

## NT24K-12GXE4-SC-10-PoE

### N-Tron NT24k® Networking Series



- Managed, Full Gigabit, Layer 2
- Power over Ethernet, PSE (PoE, PoE+)
- 8x 10/100/1000BaseT(X) - RJ45
- 4x 1000BaseFX - SM, SC, 10 km
- Operating temperature -40 °C to +80 °C
- Extremely reliable: MTBF 2,000,000+ h
- Numerous certifications
- N-Ring™ - ring redundancy technology
- N-Link™ - multi-ring redundancy technology
- N-View™ - monitoring technology

<https://www.wachendorff-prozesstechnik.de/en/NT24K-12GXE4-SC-10-PoE>

#### Description

The managed NT24K-12GXE4-SC-10-PoE offers 8x RJ45 and 4x fiber ports in a compact, hardened metal DIN rail housing. The NT24K-12GXE4-SC-10-PoE is designed for the most demanding environments with features such as Power over Ethernet, full wire speed, extended shock and vibration resistance and a wide operating temperature range. IGMP auto-configuration, port-based IEEE 802.1x with RADIUS remote server authentication and N-Ring™ technology for redundancy ensure rapid deployment and robust, secure network communications for applications in alternative energy, factory automation, transportation and water and wastewater treatment.

#### Product details

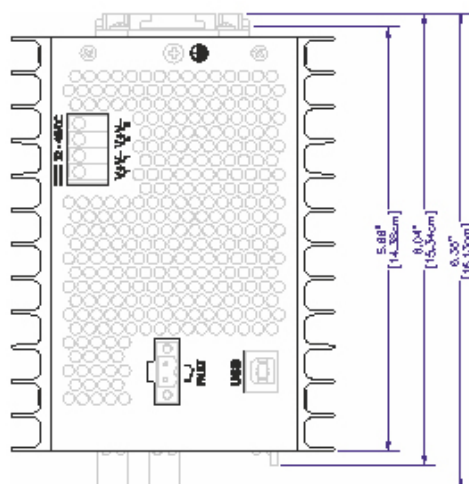
|                     |                                                                                                                                                                                                                                                                                                                                                                                                                               |
|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Type:               | managed                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Operating mode:     | Store and Forward                                                                                                                                                                                                                                                                                                                                                                                                             |
| Switching engine:   | Full Wire Speed, Layer 2                                                                                                                                                                                                                                                                                                                                                                                                      |
| Management:         | Web browser (USB type B)                                                                                                                                                                                                                                                                                                                                                                                                      |
| Ethernet standards: | <ul style="list-style-type: none"> <li>• IEEE 802.3 (10BaseT)</li> <li>• IEEE 802.3u (100BaseTX)</li> <li>• IEEE 802.3ab (1000BaseTX)</li> <li>• IEEE 802.3af (PoE, Type2)</li> <li>• IEEE 802.3at (PoE+, Type2)</li> <li>• IEEE 802.3x (Flow Control - FD)</li> <li>• IEEE 802.1d/D/w (STP, RSTP)</li> <li>• IEEE 802.1p (Class of Service)</li> <li>• IEEE 802.1Q (tagged VLANs)</li> <li>• IEEE 802.1x (RADIUS)</li> </ul> |
| Features:           | <ul style="list-style-type: none"> <li>• PoE, PoE+</li> <li>• Port Mirroring</li> <li>• Jumbo Frame Support</li> <li>• DHCP (Client)</li> <li>• IGMP auto-configuration</li> <li>• SNMP v1, v2, v3</li> <li>• STP</li> <li>• N-Ring™ - ring redundancy</li> <li>• N-Link™ - multi-ring redundancy</li> <li>• N-View™ - Monitoring</li> </ul>                                                                                  |
| Ports - Total:      | 12x                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Ports - PoE:        | 8x IEEE 802.3af/at (PSE)<br>Output 25.5 W at PD                                                                                                                                                                                                                                                                                                                                                                               |
| RJ45 ports:         | 8x 10/100/1000BaseT(X)                                                                                                                                                                                                                                                                                                                                                                                                        |
| RJ45 - Speed:       | Auto-negotiation (10/100/1000 Mbit/s)                                                                                                                                                                                                                                                                                                                                                                                         |
| RJ45 - Duplex:      | Half or full duplex                                                                                                                                                                                                                                                                                                                                                                                                           |
| RJ45 connection:    | MDI/MDIX Auto-Crossover /<br>TD/RD Auto-Polarity                                                                                                                                                                                                                                                                                                                                                                              |

