



- For 100 Mbit/s Ethernet with inherently safe "op is" fibre optic in Zone 0, 1 or 2
- Range up to 5 km (multi-mode) or up to 30 km (single-mode)
- Increased temperature range of -30 to +75 °C
- Easy commissioning, no configuration required
- Installation in Zone 2 or in the safe area

A6

WebCode **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 Zone 0, 1 and 2 with the type of protection Ex "op is".

Therefore, conventional fibre 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 particularly suitable for operation of Remote I/O systems IS1+ in Zone 1.

	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	Media converter FX op is / TX SC for Zone 2					
FO fibre type	FO transmission distance	Interface 1	Interface 2	Product Type	Art. No.	Weight kg
Multi mode	5 km 4 km	1 Port, 100 Base-FX MM SC	1 Port, 100 Base-TX Cu, RJ45	9721/13-11-14	220381 ▲	0.240
Single mode	30 km	1 Port, 100 Base-FX SM SC	1 Port, 100 Base-TX Cu, RJ45	9721/13-11-54	220382	0.240

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 nA [op is T6 Ga] IIC T4 Gc X
EAC dust explosion protection	Ⓔ [Ex op is Da] IIIC X
Certificates	ATEX (TUR), Canada (FM), EAC (STV), IECEx (TUR), India (PESO), USA (FM)
Ship approval	DNVGL, RINA
Electrical Data	
Connection Ethernet Interface	RJ 45 plug connector

Technical Data
Electrical Data

Transfer rate	10/100 Mbit/s Auto-negotiation
Operating mode	Half duplex, Full duplex Auto-MDI(X)

Auxiliary Power

Power consumption max.	2.5 W
Nominal voltage	24 V DC
Polarity reversal protection	Yes
Current consumption max.	200 mA


Ambient Conditions

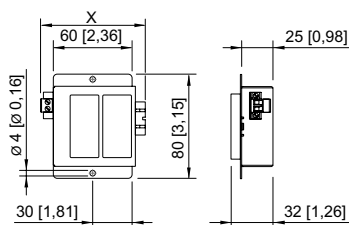
Ambient temperature	-30 °C ... +75 °C
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Mechanical Data

Degree of protection (IP)	IP20
Enclosure material	Stainless steel, powder-coated

Accessories

Figure	Description	Art. No.	Weight kg
	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


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

Media Converter Series 9721
Optical interfaces

Product Type	FO fibre type	FO connection type	FO wavelength	FO fibre cross-section	FO transmission distance
9721/13-11-14	Multi mode	SC plug connector	1310 nm	50/125 µm [OS3, OS4] 62.5/125 µm [OM1]	5 km 4 km
9721/13-11-54	Single mode	SC plug connector	1300 nm	9/125 µm [OS1, OS2]	5 km 4 km