

#### SWT-F11MGHP



-40° TO +75°



IEEE802.3at



FLEXIBILITY



PORT  
GUARDIAN



UPLINKS



2



8



3



The SWT-F11MGHP has three 100/1000Base-FX SFP\* ports and eight 10/100Base-TX ports. Two of the SFP ports support 2.5 Gbps SFPs for high-speed communication in bandwidth-intensive applications. All SFP ports utilize SFP modules for fiber and connector type, and distance selection. The Port Guardian feature provides additional cybersecurity protection by enabling physical port lockout in the event that an existing cable is disconnected and prevents a potential network incursion using common spoofing techniques. The intrusion event is reported back to the operator using SNMP. The switch offers multiple Ethernet redundancy protocols which protect your applications from network interruptions or temporary malfunctions by redirecting transmission within the network. Advanced IP-based management can limit the maximum bandwidth for each connected IP device, allowing the user to adjust usage. The SWT-F11MGHP provides eight electrical ports supporting up to 30 watts of PoE+ power, and four of the eight PoE ports can support up to 60 watts of PoE power. All PoE ports are IEEE802.3af/IEEE802.3at compliant.

## FEATURES

- › 3 × 100/1000Base-FX SFP
- › 8 × 10/100Base-TX RJ45
- › 2 × SFP ports also support 2.5 Gbps SFP modules for high speed communication
- › 8 × IEEE802.3at compliant 30 W PoE+ ports, with 4 × ports supporting 60 W PoE++
- › Total PoE budget 240 W
- › Fast Redundancy/Recovery - MSTP/RSTP/STP (IEEE802.1s/w/D) and ERPS G.8032
- › Layer 3 static routing
- › Supports IPV6 new internet protocol version
- › Provided HTTPS/SSH protocol enhances network security
- › Supports Device Binding security function
- › Supports SNMP v1/v2c/v3 & RMON & 802.1Q VLAN Network Management
- › Supports ACL, 802.1x User Authentication for security
- › Supports 9.6K Bytes Jumbo Frame
- › Web-based, Telnet and Console (CLI) configuration
  - › Designed for wall or DIN rail mount installations

## SOFTWARE FEATURES

- › Port Guardian prevents network intrusion through intelligent physical port lockout
- › STP/RSTP/MSTP (IEEE 802.1D/w/s)
- › Ethernet Ring Protection Switching (ERPS) (G.8032)
- › Quality of Service (802.1p) for real-time traffic
- › VLAN (802.1Q) with VLAN tagging and GVRP supported
- › IGMP v2/v3 (IGMP snooping support) and MLD v1/v2 for filtering multicast traffic
- › Supports IP-based bandwidth management
- › Supports application-based QoS management
- › Port configuration, status, statistics, monitoring, security
- › DHCP Client/Server, DHCP Snooping, DHCP Relay
- › Custom User Access Rights (15 Levels)
- › Static and LACP Link Aggregation
- › Supports Loop Protection function
- › Multicast VLAN Registration (MVR)
- › Supports IP Multicast Profile (IPMC)
- › Link Layer Discovery Protocol (LLDP)
- › Voice VLAN support
- › UPnP (Universal Plug and Play)

\* Small Form-Factor Pluggable (SFP) Module. Sold separately.

Low Power Consumption

## SPECIFICATIONS

## Connectors

RJ-45 Copper Ports	8 x 10/100Base-TX Ports Ports 1-4 60 W PoE, Ports 1-8 30 W PoE
SFP <sup>1</sup> Ports	2 x 100/1000/2500Base-FX, 1 x 100/1000Base-FX
Serial Console Port Power	USB Type B Connector (115200bps, 8, N, 1)
Fault Relay	2 x 2 Pin Terminal Block 3-Pin Terminal Block

