

The N-Tron® 202MC is a 10/100BaseTX to 100BaseFX Industrial Media Converter. Housed in a ruggedized DIN-RAIL enclosure, the 202MC is designed for use in industrial data acquisition, control, and Ethernet I/O applications.

PRODUCT FEATURES

- Full IEEE 802.3 Compliance
- Converts 10/100BaseTX to 100BaseFX
- Extended Environmental Specifications
- Support for Full/Half Duplex Operation
- LED Link/Activity Status Indication
- Auto Sensing Speed and Flow Control
- Store-and-forward Technology
- Auto Cable Sensing (MDIX)
- Rugged Industrial DIN-RAIL Enclosure
- Redundant Power Inputs (10-30 VDC)
- N-View Port Monitoring Option

PRODUCT OVERVIEW

The 202MC Industrial Media Converter is designed to allow the connection of 10/100BaseT Ethernet devices to fiber cabling infrastructure.

The 202MC provides one RJ-45 auto sensing 10/100BaseTX port and one 100BaseFX port. All ports are full/half duplex capable, using state-of-the-art Ethernet switching technology. The 202MC auto-negotiates the speed and flow control capabilities of the TX copper port connection, and configures itself automatically. The 100BaseFX fiber optic port utilizes industry standard ST or SC connectors and is user configurable for full or half duplex operation. Both multimode and singlemode fiber models are available.

Unlike most media converters, the 202MC uses switching technology. This means 10Mbps devices can be connected today and easily upgraded to 100Mbps devices in the future. The switching fabric simply scales up or down automatically to match different network environments.

The 202MC supports up to 4,000 MAC addresses, enabling these products to support extremely sophisticated and complex network architectures.

The N-Tron 202MC is well suited to convert 10/100BaseTX industrial devices to fiber. This allows utilization of fiber based infrastructure with its inherent advantages of increased noise immunity and longer cable lengths than a copper based system can support.



The 202MC has extended operating environmental specifications to meet the harsh needs of the industrial environment. For cost savings and convenience the media converter can now be DIN-RAIL mounted alongside Ethernet I/O or other Industrial Equipment.

A unique feature of the packaging allows horizontal or vertical mounting on the rail, conserving space in the most critical dimension. In addition, the 202MC can be panel mounted if desired.

To increase reliability, the 202MC contains redundant power inputs. LED's are provided to display the link status and activity of each port, as well as power on/off status and any controller detected errors.

N-VIEW OPC PORT MONITORING OPTION

The N-Tron N-View OLE for Process Control (OPC) Server Software can be combined with popular HMI software packages to add network traffic monitoring, trending and alarming to any application using N-Tron switches configured with the N-View option. N-Tron's N-View OPC Server collects 41 different traffic variables per port and 5 system level variables per switch. This information can provide a complete overview of the network load, service quality, and packet traffic. OPC client software can use N-View OPC Server data to resolve network problems quickly and improve system reliability.

SPECIFICATIONS

Case Dimensions

Height:	2.3"	(5.8 cm)
Width:	5.1"	(13.0 cm)
Depth:	3.2"	(8.0 cm)
Weight:	1.3 lbs	(0.6 kg)

(note: can be mounted horizontally or vertically)

Electrical

Input Voltage:	10-30 VDC
Input Current:	0.25A@24V

Environmental

Operating Temperature:	-20°C to 70°C
Storage Temperature:	-40°C to 85°C
Operating Humidity:	10% to 95% (Non Condensing)
Operating Altitude:	0 to 10,000 ft.

Network Media

10BaseT:	≥Cat3 Cable
100BaseTX:	≥Cat5 Cable
100BaseFX :	
Multimode:	50-62.5/125µm
Singlemode:	7-9/125µm

100 Mb Fiber Transceiver Characteristics

Fiber Length	2km*	15km**	40km**	80km**
TX Power Min	-19dBm	-15dBm	-5dBm	-5dBm
RX Sensitivity Max	-31dBm	-31dBm	-34dBm	-34dBm
Wavelength	1310nm	1310nm	1310nm	1550nm

* Multimode Fiber Optic Cable
** Singlemode Fiber Optic Cable

Connectors

10/100BaseTX:	One (1) RJ-45 TX Port
100BaseFX:	One (1) ST or SC Duplex Port

Recommended Wiring Clearance

Front:	4" (10.16 cm)
Side:	1" (2.54 cm)

Emissions and Safety Approvals

FCC Part 15 Class A, CE
UL Listed (US and Canada)
CLASS I, DIV 2, GROUPS A,B,C,D,T4A

