



etherRAIL Switch SM/SW 5TX M12

The Yacoub etherRAIL SM/SW 5TX M12 switch is a further development from the etherRAIL product series for advanced industrial purposes, according to degree of protection IP 67.



robust – direct mounting in machinery and equipment without switchboards,

waterproof – best qualified for operational duty in wet, dirty and dusty industrial environment, including at extreme temperatures,

compact – extremely small housing dimensions which result in less required space within machinery or equipment,

universal – Available as managed (SM 5TX) and unmanaged (SW 5TX) Switch

SM/SW 5TX M12

The SM/SW 5TX M12 is ideally suited for efficient data transmissions under extreme environmental conditions, e.g., external plants, vehicles, trains, cranes and ships. Compact design, direct montage and a unique plug-and-play concept enables the user to assemble or to enhance ethernet networks in a quick and cost-effective way. The 5 Ethernet ports are connected via M12 circular plug-in devices, characterised by:

- inexpensive transmission media and field-coupled devices,
- short and defined reaction times and
- high reliability including under extreme environmental conditions.

The ports can be connected to further network segments or terminal devices. A standalone switch is also possible.

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Technical Data

General Data	
Housing LxWxH	105 mm x 60 mm x 30 mm
Mounting	wall mounting
Mounting position	free
Protection class	IP 67
Permissible operating temperature	-40 °C to +60 °C
Permissible storage temperature	-40 °C to +70 °C
Weight	ca. 250 g
Power supply	
Input voltage range	9,5 V 32 V DC
Max. power consumption	6 W
Max. current consumption at 24 V	250 mA
Protection against polarity reversal	Diode
Transient surge protection	Varistor
Connection	M12 circular plug-in connector
Cable diameter	0.2 mm ² 2.5 mm ² rigid/flexible, AWG 2414
Ethernet Interfaces	
Number	5
Connector	M12D, Circular plug-in connector
Cable	Twisted Pair shielded
Cable impedance	100 Ohm
Transmission rate	10 MBit/s or 100 MBit/s
Max. cable length	100 m using CAT5 cable
Isolation to system and shielding	yes
Dielectric Withstand Voltage	1500 VAC
Duplex	Half or full duplex automatically
Auto Negotiation	yes
Auto Crossover	yes
Auto Polarity	yes
Management Functionality SM 5TX	
Protocols	BootP, HTTP, IGMP, SMNP v1 and v2, RSTP
Quality of Service (QoS)	Frame Priority according IEEE 802.p (tagged),
	Port Mirroring / Status
Serial Interface (RS 232)	
Connector	M12A (male)

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