WizLAN Ltd.

Industrial/Outdoor 10/100M Enhanced F/O Converter

WI-210

Wiz-Industrial Products

- Industrial/Outdoor 10/100M F/O Converter
- Transparent 3R* conversion and/or switch operation modes
- Enhanced Link Verification features:
  - > Propagation Of No Link (PONL)
  - > Far end-Fault Indication (FEFI)
  - > Loop-back test
  - > Remote TP Status Indication (RTPSI)
- Auto MDI, Auto-negotiation, force modes and flow control
- Front panel DIP switch settings
- Supports Multi/Single mode for dual and single fibers
- Available with SFP, SC or ST fiber optic connectors
- Highly visible LED status indicators
- Wide range power input, 9-58VDC or 6.5-41VAC
- Operating temperature from -20°C to + 70°C
- DIN rail enclosure IP30

WIZ-INDUSTRIAL

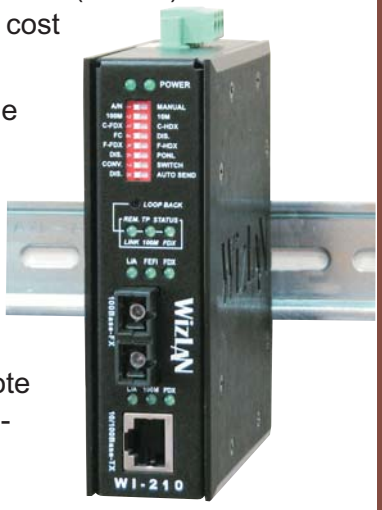
The WI-210 is a rugged 10/100Base-TX to 100Base-FX stand-alone converter designed for industrial/outdoor installations.

The converter includes unique mode selection that utilize 3R* technology (Retiming, Reshaping and Regeneration) for transparent conversion of Fast Ethernet links, and fast switching technology for dual speed 10/100M links. Compatible with extra long VLAN frames (upto 1600 bytes) in the switch mode and fully transparent to any frame size in the converter mode.

The enhanced link verification features: propagation of no link (PONL), far end fault indication (FEFI), loop back (LB) and remote TP status indication (RTPSI) assure fast installation, highly reliable operation, minimal downtime and cost effective service.

Eight positions external DIP switch enables easy setup of the converter and link verification operation, including converter/switch mode, auto-negotiate/manual, duplex, speed, flow control, PONL and auto status send. Loop-back test is activated via push-button.

Highly visible LED indications display the status of the converter TP and F/O ports, as well as the status of the remote TP port and loop-back test results provided the remote converter is a WizLAN device that supports RTPSI and loop-back.



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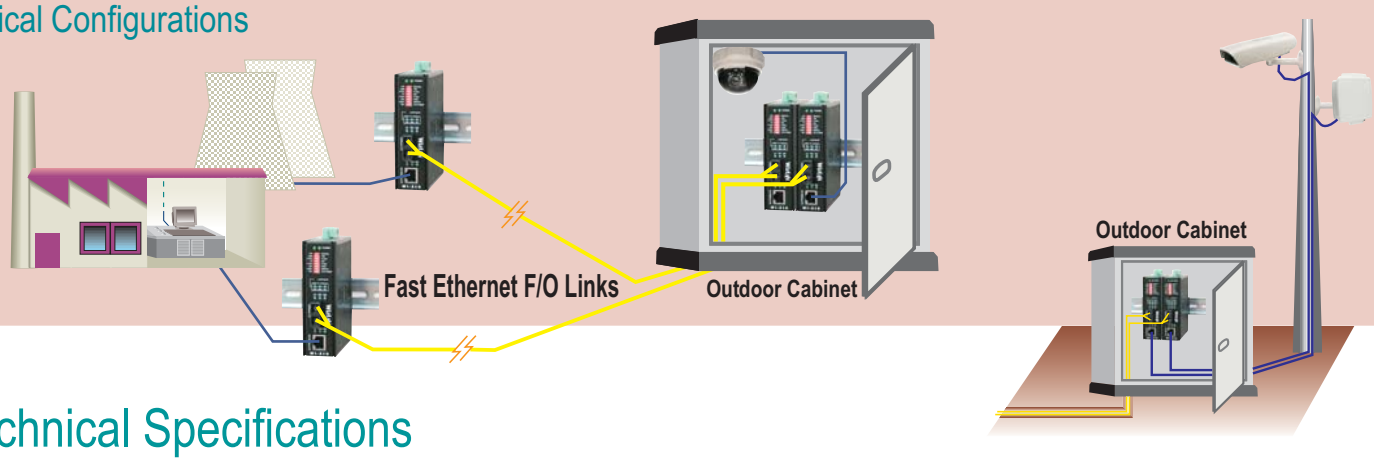
Typical Configurations



Technical Specifications

WI-210 Industrial/Outdoor Enhanced 10/100M Converter

10/100Base-TX Copper TP port (RJ45):

10/100Base-TX, auto-negotiation or manual (speed, duplex)

Auto MDI/MDIX and polarity

100 meter (330ft) distance over CAT5 or above TP cables

100Base-FX Fiber Optic port:

Dual fiber:	Multimode (MM), 1310nm	Connectors: SC, ST
	Singlemode (SM), 1310/1550nm	Connectors: SC, ST
Single fiber (BiDi):	SF-A, (TX 1550nm; RX 1310nm)	Connector: SC
	SF-B, (TX 1310nm; RX 1550nm)	Connector: SC

SFP , it is recommended to use WizLAN approved SFP transceivers.

