



Network Manager 2



Description

The TALON Network Manager 2 is a compact, embedded controller/server platform. It combines integrated control, supervision, data logging, alarming, scheduling and network management functions with Internet connectivity and web serving capabilities in a small, compact platform. The Network Manager 2 makes it possible to control and manage external devices over the Internet and present real time information to users in web-based graphical views.

The Network Manager 2 is a member of the TALON System suite of Java-based controller/server products, software applications and tools, which are designed to integrate a variety of devices and protocols into unified, distributed systems. The Network Manager 2 is powered by the Niagara^{AX} Framework®. Niagara supports a wide range of protocols including LonWorks™, BACnet™, MODbus, and Internet standards. The Niagara^{AX} Framework also includes integrated network management tools to support the design, configuration, installation and maintenance of interoperable networks.

Features

- Supports open and legacy protocols
- Web User interface (optional) serves rich presentations and live data to a web browser
- Runs stand-alone control, energy management, and multi-protocol integration
- Standard and optional communications boards
- Can be expanded with optional 16 and 34 point I/O Modules
- Small compact design is easy to install and supports multiple power options
- Supports Embedded Workbench (optional) for small projects that require an onsite programming tool be included with the project

Applications

The Network Manager 2 is ideal for smaller facilities, remote sites, and for distributing control and monitoring throughout large facilities. Optional input/output modules can be plugged in for applications where local control is required. The Network Manager 2 also supports a wide range of

field busses for connection to remote I/O and stand-alone controllers. In small facility applications, the Network Manager 2 is all you need for a complete system.

The Network Manager 2 serves data and rich graphical displays to a standard web browser via an Ethernet LAN or remotely over the Internet, or dial-up modem. In larger facilities, multi-building applications and large-scale control system integrations, Talon Workstation software can be used to aggregate information (real-time data, history, alarms, etc.) from large numbers of Network Managers into a single unified application. The Talon Workstation can manage global control functions, support data passing over multiple networks, connect to enterprise level software applications, and host multiple, simultaneous client workstations connected over the local network, the Internet, or dial-up modem.

Specifications

Platform

- IBM PowerPC 405EP 250 MHz processor
- 64MB SDRAM & 64 MB Serial Flash
- Battery Backup - 5 minutes typical - shutdown begins within 10 seconds
- Real-time clock - 3 month backup max via battery

Communications

- 2 Ethernet Ports – 10/100 Mbps (RJ-45 Connectors)
- 1 RS 232 Port (9 pin D-shell connector)
- 1 RS 485 non isolated port (3 Screw Connector on base board)

Optional Communications Cards

- 588-654 - Optional 78 Kbps FTT10 A Lon Card
- 587-759 - Optional RS-232 port adapter
- 587-760 - Optional dual port RS-485 adapter

Operating System

- QNX RTOS
- IBM J9 JVM Java Virtual Machine
- Niagara^{AX}

Power Supply

- 588-678 - Optional: 24 Volt AC/DC power supply module, Din Rail mounted

Optional Wall Power Modules –

(Note: All modules are universal input 90 – 240 volts, 50/60 Hz.; the model numbers below represent the various plug configurations only)

- 588-675 - 120 Vac, 50- 60 Hz. US
- 588-676 - 230 Vac, 50-60 Hz. Europe/Asia
- 588-677 - 230 Vac 50-60 Hz. UK

Chassis

- Construction: Plastic, din rail or screw mount chassis, plastic cover
- Cooling: Internal air convection
- Dimensions: 6.313" (16.04 cm) W x 4.820"(12.24 cm) H (including connectors) x 2.438" (6.19 cm) D

Environment

- Operating temperature range: 0° to 50°C (32°F to 122°F)

- Storage Temperature range: 0° to 60°C (32°F to 140°F)
- Relative humidity range: 5% to 95%, non-condensing

Agency Listings

UL 916, C-UL listed to Canadian Standards Association (CSA) C22.2 No. 205-M1983 "Signal Equipment", CE, FCC part 15 Class A, C-tick (Australia)

Optional I/O Modules

588-673 – 34 Point I/O Module

Max of 1 per Network Manager 2

- 16 Universal Inputs
- 10 relay outputs
- 8 analog outputs
- Module size is approximately 6.313" (16.04 cm) W x 4.820" (12.24 cm) H (including connectors) x 2.438" (6.19 cm) D

588-672 – 16 Point I/O Module

- Up to 4 per Network Manager 2 (Only 2 per Network Manager if combined with a 34 Point I/O module)
- 8 Universal Inputs
- 4 relay outputs
- 4 analog outputs
- Module size is approximately 3.2" (8.2 cm) W x 4.820" (12.24 cm) H x 2.4" (6 cm) D

