

7015-8GT2GS-I

Unmanaged 8 x 10/100/1000 RJ45 & 2 x GbE SFP Industrial Switch

Description

7015-8GT2GS-I is an unmanaged industrial Gigabit Ethernet switch, with 8 auto-negotiation 10/100/1000 Mbps downlink ports and 2 GbE SFP uplink ports for noise-free fiber connectivity, used in versatile applications with expected expansion requirements or requirements of long distance connectivity to control rooms and other devices. This unmanaged switch can connect to different machine and adapt to their speed, including PLCs, HMIs and legacy devices.

The switch offers various in-built traffic optimization and network performance features to prioritize important industrial data packets, prevent the loss of data during communication, and stable transmission; like Flow and Storm control and VLAN Passthru. It prioritizes industrial protocols for industrial applications, like Ethernet/IP, PROFINET, and GOOSE packets. Additionally, it offers per-port and 802.1p Tag Quality of Service to ensure the delivery of high priority data.

This networking device is built with industrial grade components to protect it from hazards like vibration, shock, free fall, interference, and extreme temperatures that make it resistant to harsh industrial environments. The device also uses a Redundant Power Supply and Alarm System to ensure it works uninterruptedly, even during power outages and alert technicians if one power source fails.



Features Highlight

Ruggedized Components Designed for Harsh Industrial Environments

Built with industrial-grade components, good thermal conductivity, and enclosed in an IP40 metal case, this Ethernet switch is resistant to extreme environments, vibration, EMI (electromagnetic interference), ESD (electrostatic discharge), power surge, over-voltage, over-current, and reverse polarity. It withstands operation at extreme temperatures between -40°C~75°C (-40°F~167°F). It follows international safety standards like CE, FCC, and ROHS for safe operation.



Quick and Convenient Installation with Auto-negotiation

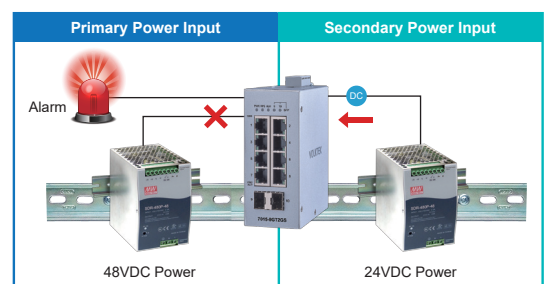
7015-8GT2GS-I works as soon as it is connected and makes installation convenient. Two 24~48VDC power supplies and an alarm can connect to the 6-pin terminal block for power and notifications. The 10/100/1000 Mbps ports use auto MDI/MDI-X connection for auto-negotiation to work with other network devices quickly after plugged and at the required speed without extra software installation needed. The SFP ports are compatible with multiple types of SFP modules. The LED signals show when the device is in operation. Its versatile compact design allows it to fit in cabinets and other areas with limited space and can be fixed to a standard TH35 DIN rail for stable installation.

Traffic Control Mechanisms to Optimize Bandwidth Usage

Traffic control mechanisms regulate excessive traffic to avoid delay, data loss and connection issues between devices. This unmanaged switch offers mechanisms such as Flow and Storm Control that prevent devices from overwhelming each other during the exchange of data and to keep the flux at a tolerable rate, hence keeping devices working within their capacity and avoiding the network from collapsing.

Redundant Power Supply and Alarm System

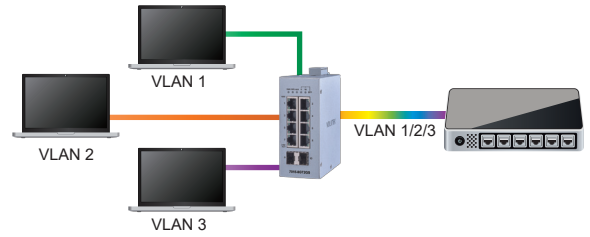
Two power supplies and one alarm connect to the 6-pin terminal block of this device to ensure it is powered all the time. When one of the connected power supplies stops working or in case of power outage, the device feeds power from the alternative power source and switches the alarm on. The Alarm signal on the LED panel lights up. The alarm notifications can be activated through the DIP switch on its physical interface.



