VOLKTEK

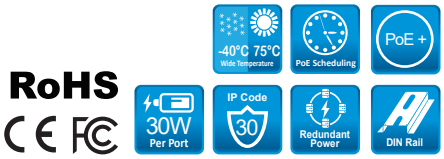
IEN-9648-RW

Managed 8 x 10/100/1000 RJ45 & 4 x GbE SFP Industrial Switch, Railway Approval, Aluminum

Description

IEN-9648-RW, 8-port 10/100/1000Base-T + 4-slot Gigabit SFP is the latest development of Volktek's managed Industrial Gigabit Ethernet Switch, specifically designed for high-speed industrial Ethernet networks that demands both, high bandwidths and rugged connectivity. IEN-9648-RW is certified with and EN 50155 and EN 50121-4 to use in railway applications so that it makes you feel trustworthy to use for surveillance or ticketing network in railway and bus stations. EN 50155, EN 50121-4 and EN 61373 certificates guarantee trustworthy operation in critical environments where vibration and shock are common place.

With IP30 protection it exhibits extreme tolerance in harsh temperature environment ranging from -40°C to 75°C. Four Gigabit SFP slots gives the advantages of configuring Ring topology or daisy chain topologies offering full-proof fiber advantages for a safe, reliable and long distance Gigabit connectivity.



Features Highlight

Robust Switch Performance

IEN-9648-RW is built with IP30 aluminum case protection, surge and ESD protection to deliver robust performance and withstand extreme conditions in Industrial environments. The SFP ports support 1000Mbps for high bandwidth transmissions and the SFP DDM feature enables service providers to monitor SFP parameters. In case of any abnormal hardware condition, the switch automatically sends warnings through email and relay output with real-time alarm messages. This assists the system administrators to immediately react to emergency events and diagnose the faults more efficiently for smoother network operations.

Redundant Power system

Mission-critical industrial applications need to operate without any interruptions because even a minimum network downtime can hugely impact the overall output. Providing continuous power as well as data to such applications is now made easy with IEN-9648-RW redundant power system. The switch is designed with standard industrial terminal block for redundant power. In case the primary power supply fails, the secondary power will enable the switch to provide continuous service.

Advanced QoS Support

Understanding the need of smoother data transmissions for specific surveillance applications, the IEN-9428-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-9428-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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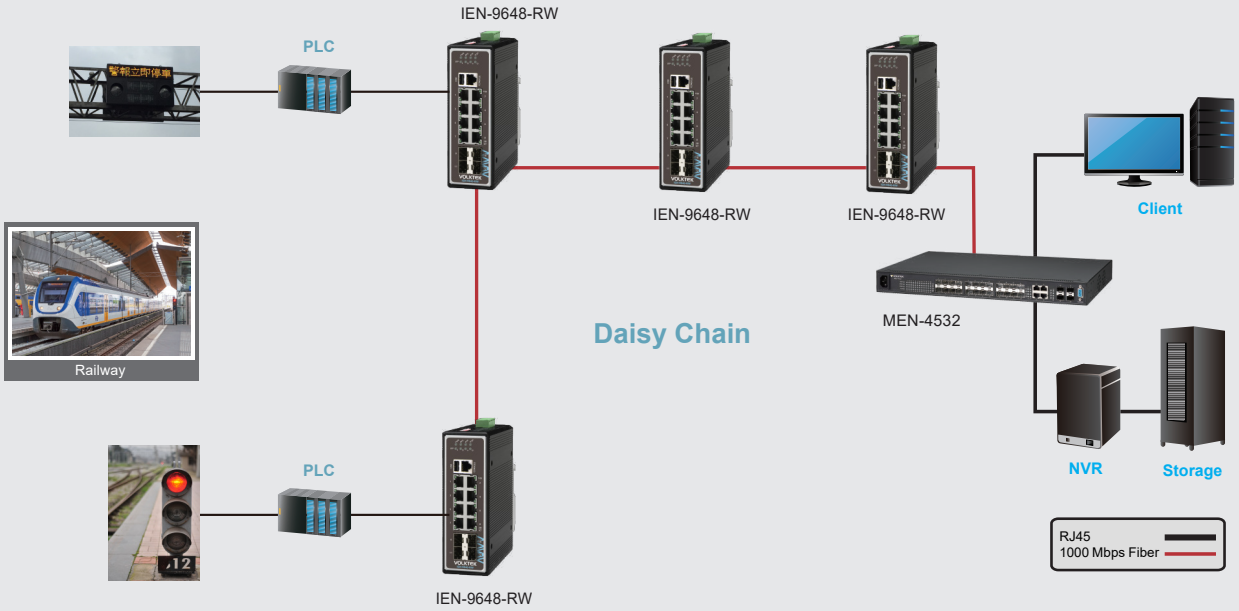
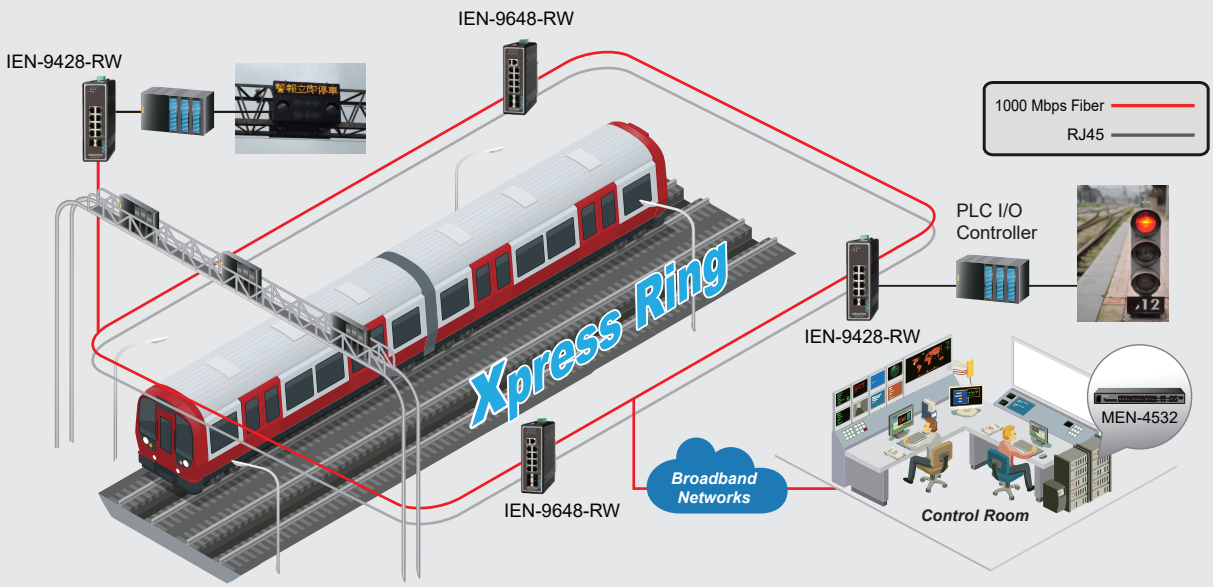
Applications

