

IE-SW-AL12M-8GT-4GESFP**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com**Features of AdvancedLine managed Switch series**

Industrial networks require a future-proof infrastructure with high availability, reliability, and transparency. Managed switches increase network availability utilizing redundancies and control mechanisms as well as network diagnostics in demanding automation networks.

- Extensive set of management features enable the set-up of various redundancy, monitoring, traffic filter and security functions
- Huge variety of port count and media type enable a wide range of applications (5 to 24 ports)
- Models supporting Gigabit Ethernet including Jumbo Frame support for applications with high demand on bandwidth and latency
- Suitable for use in harsh industrial environment thanks to rugged design and wide operating temperature range of -40°C up to 75°C

General ordering data

| | |
|------------|--|
| Version | Network switch, managed, Gigabit Ethernet, Number of ports: 8x RJ45, 4x 100/1000BaseSFP Slot, IP30, -40 °C...75 °C |
| Order No. | 2682340000 |
| Type | IE-SW-AL12M-8GT-4GESFP |
| GTIN (EAN) | 4050118692372 |
| Qty. | 1 pc(s). |

IE-SW-AL12M-8GT-4GESFP**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Technical data**Dimensions and weights**

| | | | |
|------------|----------|-----------------|------------|
| Depth | 108.3 mm | Depth (inches) | 4.264 inch |
| Height | 145.1 mm | Height (inches) | 5.713 inch |
| Width | 54.3 mm | Width (inches) | 2.138 inch |
| Net weight | 822 g | | |

Temperatures

| | | | |
|---------------------|----------------------------|-----------------------|----------------|
| Storage temperature | -40 °C...85 °C | Operating temperature | -40 °C...75 °C |
| Humidity | 5 to 95 % (non-condensing) | | |

EMC conformity and approvals

| | | | |
|-----------------|---|-----------|---|
| EMC standards | EN 55032, EN 55024, FCC Part 15 Subpart B Class A, IEC 61000-4-2 ESD: Contact: 4 kV; Air: 8 kV, IEC 61000-4-3 RS: 80 MHz bis 1 GHz: 3 V/m, IEC 61000-4-4 EFT: Power: 0.5 kV; Signal: 0.5 kV, IEC 61000-4-5 Surge: Power: 0.5 kV; Signal: 1 kV, IEC 61000-4-6 CS: 3 Vrms | Free fall | |
| Safety standard | UL 61010-1, UL 61010-2-201 | Shock | According to IEC 60068-2-31 according to IEC 60068-2-27 |
| Vibration | according to IEC 60068-2-6 | | |

Environmental conditions

| | | | |
|-----------------------------|----------------------------|--|--|
| Humidity | 5 to 95 % (non-condensing) | | |
| Operating altitude | Altitude, max. | 2,000 m | |
| | Note | in acc. with UL | |
| | Altitude, max. | 6,000 m | |
| | Note | for restrictions, see the manufacturer's declaration for operating altitude in section downloads | |
| Operating temperature, max. | 75 °C | | |
| Operating temperature, min. | -40 °C | | |
| Storage temperature, max. | 85 °C | | |
| Storage temperature, min. | -40 °C | | |

Guarantee

| | |
|---------------|---------|
| Time interval | 5 years |
|---------------|---------|

IE-SW-AL12M-8GT-4GESFP

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Technical data

Interfaces

| | | | |
|-------------------|--|------------------------|--|
| Alarm contact | 1 relay output with a current capacity of 1 A at 24 V DC | Console port interface | RS-232 (RJ45 connector) |
| Fibre-optic ports | | Function reset button | <5 sec: System reboot and set LAN IP to factory Default, >5 sec: Factory default, Note: behavior of reset button can be configured via web interface |
| | 100/1000Base SFP Slot | | |
| Number of ports | 8x RJ45, 4x 100/1000BaseSFP Slot | RJ45 ports | 10/100/1000BaseT(X), auto negotiation, Full-/half-duplex mode, Auto MDI/MDI-X port |

MTBF

| | | |
|------|------------------------------|------------------|
| MTBF | According to Standard | Telcordia SR-332 |
| | Operating time (hours), min. | 551,478 h |

Management features

| | | | |
|---------------------------------|---|-----------------------------|---|
| Device configuration | Webbrowser (HTTP/HTTPS), SNMP v1/v2c/v3, Command Line Interface (Telnet/SSH), Local serial console port (RS-232 via RJ-45 port), Upload of a configuration file via web-interface, TFTP-Server or external backup module | Monitoring function | SNMP v1/v2c/v3, Link Layer Discovery Protocol (LLDP), Port mirroring (local, remote), Port statistics, Port monitoring, Syslog, RMON (Remote monitoring), Event based warning via E-Mail, Event based warning via relay, Event based warning via SNMP trap, Ethernet cable diagnostics on RJ-45 ports |
| Network redundancy | Spanning Tree Protocol (STP), Rapid Spanning Tree Protocol (RSTP), Multiple Spanning Tree Protocol (MSTP), O-Ring (recovery time <30 ms), O-Chain (recovery time <30 ms), Link Aggregation Control Protocol (LACP), Fast recovery, Media Redundancy Protocol (MRP-client) | Network traffic filter | Quality of Service (QoS), Tag based VLAN, GVRP (GARP VLAN Registration Protocol), IGMP v2/v3, Traffic Rate Limiting |
| IP-address management | Static, DHCP-Client, DHCP-Server (port based, pool-based), DHCP Option 82, DHCP-Relay | Security functions | VLAN segmentation, Enable/disable ports, TACACS+ and IEEE 802.1X User Authentication, DoS/DDoS auto prevention, Access Control List, DHCP snooping, Loop protection, Management access security via privilege level configuration for different user roles |
| Time synchronization management | SNTP server, SNTP client | Industrial protocol support | PROFINET device acc. to conformance class B, EtherNet/IP, Modbus/TCP slave |

