- For operation of up to four inherently safe fiber optic cables “op is” according to IEC 60079-28
- For 100 Mbit/s Industrial Ethernet
- Transmission range up to 3.1 mi / 5 km (multi-mode) or up to 18.6 mi / 30 km (single-mode)
- Extended temperature range -22 ... +158 °F / -30 ...+70 °C
- Redundant supply
- Installation in Cl. I, Div. 2, Zone 2 or in the safe area

MY R. STAHL **9721B**

The 9721 unmanaged switch is designed for linking electrical Ethernet networks (TX) and fiber optic (FX) based networks. The fiber optics are used for operation in hazardous areas of Cl. I, II, III, Div. 1 and Zone 0, 1, 2, 20, 21 and 22 with the type of protection "Ex op is" (IEC/EN 60079-28). Therefore, conventional fiber optic cables can also be used in hazardous areas and may be connected and disconnected during operation (hot swap). The unmanaged switch has 2 TX ports and 4 FX op is ports. Redundant supply can be provided. Compatible with: Remote I/O IS1+, HMI Series ET/MT-xx6-A-FX and ET/MT-4x8, as well as for IP network cameras.

	NEC® 500 CE Code Appendix J					
	Class I		Class II		Class III	
Division	1	2	1	2	1	2
Ex interface	•	•	•	•	•	•
Installation in		•				

	CE Code Section 18 NEC® 505 Class I			NEC® 506		
Zone	0	1	2	20	21	22
Ex interface	•	•	•	•	•	•
Installation in			•			

	IECEx / ATEX					
Zone	0	1	2	20	21	22
Ex interface	•	•	•	•	•	•
Installation in			•			

Selection Table

Product variant	Unmanaged switch FX op is/TX SC for Zone 2					
FO fiber type	FO transmission distance	Interface 1	Interface 2	Product Type	Art. No.	Weight
Multi-mode	3.1 mi / 5 km [OM3, OM4] 2.8 mi / 4 km [OM1]	4 port, 100BASE-FX MM SC	2 Port, 100BASE-TX, RJ45	**9721/13-42-14**	243427	500 g
Multi-mode/single-mode	18.6 mi / 30 km [OS1, OS2] 3.1 mi / 5 km [OM3, OM4] 2.8 mi / 4 km [OM1]	4 port, 100BASE-FX SM/MM SC, 1 (SM) and 3 (MM)	2 Port, 100BASE-TX, RJ45	**9721/13-42-74**	243429	500 g
Single-mode	18.6 mi / 30 km [OS1, OS2]	4 port, 100BASE-FX SM SC	2 Port, 100BASE-TX, RJ45	**9721/13-42-54**	243428	500 g

The single-mode version is not suitable for direct connection to IS1+ Remote I/O.

Technical Data

Explosion Protection	
FMus certificate	FM17US0054X
cFM certificate	FM17CA0030X
Marking cFMus	Class I, Div. 2, Groups A,B,C,D; Class I, Zone 2, AEx/Ex nA [op is] Group IIC T4 Gc Ta = -30 °C to +70 °C See Doc. 9721 6 031 001 1
IECEx gas explosion protection	Ex ec [op is T6 Ga] IIC T4 Gc
IECEx dust explosion protection	[Ex op is Da] IIIC
Certificates	ATEX (TUR), Canada (FM), China (NEPSI), IECEx (TUR), India (PESO), USA (FM)

Unmanaged Switch
Series 9721

Technical Data

Electrical Data	
Ethernet interface connection	RJ 45 plug connector
FO wavelength	1310 nm
FO attenuation	1 dB / km
FO bandwidth	800 MHz * km
FO connection type	SC plug connector
FO fiber cross-section	50/125 µm [min. OM2]
Transfer rate	10/100 Mbps Auto-negotiation
FO optical budget	12 dB
Operating mode	Half duplex, Full duplex Auto-MDI(X)
Auxiliary Power	
Max. power consumption	6.4 W
Nominal voltage V_{nom}	24 V DC
Polarity reversal protection	Yes
Max. current consumption	500 mA
Ambient Conditions	
Ambient temperature °C	-30 °C ... +70 °C
Ambient temperature °F	-22°F ... +158°F
Mechanical Data	
Degree of protection (IP)	IP20
Enclosure material	Stainless steel, powder-coated
Mounting / Installation	
Mounting type	On 35 mm DIN rail

Accessories

Figure	Description	Art. No.	Weight
FO patch cable			
	Patch cable for connection of IS1+ Ethernet CPU 9441 with media converter 9721; plug LC / SC; length 3.8 ft / 3 m	220911	-

Dimensional Drawings (All Dimensions in mm [inches]) – Subject to Alterations