2024~2025 Volktek Product Catalog

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IEN-9425-RW

Unmanaged 5 x 10/100/1000 RJ45 & 2 x GbE SFP Industrial Switch, Railway Approval

Description

IEN-9425-RW is a 5-port 10/100/1000 RJ45 downlink, and 2-port GbE SFP uplink unmanaged industrial-grade switch designed to meet the thermal requirements and environmental conditions of railway applications. The downlink ports connect to industrial devices and controllers. The fiber ports allow noise-free Gigabit Ethernet transmission for fast recovery, reliable and long-distance to other switches or the control center.

To keep a stable transmission of data the device uses rate limitation and QoS (Quality of Service) and prioritizes industrial applications using protocols like EIP, PROFINET, and GOOSE.

This switch is built with industrial-grade components, enclosed in an IP40 aluminum case with high thermal conductivity to protect the device from tools and hazards. Certified for use in railway applications, the device implements standard and safe communication and withstands vibration, shock, free fall, and temperatures ranging from -40°C~75°C (-40°F~167°F).

IEN-9425-RW is enclosed within IP40 aluminum case and can able to sustain harsh temperature ranging between -40°C~75°C. Along with this, the switch is built with various protection features such as ESD Protection, Surge Protection and Reverse Polarity

Protection to deliver non-stop PoE service to the Powered Devices.



-40°C 75°C

407

EN 50155

50121-4

RoHS

Advanced QoS Support

Features Highlight

Robust Switch Performance

Understanding the need of smoother data transmissions for specific surveillance applications, the IEN-9425-RW supports IEEE 802.1p Quality of Service (QoS) which enhances bandwidth utilization to ensure time sensitive data gets delivered efficiently to mission-critical applications without any delay even during burst of high traffic. Addition to the beneficial fetures, the switch is also configured with efficient Storm Control functionalities which can only allow the traffic of a predefined rate. Both the QoS and Storm Control function can easily managed by DIP Switch without any burden of manual enable and disable.

Eco-friendly Green Ethernet Design

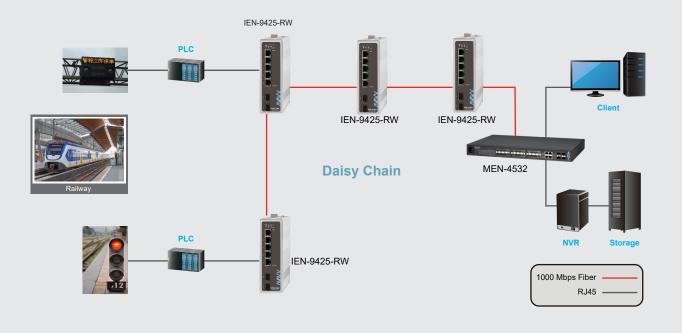
To address the concerns of increasing power consumption, IEN-9425-RW implements IEEE 802.3az Energy Efficient Ethernet (EEE) compliant Green Ethernet technology. This eco-friendly design allows the switch to automatically adjust power consumption and conserve energy during the periods of low data activity. This helps you to lower the energy usage significantly and help you save operational costs.

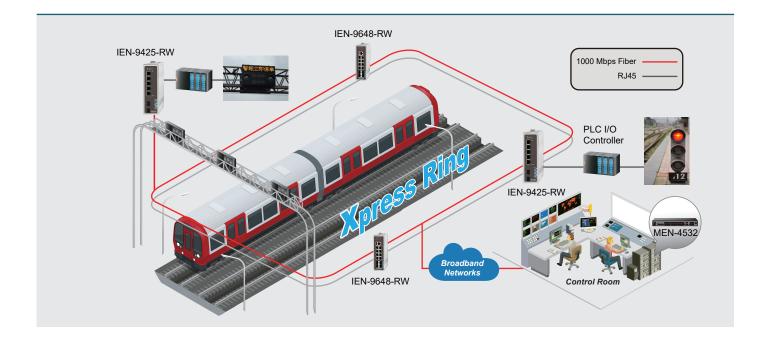
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Applications

IEN-9648-RW/9425-RW series switches are designed to meet the demands of railway applications, including rolling stock and wayside installations. The switches guarantee reliable operation in industrial environments where vibration and shock are common place. Gigabit backbone, redundant ring increase the reliability of the communications and reduce cabling and wiring costs. These are compliant with mandatory sections of EN 50155, covering operating temperature, power input voltage, surge, ESD, and vibration, as well as conformal coating and power insulation, making the switches suitable for a variety of Railway applications.





