SWMD-HE-8TX-16TX-2CB

RUGGEDIZED 10-18 PORT GIGABIT SWITCH

Overview

FANLESS

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HIGH RESILIENCY

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EN50121-4

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IEC61850

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IEEE1613

SWMD-HE-8/16TX-2CB are ruggedized Gigabit Ethernet switches dedicated to the mission critical networks of railway infrastructures and electric transport and distribution substations

SWMD-HE-8/16TX switch is qualified for operation in severe electromagnetic environment with compliance to EN 50121-4 railway and IEC 61850 / IEEE 1613 electric substation standards.

SWMD-HE-8/16TX suits most industry integration requirements thanks to its compact aluminum DIN rail form factor with IP30 protection and resistance to shocks and vibrations.

SWMD-HE-8/16TX is designed for installation in non temperature controlled environments with wide –40 to +75 °C operating temperature range and up to +85 °C picks for limited periods of time.

SWMD-HE-8/16TX products deliver 8 or 16x 10/100BaseTX ports and 2 Gigabit Ethernet ports with various copper and fiber optic options. Optical ports can be equipped with SFP modules and a broad choice of Multi-Mode, GSX / GLX Single-Mode and WDM models with distances up to 120 km.

SWMD-HE-8/16TX builds multiple service communications based on 802.1q VLAN and GVRP protocol and traffic classification. The Ethernet engine supports wire-speed and low latency packet switching at any traffic load with rate limiting, traffic shaping and prioritization, and multicast IGMP processing.

SWMD-HE-8/16TX enables secure communications on resilient rings with industry standard RSTP/MSTP but also with a 15 ms fast recovery ring protocol. It supports multiple resilient rings over copper and fiber links. Network access is protected and controlled by 802.1X and Radius authentication protocols and MAC address filtering functions with up to 24 MAC address rules per port.

SWMD-HE-8/16TX provides quick delivery of Ethernet services through extensive management functions including a LLDP Link Layer Discovery Protocol, an intuitive Web interface, CLI commands via Telnet/SSH or a local RS232 console port, and SNMP.
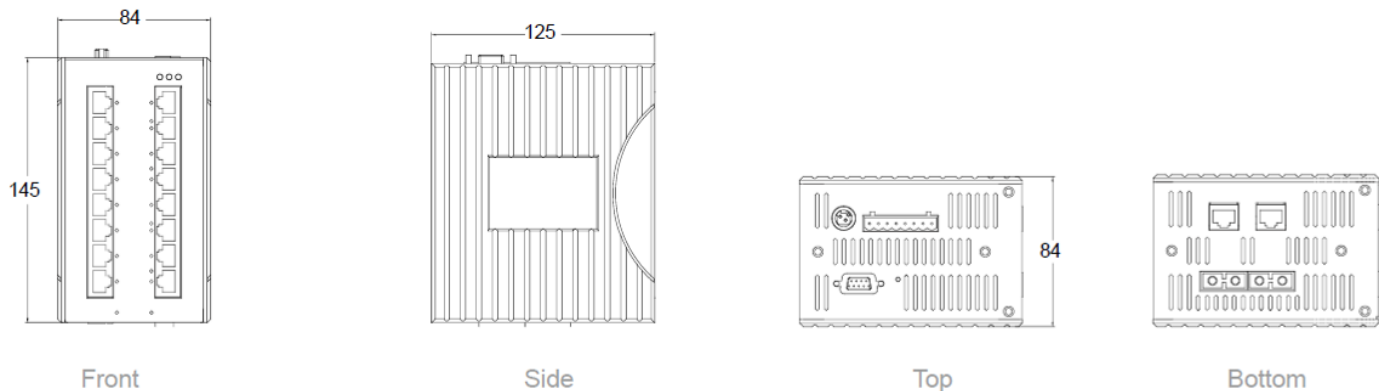
Technical Characteristics

Ethernet Ports	• 8 or 16 x 10/100BaseTX, RJ-45 • 2x 10/100/1000 RJ45 or optical ports - 1000Base-SX or LX (SC)
Optical ports	• GSX and GLX options: 10, 20, 40 km
Power supply	• 2x redundant power inputs: 12 to 50 Vdc • 1x backup power input: 12 Vdc, jack socket • Max power consumption : 15 W
Light indicators	• Power Status (Power 1, Power 2, Power3) Link/Activity for each RJ45 Ethernet port
Switching performance	• 14,880 PPS at 10 Mbps, 148,810 PPS at 100 Mbps and 1,488.100 PPS at 1000 Mbps
Memory	• 8,192 MAC address memory • 2 Mb frame buffer memory
VLANs	• 802.1q Port-based and Tag-based, 128 groups
Management	• CLI, Telnet/ SSH , SNMP , HTTP/HTTPS , LLDP • 1 x RS-232 Console port (DB9) • Alarm relay : link loss, power failure • Port mirroring
Standards	• IEEE802.3 10Base-T, • IEEE802.3u 100Base-TX, • IEEE802.3ab 000Base-T, • IEEE802.3z 000Base-SX & 1000Base-LX, • IEEE 802.1d Spanning Tree Protocol • IEEE 802.1w Rapid Spanning Tree Protocol • IEEE 802.1s Multi STP • IEEE 802.3x Flow Control • IEEE 802.1p Priority Queuing • IEEE 802.1q VLAN Tagging • IEEE802.1x Authentication
Environmental	• Operating temperature range: -40ºC to +75 ºC • Stocking : -45ºC to +85 ºC • Hygrometry : 5% to 95% RH • EN61850-3/IEEE1613 • FCC Part 15 of Class A & CE Approved • ENEN61000-6-3, EN55022 • EN61000-3-2, EN61000-3-3 • EN61000-6-2, EN61000-4-2 • EN61000-4-3, EN61000-4-4 • EN61000-4-5, EN61000-4-6 • EN61000-4-8 • EN61850-3/IEEE1613 • EN50121-4 railway • NEMA TS1/2 • IEC60068-2-6 Fc (Vibration) • IEC60068-2-27 Ea (Shock) • IEC60068-2-32 Ed (Free fall)
Size and weight	• Dimensions: 125x84x145 mm (DxWxH) • Weight: 1 kg
MTBF	• 200.000 hours

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Dimensions

Front | Side | Top | Bottom

Ordering Information

Model	10/100BT RJ45	100FX SFP	10/100/1000 RJ45	Gigabit Eth RJ45 + SFP
SWMD-HE-8TX-2TGX	8	-	2	-
SWMD-HE-8TX-2CB	8	-	-	2
SWMD-HE-8TX-2FSF2CB	8	2	-	2
SWMD-HE-16TX-2CB	16	-	-	2

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