



## ETENTECH IGP-8822M2

- 8-port 10/100/1000M PoE+ and 2 Gigabit TP/SFP combo ports
- Comply with IEEE 802.3af/at up to 30W High Power PoE
- Multiple event relay output for enhanced device alarm control
- Industrial heat dispersing design, -40~75°C wide operating temperature
- SNMP trap and SysLog
- Advanced management by LACP/VLAN/ Private VLAN / QinQ / QoS/ IGMP Snooping/Rate Control/ Online Multi-Port Mirroring/DHCP
- Cisco-Like management e CLI, Web, SNMP/RMON for network
- Voice VLAN
- Static Routing
- IEEE 1588v2 Precision Time Protocol (PTP)

### Industrial 8-port 10/100/1000M PoE+ Full Managed Switch with 2 Combo TP/SFP Uplink Ports

#### Introduction

This switch is a DIN Rail type industrial Gigabit managed Power over Ethernet Switch is designed with eight 10/100/1000M PoE+ ports and two Gigabit TP/ SFP combo ports for highly critical PoE applications such as real time IP video surveillance, WiMAX systems and Wireless APs. All of the 8 ports of the switch are compliant with both IEEE 802.3af PoE and IEEE 802.3at high power PoE standards and can deliver up to 15.4W and 30W power per port to enable the high-power requiring devices, such as Wireless APs, PTZ and dome network cameras, etc.

The two Gigabit Ethernet combo ports provide high speed uplink to connect with higher level backbone switches with ERPS (Ethernet Ring Protection Switching) technology, while ensuring the reliability of video transfer through the exclusive 50ms recovery time. By supporting various connection types, including 10/100/1000Mbps RJ-45 copper or 100Mbps, 1000Mbps Fiber, the Gigabit uplink ports further enlarge the ring infrastructure.

With Industrial EMC certified design, including robust enclosure and -40~75°C wide operating temperature range, this switch ensures high performance of the surveillance network under vibrating and shock environments in rolling stocks, traffic control systems and other harsh surveillance applications.

#### Redundant Power Inputs & Embedded Protecting Circuit

This switch provides two power inputs that can be connected simultaneously to live DC power source. If one of the power input fails, the other live source acts as a backup to automatically support the switch's power needs without compromising network service qualities. Also, it supports automatic protection switching and load balance, while its embedded protecting circuit can protect your system from over input/output voltages and rectifier malfunctions.

#### 2 Gigabit RJ45 Copper/SFP Combo Ports

This switch supports 2 Gigabit Copper/SFP Combo Ports to uplink to servers, storage, or other switching devices for long loop reach applications.

#### Outstanding Management and Enhanced Security

This switch provides various network control and security features to ensure the reliable and secure network connection. To optimize the industrial network environment the switch supports advanced network features, such as Tag VLAN, Private VLAN, QinQ, IGMP Snooping, Quality of Service (QoS), Link Aggregation Control Protocol (LACP), Rate Control, etc. The PoE switch can be smartly configured through Web Browser, SNMP Telnet and RS-232 local console with its command like interface. The failure notifications are sent through e-mail, SNMP trap, Local/Remote system log, multiple event alarm relay.

To avoid hacker's attacks and ensure the secure data transmission, this switch features DHCP client, DHCP server with IP and MAC binding, 802.1X Access Control, SSH for Telnet security, IP Access table, port security and many other security features.