Setup and Configuration:

Eight position DIP switch

- A/N or Manual (force) mode for the TP port.
- 100M or 10M and Full-duplex or Half-duplex in Manual mode.
- Flow control enable/disable.
- Full-duplex or Half-duplex of the F/O port.
- PONL enable/disable.
- Converter or Switch operation modes.

LED Indications:

10/100M TP port, three LEDs: Link/Activity; Speed; Duplex.

100M F/O port, three LEDs: Link/Activity; FEFI; Duplex.

Remote TP Status, three LEDs: Link; Speed; Duplex (only applicable if the F/O remote partner supports RTPSI and its Auto Send TP status is enabled). The three LEDs also indicate the Loop-Back test results.

POWER LED.

Technology:

Two converter operation modes (DIP switch selection):

Switch mode: None blocking Fast Switching Technology for dual speed conversions. Supports large VLAN frames with frame size up to 1600 bytes.

Converter mode: Transparent, 3R repeating technology (Retiming, Reshaping and Regeneration) for single speed Fast Ethernet conversions (supports any frame size). If the TP port locks on 10M the converter will automatically activate the switch mode.

Link Verification Functions:

Propagation Of No Link (PONL), propagates a “no link” status of one port to the other port of the converter. PONL works in both directions F2C and C2F. PONL is a powerful link management tool.

FEFI status indication on the fiber port, indicates receiving FEF pattern on the fiber port.

Loop-Back test with three LEDs test result indication.

Remote TP Status Indication (RTPSI), on-line status display of the remote TP port of the F/O link partner. Applicable if the link partner supports RTPSI.

Loop-Back Test:

Push-button, the test results and errors are displayed via three LEDs.

Power:

Input power range: 9 - 58 VDC or 6.5 - 41 VAC 50/60Hz

Input power plug: removable triple pin terminal block, with screws.

Maximum power consumption: 2 Watts (converter only)

Industrial DIN-rail power supply (ordered separately):

WI-PS20-24 24VDC 1Amp (20 Watt)

Standard Compliance:

IEEE802.3, 802.3u, 802.3x

Regulatory Approvals:

Safety:	EN60950-1:2001
EMI:	EN61000-6-3:2007 (Emission - office)
EMS:	EN61000-6-2:2007 / EN55024 (Immunity - Industrial/Outdoor)

Dimensions:

Width	Height	Depth
36mm (1.42”)	127mm (5”)	90mm (3.6”)

Enclosure and Mounting:

IP30 Protection, DIN rail mounting

Environment:

Operating Temperature:	-20°C to +70°C (-4 to 158°F)
Storage Temperature:	-40°C to +85°C (-40 to 185°F)

Ordering Information:

WI-210/_/_ Industrial/Outdoor enhanced converter, 10/100Base-TX to 100Base-FX, [fiber interface type], [connector type], -20°C to +70°C.

Ordering Terminology

WI-210/[Fiber Type]/[connector type]

M= Multimode (1310nm, 11dB, 0-2Km)
S= Singlemode (1310nm, 18dB, 0-30Km)
S1= Singlemode (1310nm, 30dB, 10-50Km)
S2= Singlemode (1550nm, 34dB, 40-100Km)
SF-A/S= BiDi type A, Tx-1550nm Rx-1310nm, 18dB, 0-20Km
SF-B/S= BiDi type B, Tx-1310nm Rx-1550nm, 18dB, 0-20Km
SF-A/S1= BiDi type A, Tx-1550nm Rx-1310nm, 30dB, 10-50Km
SF-B/S1= BiDi type B, Tx-1310nm Rx-1550nm, 30dB, 10-50Km
SFP cage for SFP plug-in transceiver (it is recommended to use WizLAN approved SFP transceivers)

→ Single Fiber dual wavelength, type A should connect to type B.

SC
ST
( )

Example: WI-210/S/SC Industrial/Outdoor enhanced converter, 10/100Base-TX to 100Base-FX, Singlemode (1310nm, 18dB, 0-30Km), SC, -20°C to +70°C.

WI-210/SFP Industrial/Outdoor enhanced converter, 10/100Base-TX to 100Base-FX, SFP, -20°C to +70°C

All specifications are subject to change without notice. Neither manufacturer nor seller shall be liable for any loss, damage, or injury, direct or consequential, arising from the inability to use the product.

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