#### 2024~2025 Volktek Product Catalog

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## 7013-16T-I Unmanaged 16 x 10/100 RJ45 Industrial Switch

## Description

The 7013-16T Industrial Ethernet Switch is a versatile and resilient networking device, equipped with sixteen 10/100Base-TX ports to support high-bandwidth applications in industrial settings. It's designed with a 16KB jumbo frame for efficient data packet processing and is built to withstand extreme temperatures from -40 to 75°C, thanks to its IP40-rated aluminum casing.

This unmanaged switch features Auto-negotiation technology for hassle-free network setup, offering full duplex capabilities with up to 200 Mbps throughput per port for rapid file transfers. Its compact design and silent operation (fan-less) make it suitable for any workspace, while MDI/MDIX auto-detection ensures easy connectivity with any cable type.

The 7013-16T's LED indicators provide convenient monitoring, and its Din-Rail mounting compatibility allows for secure installation in various environments. With 12/24/48 VDC redundant power inputs and advanced EMI/EMC protection, the switch is reliable and safe for all industrial applications. It also comes with a 5-year warranty and has passed a 100% burn-in test to ensure durability and consistent performance. This switch is an ideal solution for expanding industrial networks, offering both robustness and ease of use.

## **Features Highlight**

#### Ruggedized Components Designed for Harsh Industrial Environments

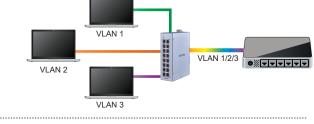
Built with industrial-grade components, good thermal conductivity, and enclosed in an IP40 metal case, this Ethernet switch is resistant to extreme environments, vibration, EMI (electromagnetic interference), ESD (electrostatic discharge), power surge, over-voltage, over-current, and reverse polarity. 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

7013-16G-I works as soon as it is connected and makes installation convenient. One 12~48VDC power supply connects to the 2-pin terminal block for power. The 10/100 Mbps ports use auto MDI/MDI-X connection for auto-negotiation to work as soon as connected to other network devices at the required speed without extra software installation needed. The LED light displays when the device is in on. The compact and port-dense design allows it to fit at different locations for many devices to operate in the same network.

#### Intelligent VLAN Data Forwarding

The 7013-16T-I is aware enough to read the source and destination of VLAN tagged data packets. This unmanaged switch delivers VLAN packets without changing or dropping them assuring operational data in industrial fields is delivered safely across devices.



#### High Port Density for Complex Applications

This high port density switch has 16 10/100 Mbps Ethernet ports to connect many devices like robots, control devices and peripherals for large and complex applications and automated processes. Each port adapts accordingly to the speed required by the device connected to this networking switch.

#### 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 uses Flow Control to prevent devices from overwhelming each other during the exchange of data hence keeping devices working within their capacity.









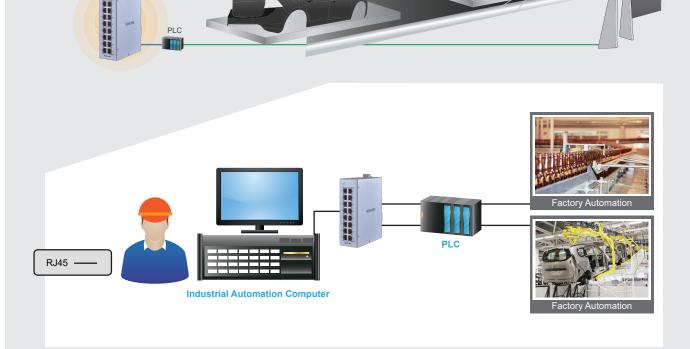
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## Applications

## Factory Automation

### **EMC Protection**

In industrial networks, the propagation and reception of electromagnetic energy may impact electronic devices including networking switches. To protect data transmission in these scenarios our switch is designed with efficient EMC protection to secure the device against electromagnetic failures generated from various sources.



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## Specifications

Standards	
IEEE 802.3	10BASE-T
IEEE 802.3u	100BASE-TX
IEEE 802.3	Nway Auto-negotiation
IEEE 802.3x	Flow Control
Interface	
Ports	16 x 10/100BASE-TX Port
LED Panel	PWR, 100, LNK/ACT
Features	
Performance	Jumbo Frames Size: 16Kbytes
	MAC Table Entries: 16K
	Switching Fabric: 3.2Gbps
	Forwarding Rate: 2.38Mpps
Power	
Input Voltage	12~48VDC
Power Consumption	System 10W
Mechanical and Environment	
Housing	Metal (IP40 protection)
Operating Temperature	-40°C~75°C
Storage Temperature	-40°C~85°C
Operating Humidity	5% to 95%
Storage Humidity	5% to 95%
Weight	900g (2.18 lb)
Dimension (WxHxD)	50 x 163.4 x 120mm (1.97 x 6.43 x 4.72in)

Certifications	
Electromagnetic Compatibility	FCC Part 15 Subpart B Class A EN 55032 / UKCA Class A EN55035 / UKCA CISPR 32 Class A ICES-003 Issue 7 EN 61000-6-2 / UKCA EN 61000-4-2 (ESD) EN 61000-4-3 (RS) EN 61000-4-4 (EFT) EN 61000-4-5 (Surge) EN 61000-4-6 (CS) IEC 61000-4-8 (PFMF)
Safety	UL 61010-1 / UL 61010-2-210
Freefall	IEC 60068-2-31
Shock	IEC 60068-2-27
Vibration	IEC 60068-2-6
Ordering Information	
7013-16GT-I	Unmanaged 16 x 10/100 RJ45 Industrial Switch
<b>Optional Accessories</b>	
SDR-120-48	DIN-Rail, 120W, 48VDC, Industrial Power Supply with PFC Function

Note:

\* The highest degree of temperature operation certified by UL is -40°C~75°C (-40°F~167°F). \* Specifications subject to change without notice.

### Dimension