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Specifications

| Standards | | |
|----------------------------|--|--|
| IEEE 802.3 | 10BASE-T | |
| IEEE 802.3u | 100BASE-TX | |
| IEEE 802.3ab | 1000BASE-T | |
| IEEE 802.3z | 1000BASE-SX/LX | |
| IEEE 802.3 | Nway Auto-negotiation | |
| IEEE 802.3x | Flow Control | |
| IEEE 802.1p | Class of Service | |
| Interface | | |
| Ports | 5 x 10/100/1000BASE-T (RJ45) | |
| | 2 x GbE SFP Slots | |
| DIP Switch | Power voltage drop alarm setting (PWR & RPS) | |
| LED Panel | PWR, SFP, 1000, LNK/ACT | |
| Features | | |
| | Max Jumbo Frame Size: 10KBytes | |
| Performance | MAC Table Entries: 8K | |
| Performance | Switch Fabric: 14Gbps | |
| | L2 Forwarding Rate: 10.4Mpps | |
| Power | | |
| Input Voltage | 20~60VDC | |
| Connection | Teminal Block, Mini-DIN | |
| Power Consumption | System: 13W | |
| | One relay output with current carrying capacity of | |
| Alarm Relay | 1 A @ 24V DC | |
| Mechanical and Environment | | |
| Housing | Aluminum Case (IP40 protection) | |
| Mounting | DIN-Rail, Rack-mount | |
| Operating Temperature | -40°C~75°C (-40°F~167°F) | |
| Storage Temperature | -40°C~85°C (-40°F~185°F) | |
| Operating Humidity | 5 to 95% RH (non-condensing) | |
| Storage Humidity | 5 to 95% RH (non-condensing) | |
| Weight | 869 g (1.9 lb) | |
| Dimension (WxHxD) | 50 x 164.9 x 122.2 mm (1.97 x 6.49 x 4.81 in) | |
| | | |

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|----------------------|------------|--|
| Certi | ications | |
| CE | EMI | FCC Part 15 Subpart B Class A EN 55022: class A |
| | | EN 55011: 2009 class A |
| | | EN 61000-6-4 |
| | EMS | EN 55024 |
| | | EN 61000-6-2 |
| | | EN 61000-4-2 (ESD) |
| | | EN 61000-4-3 (RS) |
| | | EN 61000-4-4 (Burst) |
| | | EN 61000-4-5 (Surge) |
| | | EN 61000-4-6 (CS) |
| | | EN 61000-4-8 (PFMF) |
| Shock | | IEC 60068-2-27 |
| Freefall | | IEC 60068-2-32 |
| Vibration | | IEC 60068-2-6 |
| Rail Traffic | | EN 50155 |
| | | EN 50121-4 |
| Ordering Information | | |
| IEN-9425-RW | | Unmanaged 5 x 10/100/1000 RJ45 & 2 x GbE SFP |
| | | Industrial Switch, Railway Approval |
| Optional Accessories | | |
| Power Supply | | SDR-120-48: DIN-Rail, 120W, 48VDC, Industrial |
| | | Power Supply with PFC Function |
| | ail Holder | DR-160 (for GST-160) |
| GBM-104 | | 1000BASE-SX 1.25G, Multi-mode SFP, 500m |
| GBM-104-2 | | 1000BASE-SX 1.25G, Multi-mode, 3.3V, 1310nm, 2Km |
| GBM-104-10 | | 1000BASE-LX 1.25G, Single mode SFP, 10Km |
| GBM-123 | | 1000BASE-LX Bi-di Single Mode SFP Module, 10Km |

*Specifications subject to change without notice. *Industrial SFP with wide operating temperature from -40°C~85°C (-40°F~185°F) is available upon request

Dimension

