







NT24k® & 1000 PoE+ Offerings

October 2016

NT24K® & 1000 PoE+ Offerings

- Introduction
- Features & Benefits
 - 1000-POE4+
 - 1008TX-POE+
 - NT24k-16TX-POE
- Model Numbers
- Where to Sell









NT24K® & 1000 PoE Switches & Injectors

- What: new network offerings
 - 1000-POE4+
 - 1008TX-POE+
 - NT24k-16TX-POE
- When: October 25, 2016







- Why: extends Gigabit PoE+ product portfolio to drive operational efficiencies by addressing industry demands with
 - a multi-port PoE+ injector
 - our <u>first</u> unmanaged Gigabit PoE+ switch
 - a 16-port Gigabit PoE+ switch with PoE management features



What is Power over Ethernet (PoE)?

 PoE (Power Over Ethernet) is a method to transmit data and power, up to 100 meters, over a single CAT5E/CAT6/CAT6a Ethernet cable



The benefits of PoE include:

- Eliminates the need for separate power cabling
- Reduced wiring and installation costs
- No need for special electrical permits
- Greater installation flexibility as devices no longer have to be located near power outlets



Power over Ethernet – Two Standards

	PoE (IEEE 802.3af)	PoE+ (IEEE 802.3at)
Max power delivered by PSE	15.40 W	34.20 W
Power available at PD	12.95 W	25.5 W
Voltage range (at PSE)	44-57 VDC	50-57 VDC
Maximum current	350 mA	600 mA
Power management	Three levels	Four levels

IEEE 802.3at (POE+) provides more power for devices like Pan, Tilt and Zoom Cameras



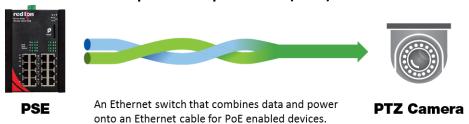
PoE Terminology

- PSE (Power Sourcing Equipment) is a device that injects power onto a copper Ethernet cable
 - Midspan injector, like the 1000-POE4+, is an intermediary device that injects PoE power onto an Ethernet cable to power a PoE powered device



Ethernet cable for PoE enabled devices.

 An Endspan switch, like the 1008TX-POE+ or NT24k-16TX-POE, combines data and power onto an Ethernet cable to power a device that can accept PoE power (PD)





PoE Terminology, cont.

- PD (Powered Device) is a device is capable of being powered by PoE
 - IP Cameras
 - VoiP Phones
 - Wireless Access Points
 - Network Audio
 - WiMax Access Points
 - PTZ Cameras
 - Remote Computer Terminals



1000-POE4+ Midspan Injector



1000-POE4+ Midspan Injector

■ 1000-POE4+

- Unmanaged 4-port Gigabit mid-span POE+ injector
- IEEE 802.3af/at compliant
- 4 10/100/1000Base-T(X) RJ-45 ports (data in)
- 4 10/100/1000Base-T(X) RJ-45 POE+ ports (data and power out)
- Supports 30 Watts per port (25.5 Watts at the PD)
- Power status LED
- PoE status indication LED
- Hardened metal DIN-rail mountable enclosure
- Built-in PoE power boost circuit
- 22-49 VDC input voltage
- -40 to 85°C Operating temperature range
- MTBF: > 2 million hours





1008TX-POE+& NT24k-16TX-POE Switches



1008TX-POE+ Unmanaged Switch

■ 1008TX-POE+

- 8 10/100/1000Base-T(X) ports
- POE+ on 4 ports (25.5 Watts at the PD)
- Built-in PoE power-boost circuit
- 22-49VDC input voltage
- Jumbo frame support
- Up to 16.0 Gb/s maximum throughput
- LED link/activity status indication
- Hardened metal DIN-Rail enclosure
- -40 to 80°C operating temperature
- MTBF: > 2 million hours