Features Highlight

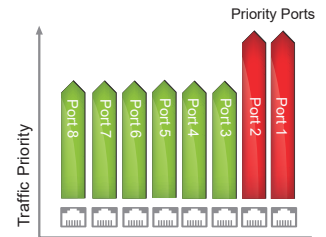
Intelligent VLAN Data Forwarding

This unmanaged switch is aware enough to read the source and destination of VLAN tagged data packets. 7015-8GT2GS-I delivers VLAN packets without changing or dropping them assuring operational data in industrial fields is delivered safely across devices.



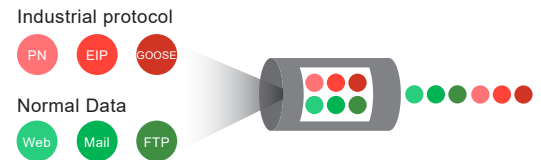
Critical Data Transmission Priority

7015-8GT2GS-I streamlines the execution of time-sensitive applications with the 802.1p Tag QoS by classifying data into high and low priority. Mission-critical applications in industrial automation like manufacturing and monitoring can be done without delay through port priority on ports #1 and #2 even during high traffic.



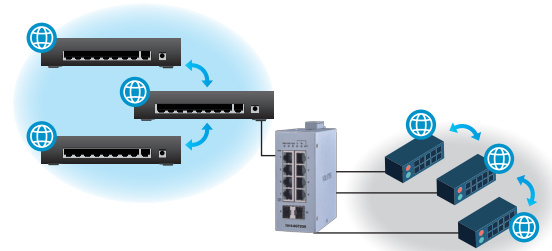
Prioritizes Industrial Standard Protocols

Industrial automation applications employ packet protocols that focus on delivering data under tight time constraints. This unmanaged switch is configured with iQoS to prioritize industrial application protocols and deliver time-sensitive data used in industrial applications first, including Ethernet/IP, PROFINET, and GOOSE (Generic Object Oriented Substation Events).



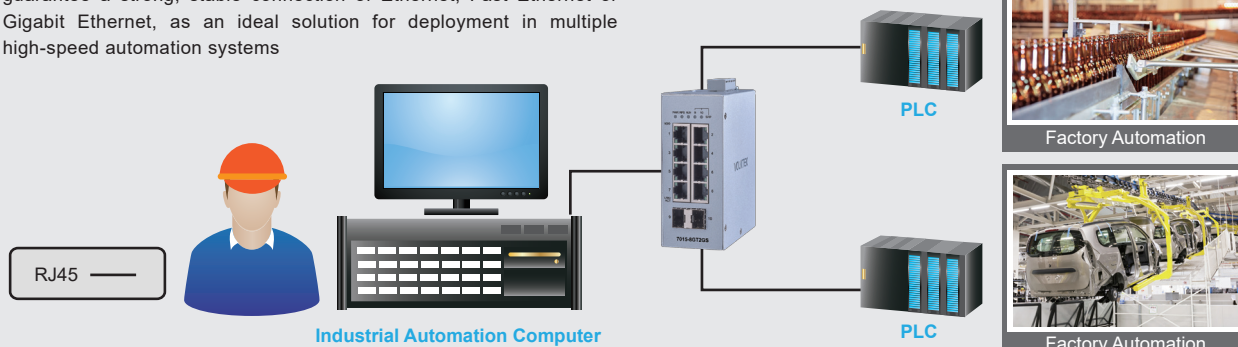
Connects Large Network Groups and Facilitates Data for Monitoring Systems

During network discovery unmanaged switches can cause device flapping and make it difficult for monitoring systems to access device data. 7015-8GT2GS-I avoids device flapping when connected to a managed switch. Using the LLDP Filter feature the device can be used in large networks. It allows other devices in the network to exchange identifiable data for accurate monitoring without concerns from detecting erroneous messages and false alerts in the presence of an unmanaged switch.