IE-SW-AL12M-8GT-4GESFP**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Technical data**Power supply**

| | | |
|-----------------------------|-----------------------------------|--------|
| Connection type | 1 removable 6-pin terminal block | |
| Current consumption | Voltage | 24 V |
| | Current | 0.54 A |
| Overload current protection | Yes | |
| Reverse polarity protection | Yes | |
| Voltage supply | 12/24/48 V DC, 2 redundant inputs | |
| Voltage supply range | Voltage type | DC |
| | Voltage, min. | 10.8 V |
| | Voltage, max. | 52.8 V |

Switch characteristics

| | | | |
|--------------------------------|-----------|--------------------------------|--------------|
| Bandwidth backplane | 24 Gbit/s | Jumbo frame support | up to 9.6 KB |
| MAC table size | 8 K | Max. number of available VLANs | 4,096 |
| Number of IGMP-Groups per VLAN | 256 | Packet buffer size | 4 Mbit |
| Priority queues | 8 | VLAN-ID max | 4,095 |
| VLAN-ID min | 1 | | |

Technical data

| | | | |
|-----------------------|------------------|-------------------|---------|
| Housing main material | Metal | Protection degree | IP30 |
| Speed | Gigabit Ethernet | Switch | managed |
| Type of mounting | DIN rail | | |

Technology

| | | | |
|----------------|--|--------------|--------------------------|
| Data switching | Store and Forward | Flow control | IEEE 802.3x flow control |
| Standard | IEEE 802.3 for 10BaseT, IEEE 802.3u for 100BaseT(X) and 100BaseFX, IEEE 802.3ab for 1000BaseT(X), IEEE 802.3z for 1000BaseX, IEEE 802.3x for flow control, IEEE 802.3ad for port trunk with LACP, IEEE 802.1D for the Spanning Tree protocol, IEEE 802.1w for Rapid STP, IEEE 802.1s for the Multiple Spanning Tree Protocol (MSTP), IEEE 802.1p for Class of Service, IEEE 802.1Q for VLAN tagging, IEEE 802.1X for authentication, IEEE 802.1AB for Link Layer Discovery protocol (LLDP) | | |

Classifications

| | | | |
|-------------|-------------|-------------|-------------|
| ETIM 6.0 | EC000734 | ETIM 7.0 | EC000734 |
| ETIM 8.0 | EC000734 | ETIM 9.0 | EC000734 |
| ECLASS 9.0 | 19-17-01-06 | ECLASS 9.1 | 19-17-01-06 |
| ECLASS 10.0 | 19-17-04-01 | ECLASS 11.0 | 19-17-04-01 |
| ECLASS 12.0 | 19-17-04-01 | ECLASS 13.0 | 19-17-04-01 |

IE-SW-AL12M-8GT-4GESFP

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Technical data

Environmental Product Compliance

| | |
|------------|--------------------------------------|
| REACH SVHC | Lead 7439-92-1 |
| SCIP | 9229992a-00b9-4096-8962-200a7f33e289 |

Approvals

Approvals



| | |
|-------------------------|------------|
| ROHS | Conform |
| UL File Number Search | UL Website |
| Certificate no. (cULus) | E141197 |

Downloads

| | |
|---|---|
| Approval/Certificate/Document of Conformity | PNO Certificate KC certificate EU Declaration of Conformity RCM Declaration of Conformity UK Declaration of Conformity Manufacturer's declaration for operating altitude |
| Engineering Data | CAD data – STEP |
| Product Change Notification | Firmware Release Notes |
| Software | Device description – SNMP private MIB Firmware – Current Firmware Device description – GSDML file Device description – EDS file |
| User Documentation | Hardware Installation Guide User manual |
| Catalogues | Catalogues in PDF-format |

IE-SW-AL12M-8GT-4GESFP

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Accessories

SFP transceiver (for use with switches of Eco- Advanced- and SubstationLine)



Features of SFP-Transceiver series

- Huge variety of transceiver types for several transmission speeds (up to 10 Gigabit Ethernet) and distances (up to 60 km)
- BiDi SFP models for communication via single fiber
- Easy control of transceiver status due to support of Digital Diagnostic Monitoring (DDM)
- Hot pluggable (during operation)
- Class 1 laser product, EN60825-1 compliant
- Applicable for switches of the Eco-, Advanced- and SubstationLine

