# WISENET

## Environmentally Hardened Managed Layer 2+ Ethernet Switch
## 3 SFP* + 8 Electrical Ports with 60 Watt PoE++

### SWT-G11MGHP

| HARDENED | PoE 60W PoE++ | SFP | PORT GUARDIAN | 1G GIGABIT | 2.5 GBPS ETHERNET | GIGABIT ETHERNET |
|---|---|---|---|---|---|---|
| -40° TO +75° | IEEE802.3at | FLEXIBILITY | PORT GUARDIAN | ALL GIGABIT | 3 | 3 + 8 |

The SWT-G11MGHP has three 100/1000/2500Base-FX SFP* ports and eight 10/100/1000Base-TX ports. The 2.5 Gbps SFPs ports support high-speed communications in bandwidth-intensive applications. All SFP ports utilize SFP modules for fiber and connector type and distance selection. 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. 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 switch provides advanced IP-based management that can limit the maximum bandwidth for each connected IP device, allowing the user to adjust usage. Four of the eight PoE ports can support up to sixty watts of PoE++ power, while the remaining support up to 30 watts of PoE+ power. All PoE ports are IEEE802.3af/IEEE802.3at compliant.

## FEATURES

› 3× 100/1000/2500Base-FX SFP
  8 × 10/100/1000Base-TX RJ45

› 2 × SFP ports support 2.5 Gbps SFP modules for high speed communication

› 8 × IEEE802.3at compliant 30 W 802.3at 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 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

Hanwha Techwin

# SPECIFICATIONS

AGENCY COMPLIANCE

FC PART 15 COMPLIANT    CE    c(UL)us    RoHS

## Connectors

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

## Switch Properties

| | |
|---|---|
| Switching latency | 7 μs |
| Switching bandwidth | 28 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

Enable/disable ports, MAC based port security

Port based network access control (802.1x)

VLAN (802.1Q) to segregate and secure network traffic

Radius centralized password management

SNMPv3 encrypted authentication and access security

HTTPS/ SSH enhance network security

Switch/port based, NAS, ACL, ARP inspection and IP sourceguard

AAA radius server authentication

TACAC+

SNTP

## Power

| | |
|---|---|
| Input Power | Redundant 48 to 57 VDC , Hardened High Temp 480 W DIN Rail Power Supply Included |
| Power Consumption | 255 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 × W × D) | 6.0 × 3.5 × 4.5 in (15.24 × 8.89 × 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 | SFP Ports[1] | RJ45 Ports | 30W PoE+ Ports | 60W PoE++ Ports |
|---|---|---|---|---|---|
| SWT-G0803MGHP360 | Industrially Hardened 11 Port Gigabit Managed Ethernet Switch with Power Supply | 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.*

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