Applications

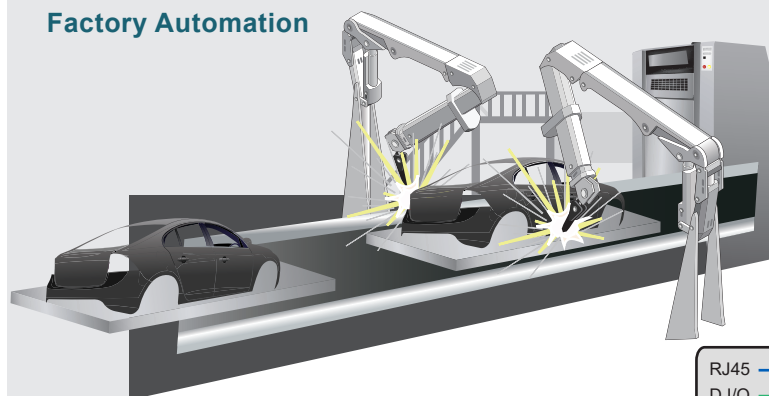
The 7015-8GT2GS-I is compatible with 10/100/1000Mbps through RJ45 to guarantee a strong, stable connection of Ethernet, Fast Ethernet or Gigabit Ethernet, as an ideal solution for deployment in multiple high-speed automation systems



Factory Automation

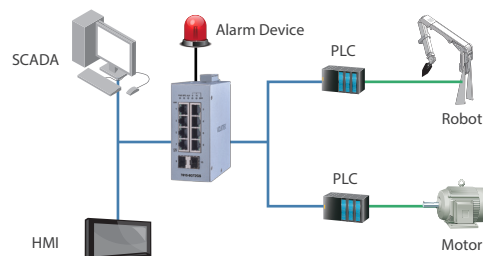
Relay Output Alarm for Power Failure

The 7015-8GT2GS-I is built with relay contact outputs that trigger alarms to notify network engineers in the event of power failure, and enables them to quickly respond and resolve high priority issues.



Redundant Power input

The 7015-8GT2GS-I has dual power inputs to provide a redundant system against power supply disruptions. In case of one power source failure, the other acts as a backup to remain continuous network power for critical industrial applications.



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	8 x 10/100/1000BASE-T (RJ45) 2 x GbE SFP Slots
DIP Switch	Power voltage drop alarm setting (PWR & RPS), Voltage drop alarm setting
LED Panel	PWR, RPS, ALM, SFP, 1000, LNK/ACT
Features	
Performance	Max Jumbo Frame Size: 10KBytes MAC Table Entries: 8K Switch Fabric: 20Gbps L2 Forwarding Rate: 14.8Mpps
Traffic Control	Flow Control, Broadcast/DLF Storm Control, LLDP Filter, VLAN Passthru, Port Priority (port 1), 802.1p QoS, Ethernet/IP (EIP) QoS, PROFINET QoS, GOOSE QoS
Power	
Input Voltage	Primary inputs: 24~48VDC Redundant Inputs: 24~48VDC
Connection	Terminal Block
System Power Consumption	11W
Alarm Relay	One relay output with current carrying capacity of 1A@ 24V DC
Mechanical and Environment	
Housing	Metal (IP40 protection)
Mounting Kit	DIN-Rail
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	550 g (1.2 lb)
Dimension (WxHxD)	50 x 116 x 100 mm (1.97 x 4.57 x 3.93 in)

Standards and Certifications

EMI	FCC Part 15 Subpart B Class A EN 55032: Class A EN 55011:2016 Class A EN 61000-6-4
EMS	EN 55024 IEC 61000-4-2 (ESD) IEC 61000-4-3 (RS) IEC 61000-4-4 (EFT) IEC 61000-4-5 (Surge) IEC 61000-4-6 (CS) IEC 61000-4-8 (PFMF) EN 61000-6-2
Shock	IEC 60068-2-27
Freefall	IEC 60068-2-31
Vibration	IEC 60068-2-6

Ordering Information

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Optional Accessories

Power Supply	SDR-120-48: 120W DIN-Rail 48V DC Industrial Power Supply, -25°C~70°C (-13°F~158°F)
GBM-104	1000BASE-SX 1.25G, Multi-mode SFP, 500m
GBM-104-10	1000BASE-LX 1.25G, Single mode SFP, 10Km
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)

*Industrial SFP with wide operating temperature from -40°C~85°C (-40°F~185°F) is available upon request

*Specifications subject to change without notice.

Dimension

