INDUSTRIAL ETHERNET

8-P Gigabit PoE + 2-TP/SFP(100/1G) slot Industrial Managed Switch

OVERVIEW

1418M-SG802F is a Managed Gigabit Ethernet switch, providing 8 10/100/1000BaseT PoE PSE ports and 2 TP/ SFP ports. The PoE device helps realize a centralized power supply solution, and it provides up to 30 watts of power per port. with a total PoE power budget of 240W .It meets the high reliability requirements demanded by industrial applications, such as factory assembly line, automation, transportation and heavy Industrial factory.

To create reliability in your network, 1418M-SG802F equips with a proprietary redundant network protocol, which provides users with an easy way to establish an extra Ethernet network with ultra high-speed recovery time less than 20ms. 1418M-SG802F supports many advanced network standards to optimize network performance, ease maintenance issues, and secure network safety. 1418M-SG802F offers powerful L2 and basic L3 features with better functions and usability. 1418M-SG802F features remote management by SNMP, and supports management functions, e.g. 802.1Q VLAN, 802.1x access control, IGMP v1/v2/v3, proxy & snooping , QoS functions ... etc. Auto-MDIX function is supported for every TX port of the switch for easy cable connection.

The embedded Device Managed System (DMS) feature benefits users easy-to-configure/ install/ troubleshoot in the video surveillance, wireless access, and other industrial applications. 1418M-SG802F is an ideal option for deliver management, not only user friendly, but also decrease the total cost.

10/100 1000M | SFP 100/1G | 802.3 at | 802.3 az | IPv6 IPv4 | STP RSTP MSTP | Ring <20ms

IGMP snooping | DC48~56V input | -40~75 °C Temp

CHARACTERISTICS

- IEEE 802.3af 15.4W / IEEE 802.3at 30W High Power PoE, total PoE power budget: 240W
- IPv4/IPv6 L3 static route Network redundant LACP, Spanning tree STP, RSTP & MSTP, and rapid Ring support network redundancy recovery<20ms
- Port-based /tag-based VLAN, IEEE 802.1ad/ QinQ VLAN, Add/remove VLAN tags,
- Multicasting support IGMP v1/v2/v3 snooping, prox, & Querier
- Multicast/Broadcast/Flooding Storm Control
- 1x access control
- Per VLAN mirroring
- CLI/Web/SNMP management interfaces
- iPush APP for real time alarm notification
- DHCP Server
- PoE PSE power management & PD power consumption
- Dual power input & Reverse power protection
- IEEE 802.3az Energy Efficient Ethernet standard for green Ethernet application

ORDERING

1418M-SG802F
8-P Gigabit + 2-TP/SFP(100/1G) combo Industrial Managed PoE Switch (240W)

SPECIFICATIONS

Standards	IEEE 802.3/3u 10Base-T, 100Base-TX Ethernet IEEE 802.3ab 1000Base-T Ethernet IEEE 802.3z 1000Base-X Ethernet IEEE 802.3x Flow Control capability IEEE802.3at/af PoE standard IEEE802.3az Energy Efficient Ethernet
Interface	Port 1 to 8: RJ-45 10/100/1000Mbps with 802.3af/at PoE, auto MDI/X Port 9 to 10: RJ45/SFP(100/1000Mbps) combo RJ-45 Console port Reset button
Forwarding Capacity	14.88 Mpps
Switching Capacity	20Gbps
Jumbo frames	9216Bytes
MAC Table	8K MAC addresses
Ring Management	
Rapid Ring	Enable self-recover time in less than 20ms DIP switch Ring setting
Layer 2 Switching	
Spanning Tree Protocol (STP)	Standard Spanning Tree 802.1d Rapid Spanning Tree (RSTP) 802.1w Multiple Spanning Tree (MSTP) 802.1s
VLAN	Port-based VLAN 802.1Q tag-based VLAN MAC-based VLAN Management VLAN Private VLAN Edge (PVE) Q-in-Q (double tag) VLAN Voice VLAN GANETX VLAN Registration Protocol (GVNETX)
Trunking	Link Aggregation Control Protocol (LACP) IEEE 802.3ad Up to 5 groups and up to 4 ports per group
DHCP Relay	Relay of DHCP traffic to DHCP server in different VLAN. Works with DHCP Option 82
IGMP v1/v2/v3 snooping	IGMP limits bandwidth-intensive multicast traffic to only the requesters Supports 1024 multicast groups
IGMP Querier	IGMP querier is used to support a Layer 2 multicast domain of snooping switches in the absence of a multicast router
IGMP Proxy	IGMP snooping with proxy reporting or report suppression actively filters IGMP packets in order to reduce load on the multicast router
MLD v1/v2 snooping	Deliver IPv6 multicast packets only to the required receivers
Multicast VLAN Registration (MVR)	It uses a dedicated manually configured VLAN, called the multicast VLAN, to forward multicast traffic over Layer 2 network in conjunction with IGMP snooping
Layer 3 Switching	
Secure Shell (SSH)	SSH secures Telnet traffic in or out of the switch, SSH v1 and v2 are supported
Secure Sockets Layer (SSL)	SSL encrypts the http traffic, allowing advanced secure access to the browser-based management GUI in the switch
IEEE 802.1X	IEEE802.1X: RADIUS authentication, authorization and accounting, MD5 hash, guest VLAN, single/multiple host mode and single/multiple sessions Supports IGMP-RADIUS based 802.1X Dynamic VLAN assignment
Layer 2 Isolation Private VLAN Edge	PVE (also known as protected ports) provides L2 isolation between clients in the same VLAN. Supports multiple uplinks
Port Security	Locks MAC addresses to ports, and limits the number of learned MAC address
IP Source Guard	Prevents illegal IP address from accessing to specific port in the switch
RADIUS/ TACACS+	Supports RADIUS and TACACS+ authentication. Switch as a client
Storm Control	Prevents traffic on a LAN from being disrupted by a broadcast, multicast, or unicast storm on a port
DHCP Snooping	A feature acts as a firewall between untrusted hosts and trusted DHCP servers
ACLs	Supports up to 256 entries. Drop or rate limitation based on: Source and destination MAC, VLAN ID or IP address, protocol, port, Differentiated services code point (DSCP) / IP precedence TCP/ UDP source and destination ports 802.1p priority Ethernet type Internet Control Message Protocol (ICMP) packets TCP flag
Loop Protection	To prevent unknown unicast, broadcast and multicast loops in Layer 2 switching configurations.

