IE-SW-AL18M-16TX-2GC

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
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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, Fast/Gigabit Ethernet, Number of ports: 16x RJ45 10/100BaseT(X), 2x combo-ports (10/100/1000BaseT(X) or 100/1000BaseSFP), IP30, -40 °C...75 °C
Order No.	2682330000
Type	IE-SW-AL18M-16TX-2GC
GTIN (EAN)	4050118692389
Qty.	1 pc(s).

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Technical data

Dimensions and weights

Depth	108.5 mm	Depth (inches)	4.272 inch
Height	154 mm	Height (inches)	6.063 inch
Width	96.4 mm	Width (inches)	3.795 inch
Net weight	1,363 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	According to IEC 60068-2-31
Safety standard	SELV according to EN 62368-1, UL 61010-1, UL 61010-2-201	Shock	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

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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	100/1000Base SFP Slot	Function reset button	<5 sec: System reboot, >5 sec: Factory default
Number of ports	16x RJ45 10/100BaseT(X), 2x combo-ports (10/100/1000BaseT(X) or 100/1000BaseSFP)	RJ45 ports	10/100BaseT(X) or 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.	600,504 h

Management features

Device configuration	Webbrowser (HTTP/HTTPS), SNMP v1/v2c/v3, Local serial console port (RS-232 via RJ-45 port), Upload of a configuration file via web-interface or TFTP-Server, Command Line Interface (Telnet/SSH)	Monitoring function	SNMP v1/v2c/v3, Link Layer Discovery Protocol (LLDP), Port mirroring, 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
Network redundancy	Spanning Tree Protocol (STP), Rapid Spanning Tree Protocol (RSTP), Multiple Spanning Tree Protocol (MSTP), O-Ring (recovery time <10/30 ms at Fast/Gigabit Ethernet interface), O-Chain (recovery time <10/30 ms at Fast/Gigabit Ethernet interface), Link Aggregation Control Protocol (LACP), Fast recovery	Network traffic filter	Quality of Service (QoS), Class of Service (CoS), Type of Service (ToS), Differentiated Services Code Point (DSCP), Port based VLAN, Tag based VLAN, GVRP (GARP VLAN Registration Protocol), IGMP v2/v3, Multicast VLAN Registration (MVR), 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, Access control (port based via IEEE 802.1X), Access control list (IP-based), Access control list (MAC-based), Management access security via secure IP-list and configuration of allowed access methods (web-interface, telnet, SSH), Loop protection
Time synchronization management	NTP server, SNTP client	Industrial protocol support	Modbus/TCP slave, PROFINET device acc. to conformance class A

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Power supply

Connection type	1 removable 6-pin terminal block	
Current consumption	Voltage	12 V
	Current	1.2 A
	Voltage	24 V
	Current	0.6 A
	Voltage	48 V
	Current	0.3 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	7.2 Gbit/s	IGMP-Groups	1,024
MAC table size	8 K	Max. number of available VLANs	4,095
Packet buffer size	1 Mbit	Priority queues	4
VLAN-ID max	4,094	VLAN-ID min	1

Technical data

Housing main material	Metal	Protection degree	IP30
Speed	Fast/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 802.1p 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 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
ECLASS 14.0	19-17-04-01		

Environmental Product Compliance

RoHS Compliance Status	Compliant with exemption
RoHS Exemption (if applicable/known)	6c, 7a, 7cI
REACH SVHC	Lead 7439-92-1 Lead monoxide 1317-36-8
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	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
User Documentation	Hardware Installation Guide User manual Application notes – Industrial Product Security Guideline
Catalogues	Catalogues in PDF-format