

OPTICAL SWITCH CONVERTER

This instrument receives up to 16 optical ON/OFF signals from optical limit switches or optical pressure switches and converts them into optical digital output signals.

FEATURES

1. A maximum of 16 optical switch signals can be transmitted to a host instrument via a single optical cable.
2. An FFI system including a combination of temperature, pressure, flow rate and other signals can be configured.

SPECIFICATIONS

Functional specifications

- Input signal:** Optical switch signal (ON/OFF)
- No. of inputs:** 8 or 16 points (according to specification)
Transmission distance; 30m max.
- Output signal:** Optical digital output
- Power supply:** 24V DC (20 to 30V DC)
- Power consumption:**
Approx. 1W
- Explosionproofing:**
JIS i3aG4 intrinsically safe explosionproofing (approval pending)
Safety barrier PWX for 24V DC is necessary (must be purchased separately)
- Ambient temperature:**
-10 to 50°C
- Storage temperature:**
-20 to 70°C
- Ambient humidity:**
90% RH or less (non-condensing is required)
- Transmission:** Half-duplex bidirectional optical transmission using a single optical fiber cable
Transmission distance; 1.2km max.

Performance specifications

- Scan speed:** Optical switch signal; 8 points/0.1 sec, 16 points/0.2 sec
- Isolation:** Isolation provided by optical interface between input and output and between output and power supply
Between power supply and ground:
Withstand voltage; 500V AC for 1 minute
Insulation resistance; 100MΩ or more at 500V DC



Structure and materials

- Enclosure:** Dustproof case made of steel plate (indoor use)
- Finish color:** Munsell 10Y 8.5/1
- Outer dimensions (H x W x D):**
299 x 480 x 100mm
- Mass (weight):** Approx. 6.5kg
- Mounting method:**
Mounted on 19 inch rack with screws
- Power terminals:** Screw terminals (M4)
- Input optical cable:**
Plastic optical cable designated by Fuji (to be purchased separately); connection made by optical connector "SMA connector".
- Output optical cable:**
Optical cable designated by Fuji (to be purchased separately); connection made by optical connector "FFI connector".

CODE SYMBOLS

1	2	3	4	5	6	7	8	9	Description
F	R	S							No. of optical switch inputs
			1						8 points
			2						16 points
									Explosionproofing
						Y			Non-explosionproof
						A			Intrinsically safe explosionproof (JIS i3aG4) ... approval pending
									Power supply
								1	24V DC
									Output optical cable specification
								9	Optical connector diameter $\phi 9$

SCOPE OF DELIVERY

Optical switch converter (excluding input/output optical cables, optical connector)

RELATED DEVICES

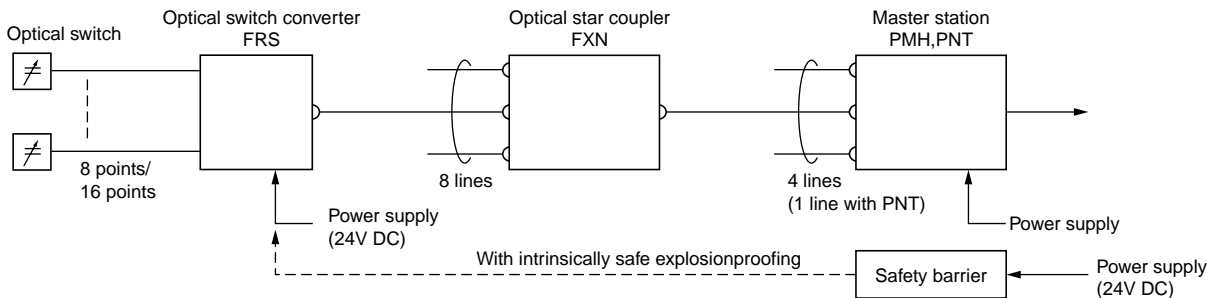
- Hand-held communicator (EDS8-44)
- Master station (EDS11-86)
- Optical star coupler (EDS8-43)
- Optical limit switch
- Optical pressure switch
- Optical command switch
- Safety barrier

