- Circuit protection to prevent power interference between ports
- Supports per port power priority setting
- 120 or 250 watts of total power selected

### **Snmpv1,v2c Network Manag**ement

Yoda Communications, Inc. www.yoda.com.tw

2F, No. 3-1, Industry East Road IX, Science Based Industrial Park, HsinChu, Taiwan



- RFC 1213 MIB (MIB-II)
  - Interface MIB
  - Address Translation MIB
  - IP MIB
  - ICMP MIB
  - TCP MIB
  - UDP MIB
  - SNMP MIB

- RFC 1757 RMON MIB
  - Statistics Group 1
  - History Group 2
  - Alarm Group 3
  - Event Group 9
  - RFC 1493 Bridge MIB
  - RFC 1643 Ethernet MIB
  - Enterprise MIB

### **LED Descriptions**

LED Description

LED	Color	Function		
System LED				
PWR	Green	Lit when +5V power is coming up		
CPU	Green	Blinks when in activating		
10/100/1000 Ethernet TP Port 1 to 8 LED				
LAN	Green/ Amber	Lit Green when TP link on 1000Mbps speed		
		Lit Amber when TP link on 10/100Mbps speed		
		Blinks when any traffic is present		
PoE	Green	Lit when PoE Power is active		
1000SX/LX Gigabit Fiber Port 7, 8 LED				
LAN	Green	Lit when connection with the remote device is good		
		Blinks when any traffic is present		
		Off when module connection is not available		

#### Network Interface

	Connector	Port
10/100/1000Mbps TP Jack (RJ- 45)	TP(RJ-45)	1 to 8
1000Mbps SFP Fiber Module	SFP	9,10

Yoda Communications, Inc. www.yoda.com.tw

2F, No. 3-1, Industry East Road IX, Science Based Industrial Park, HsinChu, Taiwan



Auto Detection	

#### Hardware Spec.

Feature		Detailed Description	
	Voltage : 100~240 V		
Power Characteristics	Frequency : 50~60 Hz		
	PoE	Max. 120W (PS800GM/GME)	
	Power	Max. 250W (PS800GMA)	
Ambient Temperature	0° to 50°C		
Humidity	5% to 90%		
Dimensions	44(H) x 280(L) x 166(W)mm (PS800GME)		
	44(H) x 3	280(L) x 215(W)mm (PS800GM/A)	
Weight	1.9 kgs (PS800GM/E),		
	2.3kgs(P	2S800GMA)	
	FCC Part	: 15 Class B, CE	
EMI			

# **Ordering Information**

Yoda Communications, Inc. www.yoda.com.tw

2F, No. 3-1, Industry East Road IX, Science Based Industrial Park, HsinChu, Taiwan



PS800GME	10-Port GbE L2 Plus Managed Switch with 8-Port PoE+ and 2- port SFP (External Power Adaptor of 120W)
PS800GMEN	10-Port GbE L2 Plus Managed Switch with 8-Port PoE+ and 2- port SFP (External Power Adaptor of 90W)
PS800GMEL	10-Port GbE L2 Plus Managed Switch with 8-Port PoE+ and 2- port SFP (External Power Adaptor of 65W)
PS800GML	10-Port GbE L2 Plus Managed Switch with 8-Port PoE+ and 2- port SFP (Internal Power Module of 65W)
PS800GM	10-Port GbE L2 Plus Managed Switch with 8-Port PoE+ and 2- port SFP (Internal Power Module of 120W)
PS800GMA	10-Port GbE L2 Plus Managed Switch with 8-Port PoE+ and 2- port SFP (Internal Power Module of 250W)

Yoda Communications, Inc. www.yoda.com.tw

2F, No. 3-1, Industry East Road IX, Science Based Industrial Park, HsinChu, Taiwan