



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

A6

WebCode **9721B**



The 9721 unmanaged switch is designed for linking electrical Ethernet networks (TX) and fibre optic (FX) based networks. The fibre optics are used for operation in hazardous areas of Zone 0, 1, 2, 20, 21 and 22 with the type of protection "Ex op is" (IEC/EN 60079-28). Therefore, conventional fibre 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.

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

	NEC 505 Class I			NEC 506		
Zone	0	1	2	20	21	22
Ex interface	•	•	•	•	•	•
Installation in			•			

	NEC 500					
	Class I		Class II		Class III	
Division	1	2	1	2	1	2
Ex interface	•	•	•	•	•	•
Installation in		•				

Selection Table						
Product variant Unmanaged Switch FX op is / TX SC						
FO fibre type	FO transmission distance	Interface 1	Interface 2	Product Type	Art. No.	Weight kg
Multi mode	5 km 4 km	4 Port, 100 Base-FX MM SC	2 Port, 100 Base-TX Cu, RJ45	9721/13-42-14	243427 ▲	0.500
Multi mode/single mode	30 km 4 km 5 km	4 Port, 100 Base-FX SM/ MM SC	2 Port, 100 Base-TX Cu, RJ45	9721/13-42-74	243429	0.500
Single mode	30 km	4 Port, 100 Base-FX SM SC	2 Port, 100 Base-TX Cu, RJ45	9721/13-42-54	243428	0.500


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

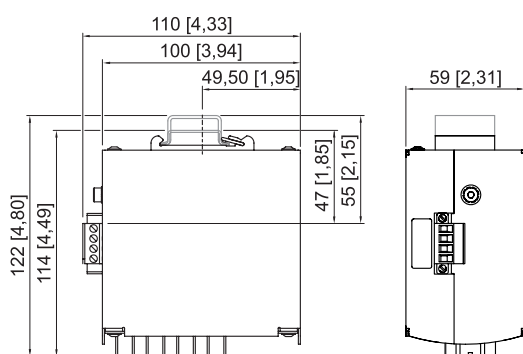
Technical Data	
Explosion Protection	
IECEX gas explosion protection	Ex nA [op is T6 Ga] IIC T4 Gc
IECEX dust explosion protection	[Ex op is Da] IIIC
ATEX gas explosion protection	⊕ II 3 (1) G Ex nA [op is T6 Ga] IIC T4 Gc
ATEX dust explosion protection	⊕ II (1) D [Ex op is Da] IIIC
EAC gas explosion protection	⊕ 2 Ex e [op is T6 Ga] IIC T4 Gc X
EAC dust explosion protection	⊕ [Ex op is Da] IIIC X
Certificates	ATEX (TUR), Canada (FM), EAC (Sertium), IECEx (TUR), India (PESO), USA (FM)

Technical Data

Electrical Data	
Connection Ethernet Interface	RJ 45 plug connector
Transfer rate	10/100 Mbit/s Auto-negotiation
Operating mode	Half duplex, Full duplex Auto-MDI(X)
Auxiliary Power	
Max. power consumption	6.4 W
Nominal voltage	24 V DC
Polarity reversal protection	Yes
Current consumption max.	500 mA
Ambient Conditions	
Ambient temperature	-30 °C ... +70 °C
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 kg
FO patch cable			
	Patch cable for connection of IS1+ Ethernet CPU 9441 and 9442 with media converter 9721; plug LC / SC; length 3 m	220911 ▲	-

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

Unmanaged Switch Series 9721

Optical interfaces					
Product Type	FO fibre type	FO connection type	FO wavelength	FO fibre cross-section	FO transmission distance
9721/13-42-14	Multi mode	SC plug connector	1310 nm	50/125 µm [OS3, OS4]	5 km
				62.5/125 µm [OM1]	4 km
9721/13-42-54	Single mode	SC plug connector	1300 nm	9/125 µm [OS1, OS2]	30 km
9721/13-42-74	Multi mode/single mode	SC plug connector	1310 nm 1300 nm	50/125 µm [OS3, OS4]	30 km
				62.5/125 µm [OM1]	4 km
				9/125 µm [OS1, OS2]	5 km