I/O Module Specifications

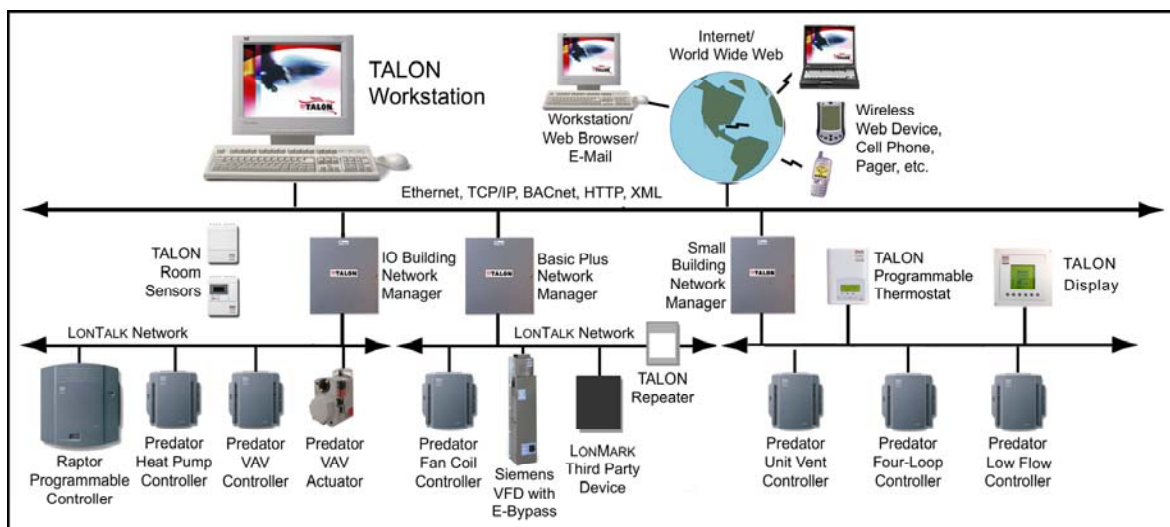
- Connection to Network Manager 2 is via a single multi-pin plug
- Removable screw terminals (.2" centers) for all inputs and outputs
- Universal Input types supported
 - Type 3 (10K) Thermistors; Thermistor Sensor Range –23.3°C to +115.5°C (–10° to +240° F). Input accuracy is in the range of +/-1% of span. Others may be supported by entering custom non-linear curve interpolation points for each unique non-linear input
 - 0 to 10 volt; accuracy is +/- 2% of span, without user calibration; Uses an external resistor for current input (four provided, mounted by installer on terminal connections)
 - 4/20 mA current loop; accuracy is +/- 2% of span, without user calibration; Self-powered or board-powered sensors accepted
- Dry contact; V open circuit, 300-uA short-circuit current
- Pulsing dry contact at a rate of up to 20 Hz; 50% duty cycle
- Digital Outputs (4 ea) Pilot Duty
- Form A relay contacts suitable for on/off control only; floating control not supported
 - Max voltage - 30 volts DC or AC
 - ½ Amp max current rating
- *Analog Outputs*
 - 0 -10 Volt DC
 - Minimum load supported per output is 2500 ohms minimum or 4 ma drain maximum

Ordering Information

Description	Product Number
16IO TNM2 NIAG NTWK CON - (No BACnet or LON)	588-730
16IO TNM2 NIAG NTWK CON with WEB - (No BACnet or LON)	588-731
16IO TNM2 BACNET SRVR, NIAG NTWK CON – (No LON)	588-732
16IO TNM2 BACNET SRVR, NIAG NTWK CON with WEB – (No LON)	588-733
34IO TNM2 NIAG NETWORK CON - (No BACnet or LON)	588-734

34I/O TNM2 NIAG NETWK CON with WEB - (No BACnet or LON)	588-735
34I/O TNM2 BACNET SRVR, NIAG NTWK CON – (No LON)	588-736
34I/O TNM2 BACNET SRVR, NIAG NTWK CON with WEB – (No LON)	588-737
TNM2 LON SERVER, NIAG NETWK CON – (No BACnet)	588-738
TNM2 LON SERVER, NIAG NETWK CON with WEB – (No BACnet)	588-739
TNM2 BACNET MSTP SERVER – (includes LON license, need 588-654)	588-740
TNM2 BACNET MSTP SERVER with WEB & ENTRPRS CONN – (includes LON license, need 588-654)	588-741
I/O TNM2 ENTRPRISE CONN PCK	588-652
I/O TNM2 RS 232/485 PORT ENABLE	588-653
TNM2 LON CARD (used only in 588-740 & 588-741)	588-654
TNM2 BACNET SRVR WEB UPGD	588-656
TNM2 BACNET SRVR ENTRP CONN	588-657
16 I/O MODULE - (8 UI, 4 DO, 4 AO)	588-672
34 I/O MODULE - (16 UI, 10 DO, 8 AO)	588-673

TALON Architecture



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Siemens Building Technologies, Inc.
HVAC Products
1000 Deerfield Parkway
Buffalo Grove, Illinois 60089
Phone 847-215-1000
www.staefa.com



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