



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

MY R. STAHL 9721A



This media converter converts electrical Ethernet signals (TX) into optical Ethernet signals (FX). The optical Ethernet signals are used for operation in hazardous areas of Zones 0, 1 and 2 with the "Ex op is" type of protection. This means that conventional fibre optic cables can also be used in hazardous areas and may be connected and disconnected during operation (i.e. hot swap). The media converter (multi-mode) is suitable for operating the IS1+ Remote I/O system in Zone 1.

Technical Data

Explosion Protection	
Application range (zones)	2
Ex interface zone	0, 1, 2, 20, 21, 22
IECEX gas certificate	IECEX TUR 13.0014 X
IECEX gas explosion protection	Ex ec [op is T6 Ga] IIC T4 Gc
IECEX dust certificate	IECEX TUR 13.0014 X
IECEX dust explosion protection	[Ex op is Da] IIIC
ATEX gas certificate	TÜV 13 ATEX 7316 X
ATEX gas explosion protection	II 3 (1) G Ex ec [op is T6 Ga] IIC T4 Gc
ATEX dust certificate	TÜV 13 ATEX 7316 X
ATEX dust explosion protection	II (1) D [Ex op is Da] IIIC
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
Certificates	ATEX (TUR), Canada (FM), China (NEPSI), IECEX (TUR), India (PESO), USA (FM)
Ship approval	ABS, BVIS, EU RO MR (DNV), KR, LR
Declaration of conformity	ATEX (EUK), China (CCC)
Installation	Zone 2, Zone 22 or in safe areas
Safety Data	
Max. FO radiant power	≤ 15 mW
Electrical Data	
Transfer rate	10/100 Mbit/s Auto-negotiation
Voltage range DC	10.8 to 26.4 V DC
Interface 1	1 port, 100BASE-FX SM SC

Electrical Data

Interface 1 version	EX OP IS
FO wavelength	1310 nm
FO fibre type	Single mode
FO attenuation	0.3 dB / km
FO bandwidth	3.5 ps / nm * km
FO connection type	SC plug connector
FO fibre cross section	9/125 µm [OS1, OS2]
FO optical budget	16 dB
FO transmission distance	30 km
Interface 2	1 Port, 100BASE-TX, RJ45
Interface 2 version	standard
Ethernet interface connection	RJ 45 plug connector
Transmission distance	Up to 100 m (Cat5e or better)
Operating mode	Half duplex, Full duplex Auto-MDI(X)

Auxiliary Power

Nominal voltage	24 V DC
Power supply	2-pole screw terminal
Max. current consumption	200 mA
Max. power consumption	2.5 W
Polarity reversal protection	Yes

Ambient Conditions

Ambient temperature	-30 °C ... +75 °C
Ambient temperature	-22°F ... +167°F
Maximum relative humidity	< 95% (no condensation)
Use at the height of	< 2000 m

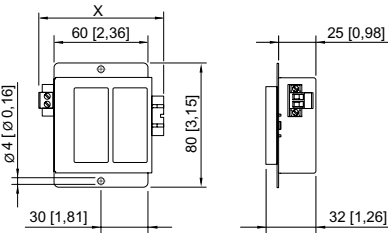
Mechanical Data

Degree of protection (IP)	IP20
Pollutant class	Corresponds to G3
Enclosure material	Stainless steel, powder-coated
Connection cross section min.	0.08 mm ²
Connection cross-section max.	2.5 mm ²
Stripping length	7 mm
Weight	240 g
Weight	0.53 lb

Mounting / Installation

Mounting type	On 35 mm DIN rail Wall mounting
Tightening torque	0.5 N · m
Mounting orientation	Horizontal Vertical

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 above with installed FO connector	116 mm [4.57]

Accessories

FO patch cable		Art. No.
	Patch cable for connecting 9441 IS1+ Ethernet CPU to 9721 media converter; LC/SC plug; length 3 m	220911

We reserve the right to make alterations to the technical data, dimensions, weights, designs and products available without notice. The illustrations cannot be considered binding.