SPECIFICATIONS

Quality of Service	
Hardware Queue	Supports 8 hardware queues
Scheduling	Strict priority and weighted round-robin (WRR) Queue assignment based on DSCP and class of service
Classification	Port based 802.1p VLAN priority based IPv4/IPv6 precedence / DSCP based Differentiated Services (DiffServ) Classification and re-marking ACLs
Rate Limiting	Ingress policer Egress shaping and rate control Per port
Management	
HW Monitoring	Temperature Detection and Alarm
HW Watchdog	Supported to resume operation from CPU hang up
iPush	The real time alarm notification could lower technical support cost Works with iOS and Android devices to make quick work of even the most demanding tasks.
DHCP Server	Support DHCP server to assign IP to DHCP clients
Remote Monitoring (RMON)	Embedded RMON agent supports RMON groups 1,2,3,9 (history, statistics, alarms, and events) for enhanced traffic management, monitoring and analysis
Port Mirroring	Traffic on a port can be mirrored to another port for analysis with a network analyzer or RMON probe. Up to N-1 (N is Switch's Ports) ports can be mirrored to single destination port. A single session is supported.
UPnP	The Universal Plug and Play Forum, an industry group of companies working to enable device-to-device interoperability by promoting Universal Plug and Play
s-Flow	The industry standard for monitoring high speed switched networks. It gives complete visibility into the use of networks enabling performance optimization, accounting/billing for usage, and defense against security threats
IEEE 802.1ab (LLDP)	Used by network devices for advertising their identities, capabilities, and neighbors on an IEEE 802ab local area network Support LLDP-MED extensions
Web GUI Interface	Built-in switch configuration utility for browser-based device configuration
CLI	For users to configure/manage switches in command line modes
Dual Image	Independent primary and secondary images for backup while upgrading
SNMP	SNMP version1, 2c and 3 with support for traps, and SNMP version 3 user-based security model (USM)
Firmware Upgrade	Web browser upgrade (HTTP/ HTTPs) and TFTP Upgrade through console port as well
NTP	Network Time Protocol (NTP) is a networking protocol for clock synchronization between computer systems over packet-switched
Other Management	HTTP/HTTPs; SSH DHCP Client/ DHCPv6 Client Cable Diagnostics Ping Syslog IPv6 Management
Power over Ethernet (PoE)	
Port Configuration	Supports per port PoE configuration function
PoE Scheduling	Supports per port PoE scheduling to turn on/off the PoE devices (PDs)
Auto-checking	Check the link status of PDs. Reboot PDs if there is no responses
Power Delay	The switch provides power to the PDs based on delay time when PoE switch boots up, in order to protect switch from misuse of the PDs
PoE Power Budget	240 Watts
Power Supply	54 VDC dual inputs DC Operating Range 48 to 56 VDC Required >48 VDC for PoE 802.3af (Max. 15.4W) output Required >54 VDC for PoE+ 802.3at (Max. 30W) output
Environment	Operating temperature: -40°C to 75°C Storage Temperature: -40 to 85°C Operating Humidity: 5% to 95% (Non-Condensing)
Dimension	62x 135x 130mm (WxHxD)
EMS	EN61000-4-2 ESD, EN61000-4-3 RS, EN61000-4-4 EFT, EN61000-4-5 (for RJ45 Port, Surge 6KV), EN61000-4-6 CS, EN61000-4-8 PFMF, (EN61000-6-2 by request)
EMI	FCC Part 15 Class A (EN61000-3-2, EN61000-3-3, EN61000-6-4, EN55022, EN55011 by request)
Safety	CE, (EN60950 by request)
Stability Testing	EN 60068-2-6 (Vibration), EN 60068-2-27(Shock), EN 60068-2-32(Free Fall)

APPLICATION