

RJ Switch

Slim Line Managed Industrial Ethernet Switches



Industrial Rugged Ethernet Switch

Amphenol proposes a full range of Rugged Ethernet switches for industrial use. Those switches are specifically designed for industrial applications where Real-Time is a key requirement. The wide range, from unmanaged Plug & Play switches to managed with fiber optics ports, will fulfill to all your needs. This is an easy way to make the Ethernet networks of your manufacturing site, automation or control units deterministic.

This family of managed switches, IP30 rated with a slim packaging, fits on your Din-Rail and reduces the place needed.

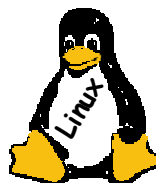
Key Features

- ✓ Slim packaging to fit ideally on Din-rail
- ✓ Industrial hardened design
- ✓ Redundant power inputs with surge/spike protection
- ✓ Hazardous location: operation in Zone 2
- ✓ Alarm Output contact for power and operational status
- ✓ Wide operating temperature range of -40°C to 75°C (SLX models)
- ✓ Auto-detecting, auto-crossover and auto-polarity
- ✓ Full-Duplex operation with flow control (no collisions!)

Managed Switch Networking Features

- ✓ Rapid Spanning Tree (RSTP) for fast redundant rings
- ✓ Priority queuing for real-time performance (QoS and CoS)
- ✓ SNMP v1 and v2 for network management
- ✓ SNMP v3 for security (authentication and encryption)
- ✓ IGMP for multicast filtering
- ✓ VLAN for traffic segregation
- ✓ Message filtering to stop broadcast storms
- ✓ RMON and port mirroring for diagnostics
- ✓ User friendly configuration

Enhance the
reliability of
your network
Linux Ipm
inside !



Industrial
Ethernet Switches

Save space in your
cabinet due to the slim
packaging !

Industrial Applications

- Factory Automation
- Robotics
- Process Control
- Transportation Systems
- Data Acquisition & Transmission

Managed Switch Features

IEEE Ethernet Standards

All IEEE 802.3 /u	10 Mbps Ethernet and 100 Mbps Fast Ethernet
All IEEE 802.3x	Full-Duplex with Flow Control
All IEEE 802.1D/w	Rapid Spanning Tree for redundant rings and Spanning Tree for interoperability
All IEEE 802.1p	Priority Queuing – QoS, CoS, ToS/DS
All IEEE 802.1Q	VLAN for traffic segregation

Regulatory Approvals

EMI emissions	EN55022, FCC part 15, ICES-003
EMC immunity:	IEC61326-1
Electrical safety	EN61010-1; UL508/CSA C22
Vibrations:	IEC60068-2-6
Hazardous Location:	UL1604, CSA C22.2/213 (Class 1, Div. 2), EN50021/Zone 2, EN60079-15, ATEX
Eye safety	IEC60825-1, Class 1; FDA 21 CFR 1040.10 & 1040.11

Ethernet features

RJ45 ports	5 or 8 Shielded RJ45 ports 10/100BaseTX
Fiber optic ports	SC or ST connectors Data rate 100BaseFX (100Mbps) Wavelength 1300 nm center Fiber multimode (mm) typ.: 50 or 62.5/125 um Fiber singlemode (sm) typ.: 9 or 10/125 um Fiber max distance (Full duplex): 4km (mm), 20 km (sm)
Ethernet switch type	Intelligent store & forward
Full / Half Duplex	Configurable
RJ45 speed	10 or 100 Mbps auto-negotiation
RJ45 MDI/MDIX	Auto-crossover connection
RJ45 TD and RD polarity	Auto-polarity
Typical latency	16 us + frame time @ 10 Mbps (varies on load and settings) 5 us + frame time @ 100 Mbps
MAC addresses supported	2048
Memory bandwidth	3.2 Gbps

Power Supply

OK contact output	10 – 30 VDC; Maximum output current 0.5 A
Input Power	3.6 W – 5 ports without fiber (typical, all ports active at 100 Mbps)
10 – 30 VDC	4.3 W – 8 ports without fiber 5.6 W – 5 ports with 2 fibers 6.3 W – 8 ports with 2 fibers
Transient Protection	15 KW peaks
Spike Protection	5 KW (10 times for 10 uS)

