F.O. MEDIA CONVERTER

10/100 MINI-INDUSTRIAL CONVERTER

UT-0216MI

UT-0216MI-SM20

Scope of Application

UT-0216MI Series is 10/100Base-TX to 100Base-FX Industrial Fast Ethernet Media Converter. Featuring one UTP port can be operation at 10Mbps or 100Mbps application and one fiber port to offer a solution for networks that are ready to expand or migrate from copper-based to Fiber-based networks on Ethernet/Fast Ethernet network. The media converter can operate consistently even in harsh industrial environments and offer an affordable solution for outdoor.
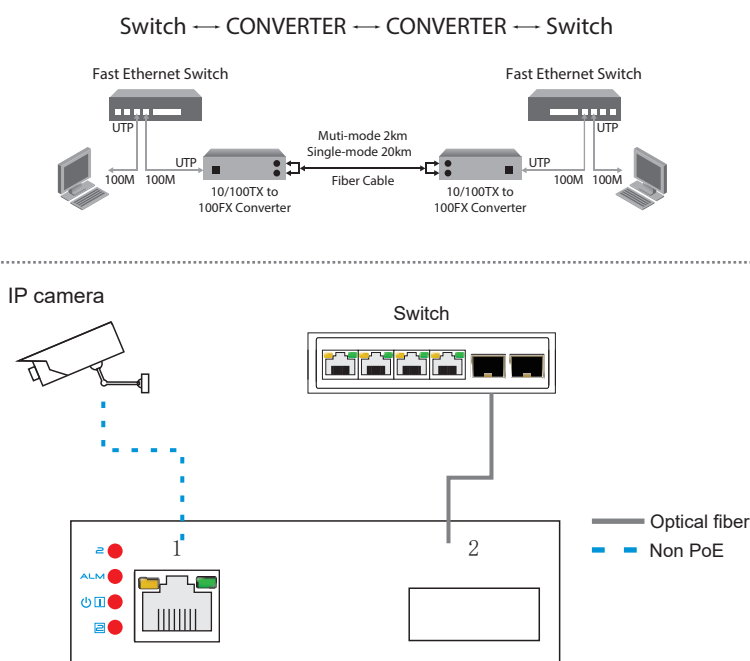
UT-0216MI Series is packaged in a special compact IP40 aluminum alloy case that allows either DIN-Rail mounting for easy installation at control cabinet. It provides an integrated power supply with a wide range of voltages for worldwide operation. It also offers dual redundant, reversible polarity 12V DC to 60V DC power supply inputs for high availability applications requiring dual or backup power inputs.

Features Highlight

- 1 x 10/100Base-TX, RJ45 port
  (Support Full/Half duplex operations)
- 1 x 100Base-FX with duplex SC
- Auto MDI/MDI-X and Auto-negotiation
  (NWay or auto-sensing) on RJ45
- Extends distance for Fast Ethernet network
  Up to 2km for Multi-mode under full duplex
  Up to 20km for single-mode under full duplex
- Support store-and-forward mechanism to avoid packet loss and error frames
- Support full-duplex flow control and half-duplex back pressure mode

- 12V to 60V DC Wide power input, redundant power
- 6KV Surge Protection
- 6KV Contact/8KV Air ESD protection
- DIN-Rail mounting for easy installation
- Support dual-ber on Multi-mode or Single-mode
- Built-in flow control (IEEE 802.3x)
- LFS with ALM's LED to indicate link failure status and support for redundant link to be working with L2 managed switch
- LEDs for device status
- Operating temperature from -40°C to 75°C

Applications

The converter is functioning as a high-speed bridge between switches creating increased capacity for each user (node) on the local area network. It is providing a 100Mbps full duplex link to a variety of Fast Ethernet network devices within a LAN.

Switch ⟷ CONVERTER ⟷ CONVERTER ⟷ Switch

Fast Ethernet Switch   Fast Ethernet Switch

UTP   UTP

UTP   Muti-mode 2km   UTP
Single-mode 20km

100M 100M   10/100TX to   Fiber Cable   10/100TX to   100M 100M
100FX Converter   100FX Converter

IP camera   Switch

1   2

—— Optical fiber
- - Non PoE

Technical Data

Standards

IEEE 802.3	10Base-T
IEEE 802.3u	100Base-TX, 100Base-FX
IEEE 802.3x	Flow Control

Fiber Optic

Port	1 x 100Base-FX
Connector Type	Duplex SC
Distance	Up to 2km for Multi-mode
	Up to 20km for Single-mode

LAN (RJ45)

Port	1 x 10/100Base-TX
Speed	Up to 100Mbps
Max. Distance (meter)	100

Power

Power Input	12 to 60V DC for Primary and Redundant
Power Connection	5-pin Terminal Block
Power Consumption	<5 Watt
Power Supply	100-240VAC, 50/60Hz, 24VDC/0.42A (DIN-Rail Type)

Mechanical and Environment

Housing	Aluminum alloy (IP40 Protection)
Dimensions (W x H x D)	65 x 36 x 101 (mm)
Weight	300g
Mounting	DIN-Rail
Operating Temperature	-40°C to 75°C
Storage Temperature	-40°C to 85°C
Operating Humidity	0% to 95% RH (non-condensing)
Storage Humidity	0% to 95% RH (non-condensing)
LED Panel	Power: Red LEDs for 1 and 2
	Ethernet Port 1: Green LED indicate Link/Act
	Fiber Port 2: Red LED indicate Link/Act
	ALM: Red LED indicate network broken
Relay Alarm	1 channel relay alarm
ESD Protection	6KV: contact / 8KV: air
Surge Protection	6KV

Performance

Switching Capacity	0.4Gbps
Forwarding Rate	0.2976Mpps
Packet Buffer Memory	1Mbits
MAC Address	8K

Optical Characteristics

Optical Characteristics	UT-0216MI	UT-0216MI-SM20
Transmit Power	-10 to -3 dBm	-10 to -3 dBm
Receiver Sensitivity	-34 dBm	-34 dBm
Wavelength	1310nm	1310nm

Certications

EMI/EMS	FCC Part 15 of Class A & CE Approved
	EN 55032
	IEC/EN 61000-4-2 (ESD)
	EN 61000-4-3 (RS)
	EN 61000-4-4 (EFT)
	EN 61000-4-5 (Surge)
	EN 61000-4-6 (CS)
	EN 61000-4-8
	EN 61000-4-11
	EN 61000-4-16
	IEC 60068-2-6
	IEC 60068-2-27
	IEC 60068-2-32
Green Product	RoHS

Ordering Information

UT-0216MI	10/100 MINI-INDUSTRIAL CONVERTER, SC (MM) w/DC Power Supply 2 km
UT-0216MI-SM20	10/100 MINI-INDUSTRIAL CONVERTER, SC (SM) w/DC Power Supply 20 km

Note :

* Specications subject to change without notice.

Drawing