



**IE-SW-AL12M-8GT-4GESFP**

**Weidmüller Interface GmbH & Co. KG**  
 Klingenbergstraße 26  
 D-32758 Detmold  
 Germany

www.weidmueller.com

**Technical data**

**Approvals**

Approvals



|                         |                            |
|-------------------------|----------------------------|
| ROHS                    | Conform                    |
| UL File Number Search   | <a href="#">UL Website</a> |
| Certificate no. (cULus) | E141197                    |

**Dimensions and weights**

|            |          |                 |             |
|------------|----------|-----------------|-------------|
| Depth      | 108.3 mm | Depth (inches)  | 4.2638 inch |
| Height     | 145.1 mm | Height (inches) | 5.7126 inch |
| Width      | 54.3 mm  | Width (inches)  | 2.1378 inch |
| Net weight | 822 g    |                 |             |

**Temperatures**

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

**Environmental Product Compliance**

|                                      |   |
|--------------------------------------|---|
| RoHS Compliance Status               | Compliant with exemption                |
| RoHS Exemption (if applicable/known) | 6c, 7a, 7cl                             |
| REACH SVHC                           | Lead 7439-92-1, Lead monoxide 1317-36-8 |
| SCIP                                 | 9229992a-00b9-4096-8962-200a7f33e289    |

**EMC conformity and approvals**

|                 |                             |               |   |
|-----------------|-----------------------------|---------------|---|
| Free fall       | According to IEC 60068-2-31 | 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 |
| Vibration       | according to IEC 60068-2-6  | Shock         | according to IEC 60068-2-27   |
| Safety standard | UL 61010-1, UL 61010-2-201  |               |   |

**Environmental conditions**

|                             |                            |                 |
|-----------------------------|----------------------------|-----------------|
| Operating temperature, max. | 75 °C                      |                 |
| Operating temperature, min. | -40 °C                     |                 |
| Humidity                    | 5 to 95 % (non-condensing) |                 |
| Storage temperature, max.   | 85 °C                      |                 |
| Storage temperature, min.   | -40 °C                     |                 |
| Operating altitude          | Altitude, max.             | 2000 m          |
|                             | Note                       | in acc. with UL |
|                             | Altitude, max.             | 6000 m          |

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Note

for restrictions, see the manufacturer's declaration for operating altitude in section downloads

### Guarantee

Time interval 5 years

### Interfaces

|                        |                                  |                       |  |
|------------------------|----------------------------------|-----------------------|--|
| Fibre-optic ports      | 100/1000Base SFP Slot            | RJ45 ports            | 10/100/1000BaseT(X), auto negotiation, Full-/half-duplex mode, Auto MDI/MDI-X port   |
| Console port interface | RS-232 (RJ45 connector)          | Alarm contact         | 1 relay output with a current capacity of 1 A at 24 V DC   |
| Number of ports        | 8x RJ45, 4x 100/1000BaseSFP Slot | 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 |

### MTBF

|      |                              |                  |
|------|------------------------------|------------------|
| MTBF | According to Standard        | Telcordia SR-332 |
|      | Operating time (hours), min. | 551478 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-manager/client) | Network traffic filter | Quality of Service (QoS), Tag based VLAN, GVRP (GARP VLAN Registration Protocol), IGMP v2/v3, Traffic Rate Limiting, Differentiated Services Code Point (DSCP), IGMP Snooping, MLD Snooping, MLD v1/v2  |
| IP-address management | Static, DHCP-Client, DHCP-Server (port based, pool-based), DHCP Option 82, DHCP-Relay, IPv4/IPv6  | 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  |

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|                                 |                          |                             |  |
|---------------------------------|--------------------------|-----------------------------|--|
| Time synchronization management | SNTP server, SNTP client | Industrial protocol support | security via privilege level configuration for different user roles        |
|                                 |                          |                             | PROFINET device acc. to conformance class B, EtherNet/IP, Modbus/TCP slave |

### Power supply

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

### Switch characteristics

|                     |              |                                |        |
|---------------------|--------------|--------------------------------|--------|
| Priority queues     | 8            | Max. number of available VLANs | 4096   |
| VLAN-ID min         | 1            | VLAN-ID max                    | 4095   |
| MAC table size      | 8 K          | Packet buffer size             | 4 Mbit |
| Bandwidth backplane | 24 Gbit/s    | Number of IGMP-Groups per VLAN | 256    |
| Jumbo frame support | up to 9.6 KB |                                |        |

### Technical data

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

### 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) |              |                          |

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**Classifications**

|             |             |             |             |
|-------------|-------------|-------------|-------------|
| ETIM 8.0    | EC000734    | ETIM 9.0    | EC000734    |
| ETIM 10.0   | EC000734    | ECLASS 14.0 | 19-17-04-01 |
| ECLASS 15.0 | 19-17-04-01 |             |             |