|                          |                                                                                         |
|--------------------------|-----------------------------------------------------------------------------------------|
| RJ45 - Isolation:        | ESD and overvoltage protection                                                          |
| Fiber ports:             | 4x 1000BaseFX                                                                           |
| Fiber - Wavelength:      | 1310 nm                                                                                 |
| Fiber - Type:            | Singlemode                                                                              |
| Fiber - Connector:       | SC                                                                                      |
| Fiber - Distance:        | 10 km                                                                                   |
| Interfaces:              | <ul style="list-style-type: none"> <li>• USB type B</li> <li>• SD card slot</li> </ul>  |
| Sensors:                 | Temperature (onboard)                                                                   |
| Fault signaling contact: | configurable                                                                            |
| MAC table size:          | 16.000                                                                                  |
| Backplane:               | 16.4 Gbit/s                                                                             |
| Latency:                 | 1.6 µs<br>(typical values, load-dependent)                                              |
| Power supply:            | Redundant input terminal block<br>connector with overvoltage protection                 |
| Voltage range:           | 22 to 49 VDC                                                                            |
| Power consumption:       | 11.24 A @ 24 VDC                                                                        |
| Inrush current:          | 60.8 A / 0.2 ms @ 24 VDC                                                                |
| BTU/h:                   | 122                                                                                     |
| Operating temperature:   | -40 °C to +80 °C                                                                        |
| Storage temperature:     | -40 °C to +85 °C                                                                        |
| Humidity:                | 10 % to 95 % rH<br>(non-condensing)                                                     |
| max. insertion height:   | 3000 m                                                                                  |
| Vibration and shock:     | Shock: 200 g @ 10 ms<br>Vibration: 50 g @ 5 to 200 Hz<br>(triaxial, wall mount bracket) |

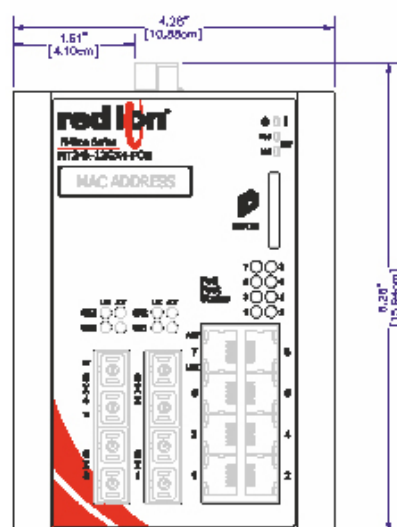
|                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Certifications:     | <p><b>Product Safety</b><br/>ANSI/ISA 12.12.01-2013 Class I and II, Div. 2 and Class III, Div. 1 and 2, Groups A, B, C and D Hazardous Locations UL508 Industrial Control Equipment<br/>CAN/CSA-C22.2 No. 213-M1987 Class I Div. 2 Hazardous Locations<br/>CAN/CSA-C22.2 No. 14-M1987 Industrial Control Equipment</p> <p><b>Emissions</b><br/>FCC Title 47, Part 15, Radio Frequency Devices, Subpart B ANSI C63.4-2009<br/>Industry Canada ICES-003, EN 55011; EN 61000-6-4, EN 61000-3-2, EN61000-3-3, EN 55032</p> <p><b>Immunity</b><br/>EN 55024, EN 61000-6-2; IEC 61000-4-2 (ESD); IEC 61000-4-3 (RFAM); IEC 61000-4-4 (EFT); IEC 61000-4-5 (SURGE); IEC 61000-4-6 (RFCM); IEC 61000-4-8 (PFMF); IEC 61000-4-11 (VDI)</p> <p><b>Rail</b><br/>EN 50155, EN 50121 and EN 61373</p> <p><b>Designed In Compliance</b><br/>IEEE 1613 (Electric Utility Substations), NEMA TS1/TS2 (Traffic Control)</p> <p><b>Other</b><br/>ABS Type Approval for Shipboard Applications; EMC Directive 2014/30/EU; LV Directive 2014/35/EU GOST-R, RoHS Compliant</p> |
| Protection class:   | IP20                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| MTBF:               | 2.000.000+ h                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Execution:          | Metal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Dimensions (WxHxD): | 7.87 cm x 14.92 cm x 14.07 cm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Weight:             | 1.46 kg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Assembly:           | DIN rail                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Manufacturer:       | Red Lion Controls, USA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

## Drawings

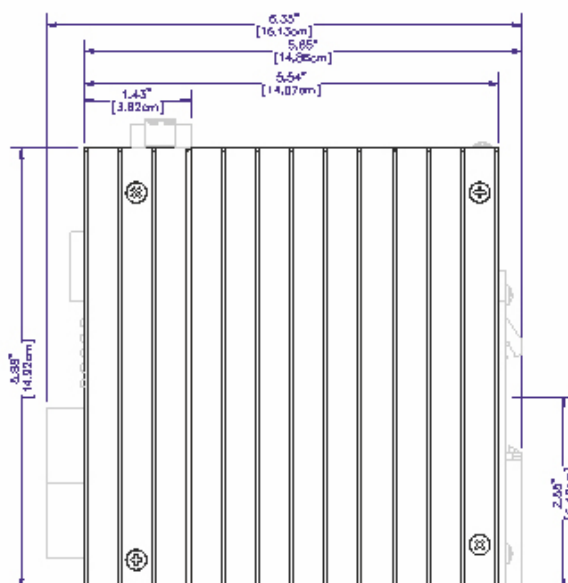
### Dimensions



oben



vorne



rechts

## Downloads / FAQ

The following files could be downloaded from our website directly from this product under the tab "Drawings":

### Dimensions 2D

NT24k-12GX4-POE-Zeichnung.pdf



Wachendorff Prozesstechnik GmbH & Co. KG  
Industriestrasse 7 • 65366 Geisenheim  
Germany

Phone: +49 (0) 67 22 / 99 65 - 20  
E-Mail: [wp@wachendorff.de](mailto:wp@wachendorff.de)  
[www.wachendorff-prozesstechnik.de](http://www.wachendorff-prozesstechnik.de)