General ordering data

| | | |
|------------|-----------------------------|---|
| Type | IE-SFP-1GE-SM-10-BIDI-T ... | Version |
| Order No. | 2682530000 | SFP Transceiver, 1000 Mbps, Singlemode BiDi, LC-Simplex, 10 km, |
| GTIN (EAN) | 4050118692181 | -40 °C...85 °C |
| Qty. | 1 pc(s). | |
| Type | IE-SFP-1FE-SM-30 | Version |
| Order No. | 2682460000 | SFP Transceiver, 100 Mbps, Singlemode, LC-Duplex, 30 km, -40 |
| GTIN (EAN) | 4050118692259 | °C...85 °C |
| Qty. | 1 pc(s). | |
| Type | IE-SFP-1GE-MM-05 | Version |
| Order No. | 2682480000 | SFP Transceiver, 1000 Mbps, Multimode, LC-Duplex, 0.5 km, -40 |
| GTIN (EAN) | 4050118692235 | °C...85 °C |
| Qty. | 1 pc(s). | |
| Type | IE-SFP-1GE-MM-2 | Version |
| Order No. | 2682490000 | SFP Transceiver, 1000 Mbps, Multimode, LC-Duplex, 2 km, -40 °C...85 |
| GTIN (EAN) | 4050118692228 | °C |
| Qty. | 1 pc(s). | |
| Type | IE-SFP-1GE-SM-10-BIDI-T ... | Version |
| Order No. | 2682520000 | SFP Transceiver, 1000 Mbps, Singlemode BiDi, LC-Simplex, 10 km, |
| GTIN (EAN) | 4050118692198 | -40 °C...85 °C |
| Qty. | 1 pc(s). | |
| Type | IE-SFP-1GE-RJ45 | Version |
| Order No. | 2766120000 | SFP Transceiver, 10/100/1000 MBit/s, RJ45, 100 m, -40 °C...85 °C |
| GTIN (EAN) | 4064675023791 | |
| Qty. | 1 pc(s). | |
| Type | IE-SFP-1GE-SM-20-BIDI-T ... | Version |
| Order No. | 2682540000 | SFP Transceiver, 1000 Mbps, Singlemode BiDi, LC-Simplex, 20 km, |
| GTIN (EAN) | 4050118692174 | -40 °C...85 °C |
| Qty. | 1 pc(s). | |
| Type | IE-SFP-1FE-MM-2 | Version |
| Order No. | 2682450000 | SFP Transceiver, 100 Mbps, Multimode, LC-Duplex, 4 km, -40 °C...85 |
| GTIN (EAN) | 4050118692266 | °C |
| Qty. | 1 pc(s). | |
| Type | IE-SFP-1GE-SM-10 | Version |
| Order No. | 2682500000 | SFP Transceiver, 1000 Mbps, Singlemode, LC-Duplex, 10 km, -40 |
| GTIN (EAN) | 4050118692211 | °C...85 °C |
| Qty. | 1 pc(s). | |

IE-SW-AL12M-8GT-4GESFP**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Accessories

| | | |
|------------|-----------------------------|---|
| Type | IE-SFP-1FE-SM-60 | Version |
| Order No. | 2682470000 | SFP Transceiver, 100 Mbps, Singlemode, LC-Duplex, 60 km, -40 |
| GTIN (EAN) | 4050118692242 | °C...85 °C |
| Qty. | 1 pc(s). | |
| Type | IE-SFP-1GE-SM-40 | Version |
| Order No. | 2682510000 | SFP Transceiver, 1000 Mbps, Singlemode, LC-Duplex, 40 km, -40 |
| GTIN (EAN) | 4050118692204 | °C...85 °C |
| Qty. | 1 pc(s). | |
| Type | IE-SFP-1GE-SM-20-BIDI-T ... | Version |
| Order No. | 2682550000 | SFP Transceiver, 1000 Mbps, Singlemode BiDi, LC-Simplex, 20 km, |
| GTIN (EAN) | 4050118692167 | -40 °C...85 °C |
| Qty. | 1 pc(s). | |

Configuration backup and restore module (for use with switches of Advanced- and SubstationLine)**Module for saving and loading a device configuration**

- Reduce system downtime by simple reconfiguration in case of replacing devices
- 2 storage spaces selectable via DIP switch
- Compact, rugged, reliable design
- For use with switches of Advanced- and SubstationLine

General ordering data

| | | |
|------------|----------------------------|---|
| Type | IE-EBR-MODULE-RS232-ALM | Version |
| Order No. | 2682610000 | Configuration backup and restore module, IP40, -10 °C...60 °C |
| GTIN (EAN) | 4050118692105 | |
| Qty. | 1 pc(s). | |

Mounting kit for 19" rack assembly

- For assembling DIN rail-based devices on 19" racks

**General ordering data**

| | | |
|------------|----------------------------|---------------------------|
| Type | RM-KIT | Version |
| Order No. | 1241440000 | Kit for 19"-rack mounting |
| GTIN (EAN) | 4050118029154 | |
| Qty. | 1 pc(s). | |