## Product Specification

<b>Interface</b>		
10/100/1000M RJ45 Ports		8
1000BaseSX/LX and 1000 RJ45 Combo Port		2
Console Port for CLI Management		1
<b>System Performance</b>		
Packet Buffer		4Mbits
MAC Address Table Size		8K
Switching Capacity		20Gbps
Forwarding Rate		14.88Mpps
<b>PoE Features</b>		
IEEE 802.3 af/at		IEEE 802.3 af/at
Number of PSE Ports		8
System Power Consumption		15W
Power Feeding Detecting Capability on PD		•
PD Classification		•
Power Management (per-port)	Enable/Disable PoE Per Port	•
	Priority Setting Per Port	•
	Power Level Setting Per Port	•
	Overloading Protection	•
<b>L2 Features</b>		
Auto-negotiation		•
Auto MDI/MDIX		•
Flow Control (duplex)	802.3x (Full)	•
	Back-Pressure (Half)	•
Spanning Tree	IEEE 802.1D (STP)	•
	IEEE 802.1w (RSTP)	•
	IEEE 802.1s (MSTP)	•
VLAN	VLAN Group	4K
	Tagged Based	•
	Port-based	•
	Voice VLAN	•
Link Aggregation	IEEE 802.3ad with LACP	•
	Static Trunk	•
	Max. LACP Link Aggregation Group	5
IGMP Snooping	IGMP Snooping v1/v2/v3	Supports 1024 IGMP groups
	IGMP Static Multicast Addresses	Supports 1024 static multicast addresses
	IPv6 MLD Snooping	Supports 1024 MLD groups
	MLD Static Multicast Addresses	Supports 1024 static multicast addresses
	Querier, Immediate Leave	•
IEEE 1588v2 - Precision Time Protocol (PTP)		•
Storm Control (Broadcast/Multi-cast/Un-known Unicast)		•
Carrier Sense Multiple Access with Collision Detection (CSMA/CD)		•
RFC 903 - Reverse Address Resolution Protocol (RARP)		•
G.8032 - Ethernet Ring Protection Switching (ERPS)		•
Jumbo Frame Support		9.6KB
<b>QoS Features</b>		
Number of priority queue		8 queues/port
Rate Limiting	Ingress	Yes, 1KBps/1pps
	Egress	Yes, 1KBps/1pps
DiffServ (RFC2474 Remarking)		•
Scheduling (WRR, Strict, Hybrid)		•
CoS	IEEE 802.1p	•
	IP ToS precedence, IP DSCP	•
<b>Security</b>		
Management System User Name/Password Protection		•
User Privilege		Set user privilege up to 15 Level
Port Security (MAC-based)		•
IEEE 802.1x Port-based Access Control		•
ACL (L2/L3/L4)		•
IP Source Guard		•
RADIUS (Authentication, Authorization, Accounting)		•
TACACS+		•
HTTP & SSL (Secure Web)		•
SSH v2.0 (Secured Telnet Session)		•
MAC/IP Filter		•

<b>Management</b>	
Command Line Interface (CLI)	•
Web Based Management	•
Telnet	•
Access Management Filtering	SNMP/WEB/SSH/TELNET
Firmware Upgrade via HTTP	•
Dual Firmware Images	•
Configuration Download/Upload	•
SNMP (v1/v2c/v3)	•
RMON (1,2,3,&9 groups)	•
DHCP (Server/Client/Relay/Option82/Snooping)	•
System Event/Error Log	•
NTP/LLDP	•
Cable Diagnostics	•
IPv6 Configuration	•
Port Mirroring	One to One or Many to One
<b>Mechanical</b>	
Input Voltage	45~57 VDC, redundant inputs
Power Input	1 Removable 6-pin Terminal Block
Dimension (H*W*D)	175 x 74 x 125 mm
Weight	0.925g
LED	Power 1 & 2, Fault, Link/Act, PoE, SFP
DIP Switch	Switch 1~10: Port 1~10 disconnect alarm Switch 11: Power input alarm
Operating Temperature	-40 to 75°C
Storage Temperature	-40 ~ 85°C
Operating Humidity	5~95% (non-condensing)
<b>Mechanical</b>	
Alarm Contact	1 relay output with current carrying capacity of 1A @ 24 VDC
Reverse Polarity Protection	•
Overload Current Protection	•
CPU Watch Dog	•
Casing	IP30 protection, aluminum alloy case
EMI	FCC Part 15 Subpart B Class A, EN 55022 Class A, VCCI Class A
EMS	EN61000-4-2 (ESD) EN61000-4-3 (RS) EN61000-4-4 (EFT) EN61000-4-5 (Surge) Level 4 (DC in), RJ45 Line to Ground EN61000-4-6 (CS), Level 3, EN61000-4-8 EN61000-4-11
Shock	IEC60068-2-27
Free Fall	IEC60068-2-32
Vibration	IEC60068-2-6
Installation	DIN-Rail mounting or Wall mount (Optional)
<b>Standard</b>	
IEEE 802.3 – 10BaseT	•
IEEE 802.3u - 100BaseTX	•
IEEE 802.3ab - 1000BaseT	•
IEEE 802.3z 1000BaseSX/LX	•
IEEE 802.3af Power over Ethernet (PoE)	•
IEEE 802.3at Power over Ethernet (PoE+)	•
IEEE 802.3az - Energy Efficient Ethernet (EEE)	•
IEEE 802.3x - Flow Control	•
IEEE 802.1Q - VLAN	•
IEEE802.1v - Protocol VLAN	•
IEEE 802.1p - Class of Service	•
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 802.1AB - LLDP (Link Layer Discovery Protocol)	•
IEEE 802.1X - Access Control	•
IEEE 1588v2 - Precision Time Protocol (PTP)	•
Carrier Sense Multiple Access with Collision Detection (CSMA/CD)	•
RFC 903 - Reverse Address Resolution Protocol (RARP)	•
G.8032 - Ethernet Ring Protection Switching (ERPS)	•