BENEFITS

Industrial Media Converter

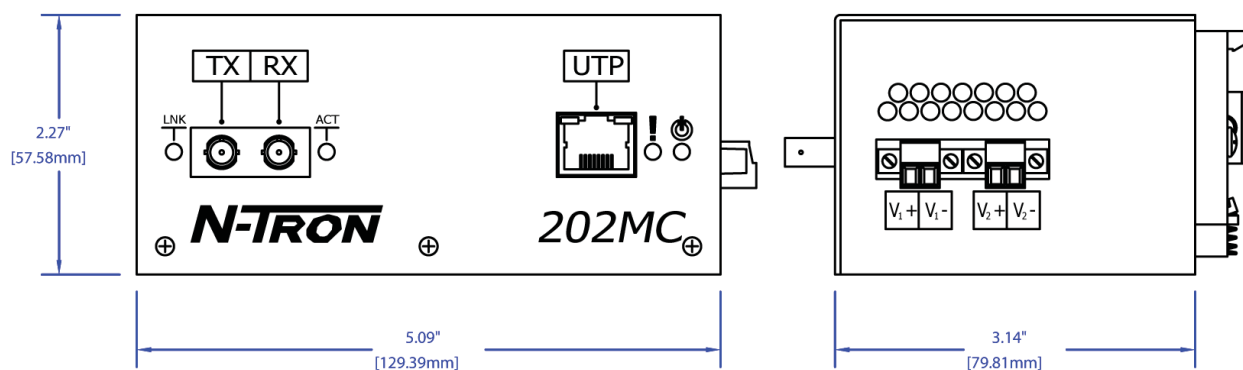
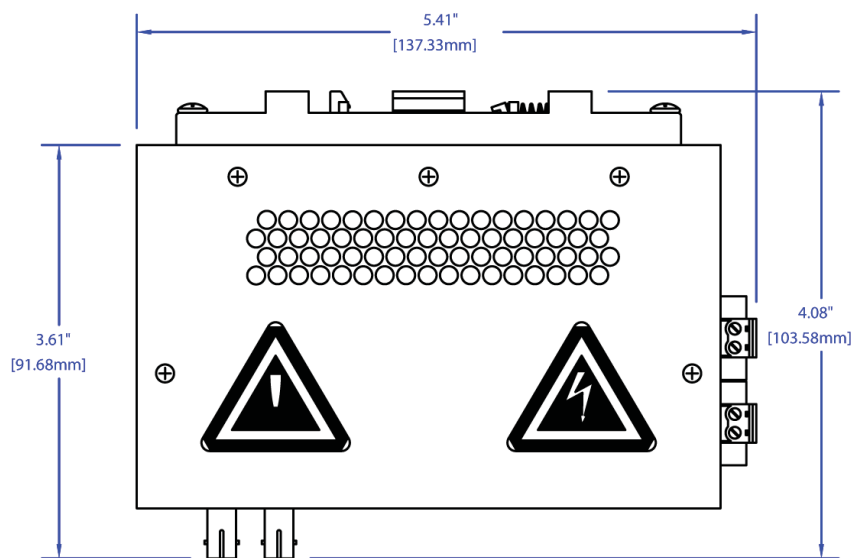
- Converts 10/100BaseTX to 100BaseFX
- High Reliability/Availability
- Extended Environmental Specifications
- Ruggedized DIN-RAIL Enclosure
- High Performance
- High MTBF - >2M Hours (measured)

Ease of Use

- Plug & Play Operation
- Auto Sensing 10/100BaseT
- Auto Sensing Full/Half Duplex
- Auto Cable Sensing (MDIX)
- Compact DIN-RAIL Package

Increased Performance

- Full Wire Speed Capable
- 100BaseFX Fiber Uplink
- Full Duplex Capable
- Eliminates Network Collisions
- Increases Network Determinism
- N-View Port Viewing Option



ORDERING INFORMATION

PART NUMBER	DESCRIPTION
202MC-XX.....	100BaseFX multimode fiber
202MC-N-XX.....	with N-View Firmware Option
202MCE-XX-YY.....	100BaseFX singlemode fiber
202MCE-N-XX-YY.....	with N-View Firmware Option

Where: N = N-View Firmware Option
E = Singlemode
XX = ST style fiber connector, SC for SC style fiber connector
YY = Segment length:
15 for 15km max. fiber segment length
40 for 40km max. fiber segment length
80 for 80km max. fiber segment length

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QUALITY MANAGEMENT SYSTEM

CERTIFIED BY DNV

ISO 9001:2008