ORDERING INFORMATION

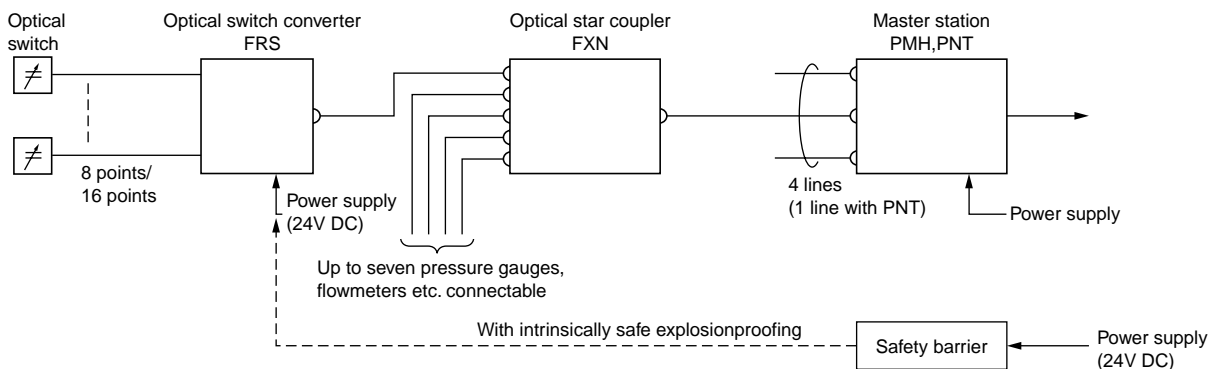
- Product name
- Code symbols
- No. of inputs
- With/without explosionproofing

SYSTEM CONFIGURATION DIAGRAMS

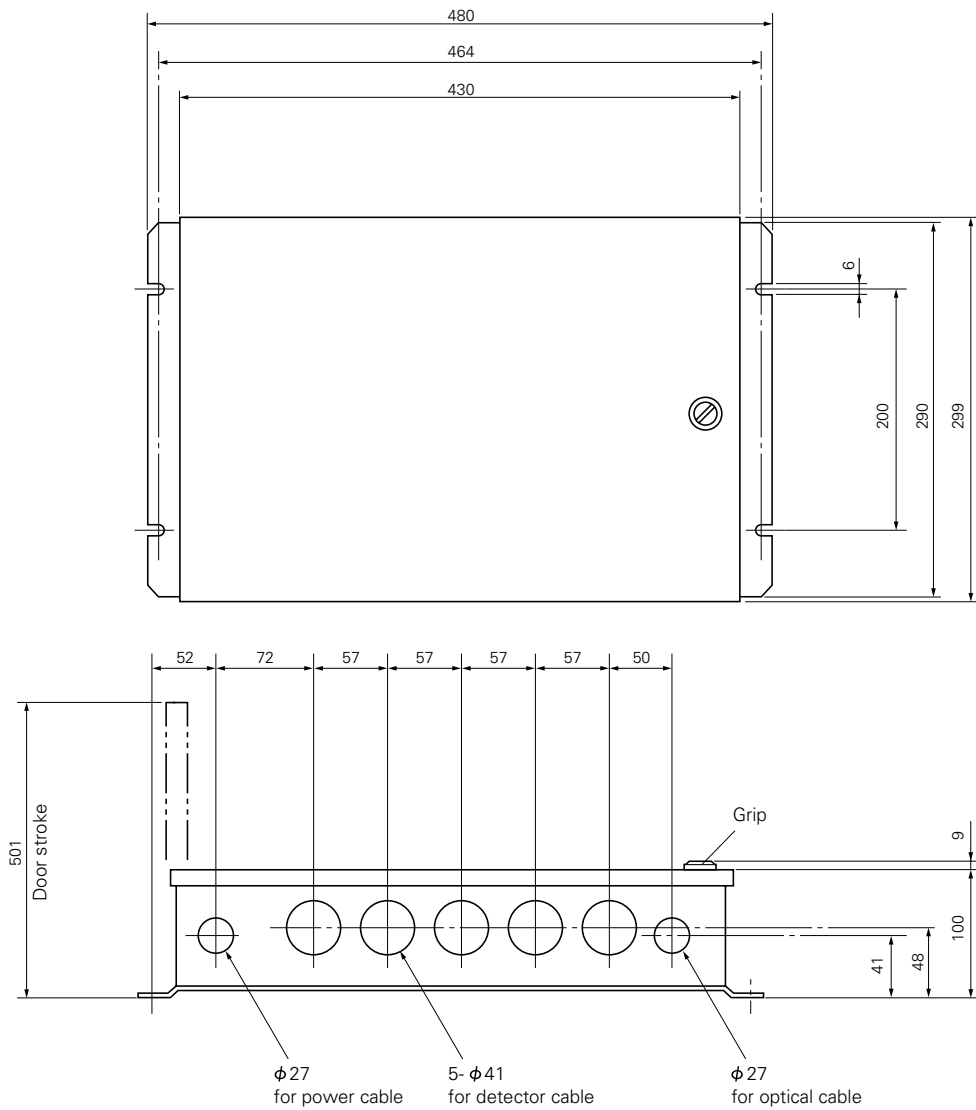
1. In case of optical switch ON/OFF instrumentation system (up to 512 optical switches measurable)



