



Tactical Switch

SP-112

**6 electrical Ethernet Interfaces
10/100/1000Base-T/TX**

**4 electrical Ethernet Interfaces
10/100Base-T/TX**

**2 optical Ethernet Interfaces
100Base-FX**

**Automatic detection MDI/MDIX
on electrical Interfaces**

**Support for multicasts traffic
(IGMP snooping/querier)**

The unmanaged board switch SP-112 should be used in sets of mobile and stationary equipment enabling to create and extend the local Ethernet networks. The device cooperates with devices equipped with Ethernet Interfaces in accordance with the standard IEEE802.3.

SP-112 enables:

- to create a local network based on 12-port Ethernet switch;
- to connect 6 devices with the 10/100/1000Base-T/TX (electrical Interfaces);
- to connect 4 devices with the 10/100Base-T/TX (electrical Interfaces);
- to connect 2 devices 100Base-FX (optical Interfaces);
- to detect automatically MDI/MDIX on electrical Interfaces;
- the auto-negotiation of the speed rate on electrical Interfaces.

SP-112 is made in the group of N.11-O-II(A and B) according to NO-06-A101 and NO-06-A103 (MIL-STD-810G compliant) (multi-use and continuous-operation equipment) in an operating temperature range of minus 30°C to plus 60°C and the aberration within the storage temperature from minus 40°C to plus 65°C. Given these restrictions, the device meets also environmental requirements of groups N.7-O-II(A and B) and N.9-O-II(A and B) with the aberration of single mechanical strokes.

SP-112 is adjusted to be used in three positions. SP-112 may be installed **directly** on the vehicle armour or the container wall only with the use of special cushioning elements provided by the producer. The device may be installed only inside of objects or vehicles.



TECHNICAL PARAMETERS

BASIC FUNCTIONALITIES

- Creating the local network based on 12-port Ethernet switch
- Automatic detection of MDI/MDIX on electrical Interfaces
- Electrical and optical Interfaces in accordance with Ethernet standard
- Connections realized by fiber-optic two-wire multi-mode cables 62.5/125 μm or 50/125 μm
- Support for multicasts traffic (IGMP snooping/querier)
- Support for VLAN according to 802.1Q
- Support for the RSTP and MSTP protocols
- Auto-negotiation on electrical Interfaces

INTERFACES

Electrical Ethernet Interface	6x10/100/1000Base-T/TX
	RJ45 RJ45 Amphenol (RJ-45) connector
Speed rate	10/100/1000 Mbps
Auto-negotiation	Yes
MDI/MDIX	Yes
Work mode	Half/Full duplex
Range	90 m

Electrical Ethernet Interface	4x10/100Base-T/TX
	8D0C17W26SN Souriau connector
Speed rate	10/100 Mbps
Auto-negotiation	Yes
MDI/MDIX	Yes
Work mode	Half/Full duplex
Range	90 m

Optical Ethernet Interface	2x100Base-FX
	MFM-002RZN Amphenol connector
Type of optical fibre	Multi-mode: 62,5/125 μm or 50/125 μm
Wavelength	1310 nm \pm 30 nm
Transmitter power	-18 dBm \pm 6 dBm
Receiver sensitivity	-28 dBm
Speed rate	100 Mbps

POWER SUPPLY

Power supply	+27 V (from 19 V to 35 V)
Power consumption	<15 W

OTHER TECHNICAL PARAMETERS

Dimensions (HxWxD)	68x330x265 mm
Weight	<6 kg
Mechanical and climatic classification	Group N.7, N.9 and N.11-O-II(A and B), acc. NO-06-A101+108 (MIL-STD-810G compliant) (multi-use and continuous use equipment)
Electromagnetic compatibility	NO-06-A200 (MIL-STD-461F compliant) (KRE-02, KCE-02, KCS-01, KCS-06, KCS-07, KCS-08, KRS-02)
Operating temperature	From -30°C to +60°C
Storage temperature	From -40°C to +65°C
Humidity resistance	95-98% at +40°C