Temperature

Operating Temperature	- 10°C to +60°C (SL models) - 40°C to +75°C (SLX models)
Storage Temperature	- 40°C to +85°C

Description

Terminal bloc for Redundant Power Inputs + Alarm Output

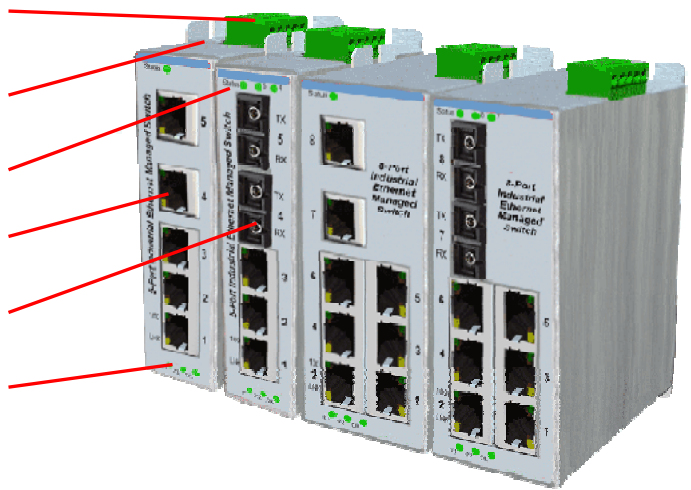
DIN-Rail low profile fixture

Indicators for Powers, Alarm Output Status

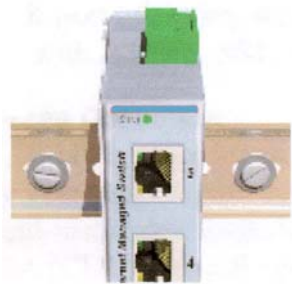
5 or 8 connectors (RJ45, SC or ST fiber)