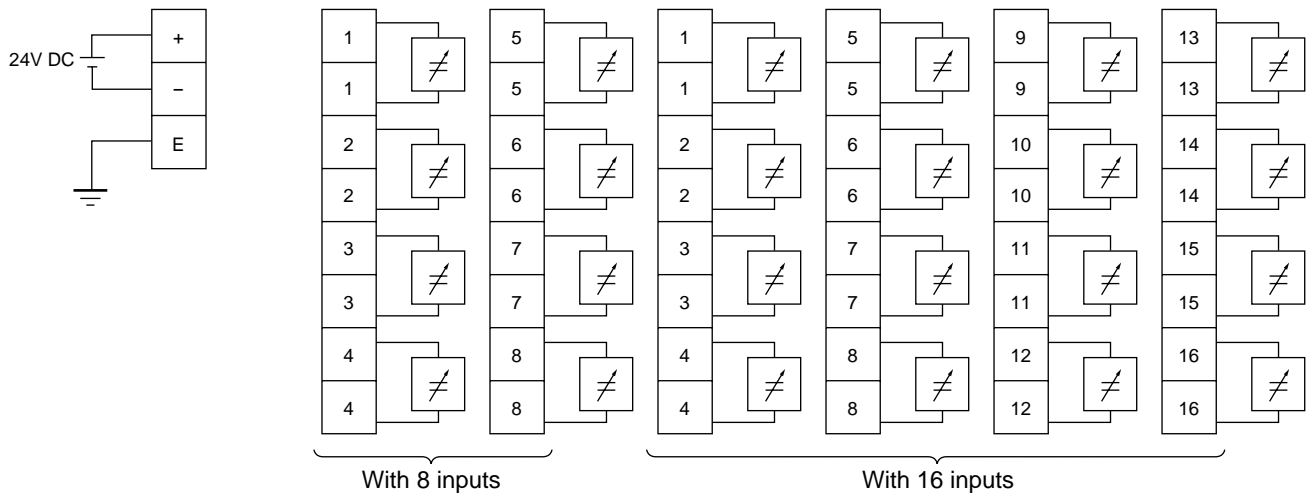
2. In case of combined instrumentation system for temperature, pressure, flow rate etc.



OUTLINE DIAGRAM (Unit: mm)



EXTERNAL CONNECTION DIAGRAM



⚠ Caution on Safety

*Before using this product, be sure to read its instruction manual in advance.

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