## Switch Properties

Switching latency	7 $\mu$ s
Switching bandwidth	13.6 Gbps
DRAM	1GB
Flash	128Mb
VLANs	Voice, Private, Multicast
Max. Available VLANs	256
IGMP multicast groups	128 for each VLAN
Port rate limiting	User Defined
Processing	Store-and-Forward
Priority Queues	8
Network Redundancy	STP RSTP MSTP ERPS
MAC Table	8K MAC Addresses
Jumbo Frame	Up to 9.6K Bytes
Static Routing	32 Routes

## Security Features

Device Binding security feature	SNMPv3 encrypted authentication and access security
Enable/disable ports, MAC based port security	HTTPS / SSH enhance network security
Port based network access control (802.1x)	Switch/port based, NAS, ACL, ARP inspection and IP sourceguard
VLAN (802.1Q) to segregate and secure network traffic	AAA radius server authentication
Radius centralized password management	TACACS+ SNTP

## Power

Input Power	Redundant 48 to 57 VDC , Hardened High Temp 480 W DIN Rail Power Supply Included
Power Consumption	250 W Max with PoE++, 240 W PoE Budget
Overload Current Protection	Present
Reverse Polarity Protection	Present

## Mechanical

Indicating LEDs	Power/Fault Indicators Alarm Indicator RJ45 Port Indicator SFP Port Indicator PoE Indicators
Size (H x W x D)	6.0 x 3.5 x 4.5 in (15.24 x 8.89 x 11.43 cm)
Installation	DIN-Rail or Wall Mount
Weight	2.6 lb / 1.2 kg

## Environmental

Storage Temperature	-40 to +85° C
Operating Temperature	-40 to +75° C
Operating Humidity	5% to 95% Non-condensing
MTBF	>100,000 hours

## Ethernet Standards

IEEE 802.3 for 10Base-T
IEEE 802.3u for 100Base-TX and 100Base-FX
IEEE 802.3ab for 1000Base-T
IEEE 802.3z for 1000Base-X
IEEE 802.3x for Flow control
IEEE 802.3ad for LACP (Link Aggregation Control Protocol)
IEEE 802.3at for Power Sourcing Equipment (PSE) and PoE up to 30 watts per port
IEEE 802.1p for COS (Class of Service)
IEEE 802.1Q for VLAN Tagging
IEEE 802.1D for STP (Spanning Tree Protocol)
IEEE 802.1w for RSTP (Rapid Spanning Tree Protocol)
IEEE 802.1s for MSTP (Multiple Spanning Tree Protocol)
IEEE 802.1x for Authentication
IEEE 802.1AB for LLDP (Link Layer Discovery Protocol)
IEEE 802.3az Energy Efficient Ethernet
ITU-T G.8032v1/v2 Ethernet Ring Protection Switching (ERPS)

## Regulatory Compliance

EMI	FCC Part 15, CISPR (EN55022) class A
EMS	EN61000-4-2 (ESD), EN61000-4-3 (RS), EN61000-4-4 (EFT), EN61000-4-5 (Surge), EN61000-4-6 (CS), EN61000-4-8, EN61000-4-11
Shock	IEC60068-2-27
Free Fall	IEC60068-2-32
Vibration	IEC60068-2-6
Safety	EN60950-1
Rail	EN50121-4
Traffic	NEMA TS2

## ORDERING INFORMATION

Part Number	Description	100/1000 SFP Ports <sup>1</sup>	10/100 RJ45 Ports	30W PoE+ Ports	60W PoE++ Ports
SWT-F11MGHP	Industrially Hardened 11 Port Managed Ethernet Switch	3	8	8	4
Options	User selection of Wisenet SFP (see Wisenet SFP Modules datasheet for product numbers and compatibility before ordering)				

[1] Multimode fiber needs to meet or exceed fiber standard ITU-T G.651. Single mode fiber needs to meet or exceed fiber standard ITU-T G.652

Complies with FDA Performance Standard for Laser Products, Title 21, Code of Federal Regulations, Subchapter J. In a continuing effort to improve and advance technology, product specifications are subject to change without notice.