SC or ST fiber connector

Indicators for Link Status and Datarate



Optional mounting positions

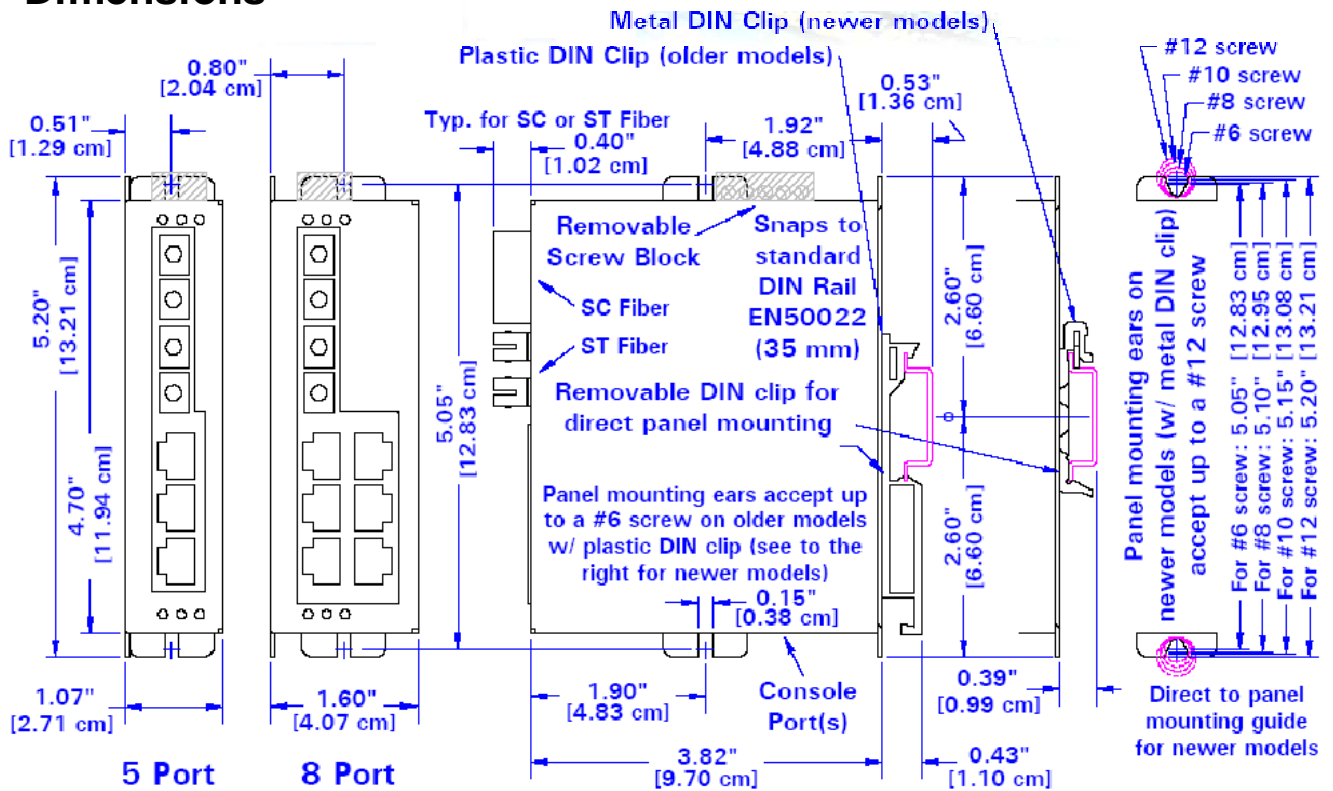


Snap On DIN rail

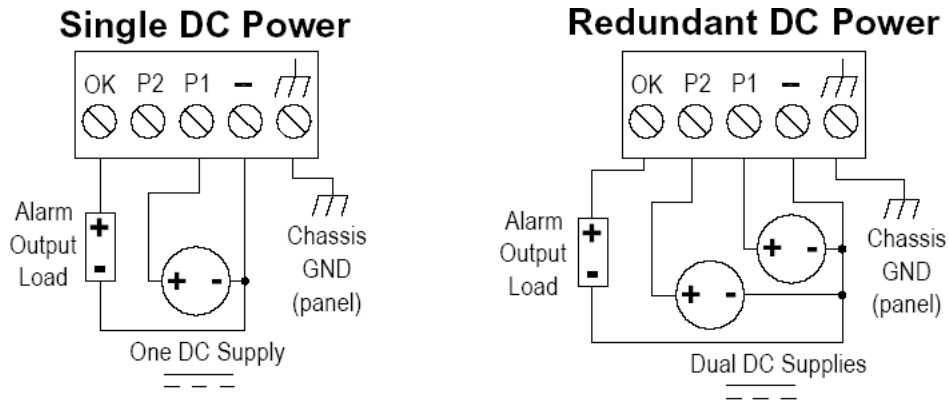


Vertical or horizontal Direct to Panel

Dimensions



Power and alarm wiring



Part Numbers

Series	RJS	SLX	5MS	1	-
RJ-Switch					
Type and operating temperature grade					
SL	Slim Line with standard range: -10 to +60°C				
SLX	Extended temperature range: -40 to +75°C				
Type of Electronics					
5MS	Ethernet Managed switch with 5 10/100 ports				
8MS	Ethernet Managed switch with 8 10/100 ports				
RJ45 or fiber ports					
1	RJ45 ports only, no fiber				
4	2 multimode fiber ports				
5	2 singlemode fiber ports				
Style of Fiber connectors					
Blank	No fiber				
SC	SC style fiber connector(s)				
ST	ST style fiber connector(s)				

Example: Ethernet managed Switch, extended temperature range,
with 5 ports including 2 multimode fiber port, ST style:

RJS-SLX-5MS-4ST

A complete range of IP65/68 sealed Rugged Ethernet switches

Amphenol proposes the widest range of IP65/68 sealed Industrial Ethernet switches for very harsh environments. The Ethernet interfaces are waterproof & rugged RJ45 connectors from the RJ FIELD series.

Consult our dedicated website for more information: www.rjswitch.com



series RJS-PC5

- ✓ 5 ports - RJ45 - IP6/68
- ✓ Polyester rugged enclosure
- ✓ Ring or unmanaged



series RJS-ML & RJS-BKN

- ✓ 9 ports - RJ45 - IP65/68
- ✓ Aluminum enclosure
- ✓ Paint or cadmium olive drab plating
- ✓ Ring, managed or unmanaged, Gigabit