NT24k®-16TX-POE

- Layer 2 managed Gigabit switch
- 16 10/100/1000BaseT(X) RJ45 ports
- Managed PoE
 - IEEE 802.3af/at
 - 240 Watt power budget
- Redundant power inputs 22-49 VDC
 - Boosts power to meet PoE output requirements
- -40°C to 80°C operating temperature
- 200g shock, 50g vibration tolerance





NT24k® Feature Highlights

Advanced PoE management

 Quick and easy allocation of the switch's 240 Watt PoE power budget to any of its 16 ports (up to 30 Watts per port)

Comprehensive networking functionality

- Auto IGMP configuration
- N-Link™ and N-Ring™ technology
- RSTP
- N-View™ monitoring
- CIP messaging
- Event logging
- IEEE 802.1x with RADIUS remote server authentication
- SNTP (Simple Network Time Protocol)



PoE Port Assignment



- 240 Watt PoE power budget can be assigned to any of the 16 ports
- Quick configuration option allows allocation of the power budget across multiple ports in one step
- For example:
 - Allocate 30 Watts to ports 1-8
 - Allocate 15.4 Watts to ports 1-16



PoE Port Status

Web browser displays PoE status and power consumption by port

PoE Status View PoE Status Enabled Budgeted Power (Watts) 112 **Total Power Consumption (Watts)** 112 20.3 (18.1%) PoE Port **Max Power Limit Power Consumption** Detected Information Name Status **PD Class** Watts (W) Volts (V) Current (mA) P1 Active 30W (Class 4) 5.5 103.0 53.4 Class 2 P2 Inactive 15.4W (Class 3/0) No PD connected 7W (Class 2) Class 3 Max power limit exceeded Inactive 30W (Class 4) Class 4 Overcurrent error P5 Disabled 30W (Class 4) Class 4 PD detected but PoE disabled 30W (Class 4) 14.8 56.5 Active 261.7 Class 4 Disabled 30W (Class 4) Disabled 30W (Class 4) P9 Disabled 30W (Class 4) P10 Disabled 30W (Class 4) Disabled 30W (Class 4) 30W (Class 4) Disabled Disabled 30W (Class 4) P14 Disabled 30W (Class 4) Disabled 30W (Class 4) Disabled 30W (Class 4)

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NT24k®-16TX-POE

- 240 Watt PoE power budget
 - Can be assigned to any of the 16 ports
- Quick PoE configuration allocates
- Graphical "gas gauge" representation of budgeted power and actual power consumption









Model Numbers



Model Numbers

Model Number	Description
1000-POE4+	4-Port Industrial Gigabit PoE+ Mid-Span Injector (4 10/100/1000Base-T Ports Data In, 4 10/100/1000Base-T Data/PoE+ Out)
1008TX-POE+	8-Port Industrial Unmanaged Gigabit PoE+ Switch (4 10/100/1000Base-T ports, 4 10/100/1000Base-T with PoE+ ports)
NTPS-24-10	DIN-Rail Power Supply 10 Amp @ 24 VDC
1K26-PMK	Panel Mount Kit, 1000 Series



NT24K®-16TX-POE Model Numbers

Model Number	Description
NT24K-16TX-POE	16-Port 10/100/1000BaseT Managed PoE+ Industrial Ethernet Switch
NTCD-CFG	NT24k Configuration Recovery Device
NTPS-24-20	DIN-Rail Power Supply 20 Amp @ 24 VDC
NTPS-48-10	DIN-Rail Power Supply 10 Amp @ 48 VDC
NT24K-NM-PMK	NT24k Non-Modular Panel Mount Kit





Where to Sell?



Targeted Applications

- Security & Surveillance
- Oil & Gas
- Utilities
- Alternative Energy
- Transportation
- Utilities
- Factory Automation



Launch Information – October 25, 2016

Promotional Materials <u>www.redlion.net/products/industrial-networking</u>

- Press Release
- Data Sheets
- Launch Email

Distributor Portal

- Product Notice
- Product Briefing
- High-Res images

Events

- IAS Shanghai
- SPS in Germany















Thank You. Questions?

For more information

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