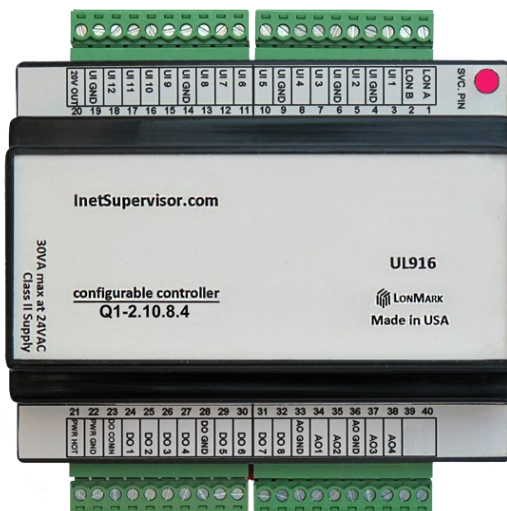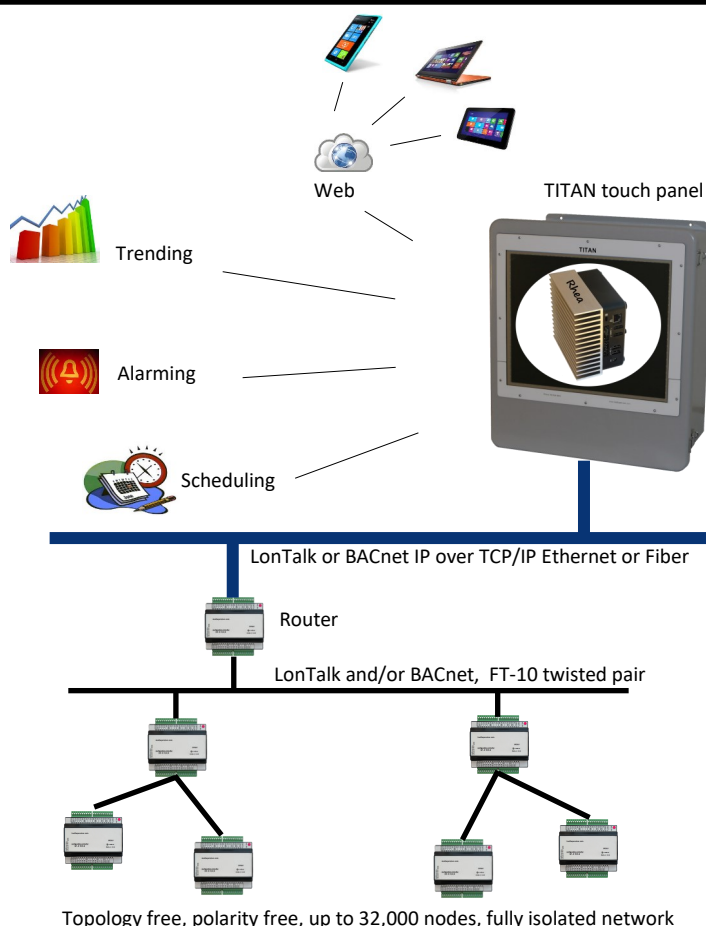## APPLICATIONS

Universal dumb I/O, best used with other programmable controllers.

OVERVIEW

The NS-8.8 I/O Series are microprocessor based configurable I/O controllers designed to control, optimize and improve energy efficiency of variety of equipment. All controller features are adjustable with DeviceEditor (part of NetworkManager) software that is free to our customers. The NS-8.8 uses FT-10 transceiver for best in its class networking over twisted pair of wires. FT-10 networks are polarity and topology free. The network utilizes open standard LonTalk and BACnet/IP protocols for interoperability and ease of data exchange.

NS-8.8 supports variety of sensors including thermistors Type II (recommended), and Type III, and custom thermistor array. 4-20mA sensors are well supported with external 20VDC supply. All sensors types are software configurable. Two inputs accept pulse and have software pulse accumulators.

Web

TITAN touch panel

Trending

Alarming

Scheduling

LonTalk or BACnet IP over TCP/IP Ethernet or Fiber

Router

LonTalk and/or BACnet, FT-10 twisted pair

Topology free, polarity free, up to 32,000 nodes, fully isolated network

I/O CONFIGURATION

NOTE: No Hardware Jumpers required to configure I/O

8 x Universal Inputs	All inputs have 12 bit resolution
Resistive	Thermistor 10KΩ Type II and Type III (Type II is recommended)
	Potentiometer with custom scaling
	Dry contact
Voltage	0-10V DC
Current	0-20mA DC
6 x Digital Outputs	Solid State Relays
	SSR rated at 130mA @ 50V AC/DC w/ external power supply
2 x Analog	20mA max at 30°C, 8bit resolution
	0 or 10VDC Digital / Binary
	0-10V DC adjustable , linear

MECHANICAL

Hardware	
Processor	FT-5000, 8bits, 80MHz
Memory	48k application memory
Transceiver	FTT-10; 78kbps
Indicators	Multicolor LED, power, status
Comm Ports	RJ11, LON, TTL
Power	
Supply Voltage	24VAC; 50/60Hz; Class II
Max	30VA
Typical	6VA plus peripherals
Fuse	1.85A auto-resettable
Enclosure	
Material	ABS
Color	Black
Installation	35mm DIN
Connectors	Removable (RED)
Environment	
Temperature	0°-70°C (32°-158°F)
Humidity	0-90% non-condensing
Storage	-20°- 70°C (-4° - 158°F)

STATUS LIGHTS

LED	
Device status GREEN	Pulsing green = Normal Off = No power or other fault
Service pin GREEN	OFF = Normal, running ON = No application

AGENCY APPROVALS

Safety Certifications	UL916 Energy Management Equipment CSA C22.2#205 Issue 1983/06/01 (R2009) Signal Equipment standard

LonMark   **UL916   RoHS**   ETL us Intertek

87.5 (3.4in)
61
47
58.5
45.5
36
17
35.5 (1.4in)

106.5 (4.19)
102.5
85.5
83.5
50.5