- For 100 Mbit/s Ethernet with inherently safe "op is" fiber optic in Cl. I, II, III, Div.1 and Zone 0, 1 or 2
- Range up to 3.1 mi / 5 km (multi-mode) or up to 18.6 mi / 30 km (single-mode)
- Increased temperature range of -22 ... +158 °F / -30 to +75 °C
- Easy commissioning, no configuration required
- Installation in Cl. I, Div. 2, Zone 2 and safe area

MY R. STAHL **9721A**

The Media Converter is used to convert electrical Ethernet signals (TX) into optical Ethernet signals (FX).
The optical Ethernet signals are used for operation in hazardous areas of Cl. I, II, III Div. 1 and Zone 0, 1, 2 with the type of protection Ex “op is”.
Therefore, conventional fiber optic cables can also be used in hazardous areas and may be connected and disconnected during operation (hot swap).
The Media Converter (multi-mode) is suitable for operation of Remote I/O systems IS1+ in Cl. I, Div. 1 and Zone 1.

	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		FX op is/TX SC media converter 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]	1 port, 100BASE-FX MM SC	1 Port, 100BASE-TX, RJ45	**9721/13-11-14**	220381 ▲	240 g
Product variant		Media converter FX op is / TX SC for Cl. I, Div. 2 and Zone 2				
FO fiber type	FO transmission distance	Interface 1	Interface 2	Product Type	Art. No.	Weight
Single-mode	18.6 mi / 30 km [OS1, OS2]	1 port, 100BASE-FX SM SC	1 Port, 100BASE-TX, RJ45	**9721/13-11-54**	220382 ▲	240 g

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 +75 °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)
Ship approval	ABS, BVIS, EU RO MR (DNV), KR, LR

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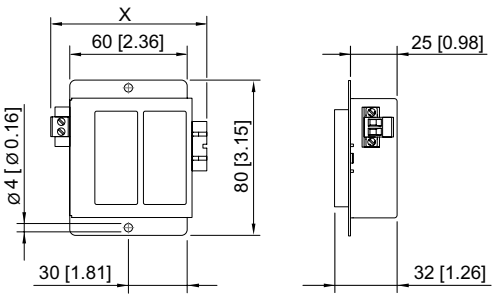
Technical Data

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
Transfer rate	10/100 Mbps Auto-negotiation
FO fiber cross-section	50/125 µm [min. OM2]
FO optical budget	12 dB
Operating mode	Half duplex, Full duplex Auto-MDI(X)
Auxiliary Power	
Max. power consumption	2.5 W
Nominal voltage V_{nom}	24 V DC
Polarity reversal protection	Yes
Max. current consumption	200 mA
Ambient Conditions	
Ambient temperature °C	-30 °C ... +75 °C
Ambient temperature °F	-22°F ... +167°F
Mechanical Data	
Degree of protection (IP)	IP20
Enclosure material	Stainless steel, powder-coated

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



	Dimension X
with fiber optic sockets and an auxiliary power connection	81 mm [3.19]
as described above with an installed fiber optic plug	116 mm [4.57]