IEN-96XX-SS/94XX-SS series switches are designed to meet the demands of power substation automation systems (IEC 61850-3, IEEE 1613). The switches guarantee reliable operation in critical 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 802.3x	Flow Control
IEEE 802.3ad	Link Aggregation
IEEE 802.1AB	LLDP
IEEE 802.1D	STP
IEEE 802.1w	RSTP
IEEE 802.1s	MSTP
IEEE 1588v2	PTP
IEEE 802.1p	Class of Service
IEEE 802.1Q	VLAN Tagging
IEEE 802.1X	Port Authentication
IEEE 802.3az	Energy Efficient Ethernet (EEE)
Interface	
Ports	8 x 10/100/1000BASE-T (RJ45)
	4 x Gigabit SFP Slots
	1 x RJ-45 Console Port
	1 x USB Port
DIP Switch	Primary/Redundant Power Voltage Drop Alarm setting
LED Panel	PWR, RPS, ALM, POST, 1000, 10/100
Features	
Performance	Jumbo frame Size: 10KBytes
	MAC Table Entries: 16K
	Active VLAN: 4K
	Switch Fabric: 24Gbps
	L2 Forwarding Rate: 17.9Mpps
Management	CLI, Telnet/SSH, HTTP/HTTPs, SNMP v1//v2c/v3, SNMP Trap, MVLAN, Firmware Upgradable, Configuration Backup/Restore, Syslog, SNTP, LLDP, UDLD, DHCP Client, DHCP Option 82, e-mail Alarm, Service Control, DDM
Reliability	STP/RSTP/MSTP, Xpress Ring, ERPS v1/v2, Dual Homing, LACP, Code Redundancy
VLAN	IEEE 802.1Q, GARP/GVRP, Port-based VLAN, MAC-based VLAN, IP-based VLAN, Protocol-based VLAN, QinQ
Traffic Control	IGMP snooping/Throttling/Proxy, MVR, QoS, Flow Control, Abnormal Traffic Detection, Rate Limit, Storm Control, Port Isolation, Loop Detectionl
Security	ACL, SSH, Port Security, Port-based 802.1x, MAC-based 802.1x, TACACS+, MAC limit, MAC Search, Refusal MAC, Static MAC, DHCP Snooping, DHCP Sever Screening, ARP Inspection, BPDU Guard/Filter, Root Guard, Management Host
Power	
Input Voltage	Primary inputs：12V~60VDC
	Redundant inputs：12V~60VDC
Power Consumption	System：18W
Alarm Relay	One relay output, 1 A @ 24V DC
Mechanical and Environment	
Housing	Aluminum (IP30 Protection)
Mounting	DIN-Rail
Operating Temperature	-40°C~75°C
Storage Temperature	-40°C~85°C
Operating Humidity	5 to 95% RH (non-condensing)
Storage Humidity	5 to 95% RH (non-condensing)
Weight	955g
Dimension (WxHxD)	50x160x120mm (1.97x6.3x4.72inch)
Certifications	
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
Optional Accessories	
Power Supply	SDR-480P-48: 480W DIN-Rail 48V DC Industrial Power Supply, -25°C~70°C
GBM-104	1000BASE-SX 1.25G, Multi-mode SFP, 500m
GBM-123TS	1000BASE-LX, Bi-Di SFP TX:1310/RX:1550 Single Mode, 10Km, 0°C~70°C / -32°F~158°F
GBM-123RS	1000BASE-LX, Bi-Di SFP TX:1550/RX:1310 Single Mode, 10Km, 0°C~70°C / -32°F~158°F

Note :

** The SFP communication distance upon the request.*

** Industrial SFP with wide operating temperature from -40°C~85°C is available upon request.*

** Specifications subject to change without notice.*

Dimension