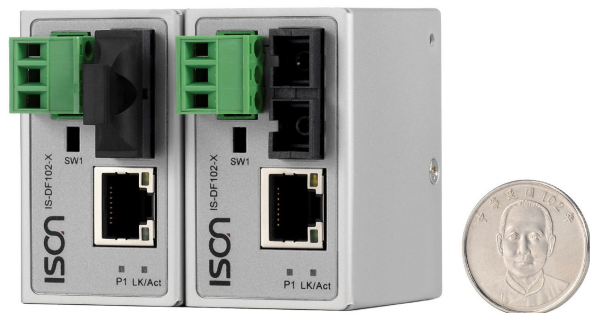# IS-DF102 Series

Compact size media converter, 10/100BASE-TX to 100BASE-FX

The IS-DF102 Series is a true mini and rugged Fast Ethernet to fiber Industrial media converter designed for where critical but space-limited applications, and can be powered by wide range of AC, DC power adapter. With its compact and easy to use design, the IS-DF102 Series can also be installed on Din-Rail or be wall-mounted. As the ideal unit for IP surveillance, traffic monitoring and Security application, the IS-DF102 Series also works great in extreme environments with its operating temperature ranges from -40°C to 75°C for extending an existing network.

Key features

▶ Rugged design, compact enclosure 59x36x49mm(LxWxD)

▶ Layer 2 Line-Speed Switching Fabric, non-blocking (Switch mode)

▶ Wide range power input, 18V-36VAC/12V-58VDC/ or DC Jack socket

▶ Link Fault Pass through (LFP) function

▶ Supports switch model and converter mode.

▶ Surge protection diodes on power input.

▶ ESD protection diodes on RJ-45 port

▶ Support Far End Fault function on FX port.

▶ Provides increased Noise Immunity

▶ -40°C to 75°C operating temperature

Specification

Ethernet

Operating Mode	Store and Forward, L2 wire-speed/non-blocking switching engine
MAC addresses	1K
Packet Buffer	1 Mbits
Switching Fabric / Back Plane	400Mbps

RJ45 Copper ports

Speed	10/100 Mbps
MDI/MDIX Auto-crossover	Support straight or cross wired cables
Auto-negotiation/Duplex	10/100 Mbps speed auto-negotiation; Full & Half Duplex

Fiber Ports

Port Types supported	SC, ST, WDM, SFP
Fiber port connector	SC/ST/WDM/LC connector for fiber ports
Optimal fiber cable	Typical 50 or 62.5/125 µm for multimode (mm) Typical 8 or 9/125 µm for single mode (sm)

Protocols & Standards

IEEE 802.3 , IEEE 802.3x, Flow Control, Back Pressure, TCP/UDP

Power

Power Input	Single Power Input, Terminal Block
Input Voltage Range	18~36 VAC, 12V~58VDC
Reverse power protection	YES
Power Consumption	1.92 Watt (48VDC)

Indicators

Power status indication	Power Input status
Ethernet port indication	Link & speed

Environmental and Compliances

Operating Temperature	-40~75ºC (Cold startup at -40ºC)
Storage Temperature	-40~85ºC
Humidity	5~95% (Non-Condensing)
Vibration, shock, free fall	IEC-60068-2-6, -27, -32
Certification Compliance	CE, FCC
Electrical safety	CE
EMC	FCC Part 15, CISPR 22 (EN55022) Class A IEC-61000-4-2, -3, -4, -5, -6 (Level 3)
RoHS & WEEE	RoHS (Pb free) and WEEE Compliant
MTBF	>25 years

Mechanical

Protection	IP30
Dimension	59x36x49mm (LxWxD)
Weight	90g
Installation	DIN-Rail mounting; Wall mounting
DIP	LFP (Link Fault Pass Through), Converter Mode / Switch Mode

Dimension Diagram
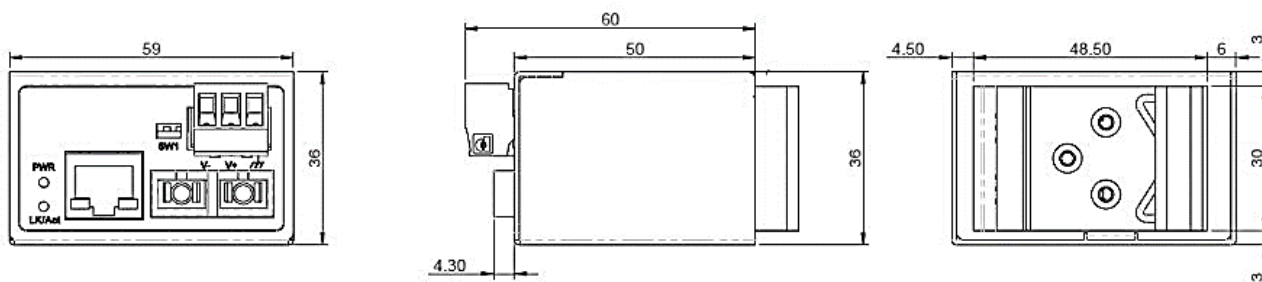
Ordering Information

Available Models	Description	10/100Mb TX	100Mb FX
IS-DF102-M-SC	Industrial Media Converter, 10/100M TX to 100M MM SC connector, 2 km	1	1
IS-DF102-M-ST	Industrial Media Converter, 10/100M TX to 100M MM ST connector, 2 km	1	1
IS-DF102-S-SC	Industrial Media Converter, 10/100M TX to 100M SM SC connector, 30 km	1	1
IS-DF102-F	Industrial Media Converter, 10/100M TX to 100M FX, SFP Slot	1	1

Accessories

1. IS-RK2U 19" rack mount kit
2. IS-RK4U 19" rack mount kit
3. IS-PS20-12 Power adaptor

Package Checklist

- IS-DF102 Media converter
- Quick Installation Guide (Printed)
- Wall Mount Kit /Din-Rail kit