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# Woodpecker 7013-16GT-I

## Unmanaged 16 x 10/100/1000 RJ45 Industrial Switch


## Description

Woodpecker 7013-16GT-I is an unmanaged industrial Gigabit Ethernet switch with 16 auto-negotiation 10/100/1000 Mbps downlink ports for scalable networks in automated settings. This high port density switch is used in complex industrial applications to connect to multiple devices including multi-axis robots and their peripherals such as 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 VLAN Passthru. Ensures the delivery of high priority time-sensitive data with transfer priority for PROFINET protocols and 802.1p Tag QoS 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.

## Features Highlight

### Ruggedized Components Designed for Harsh Industrial Environments

Built with industrial-grade components, good thermal conductivity, and enclosed in an IP30 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

Woodpecker 7013-16GT-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 10/100/1000 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 and can be mounted to a standard TH35 DIN rail.

### Traffic Control Mechanisms to Optimize Bandwidth Usage

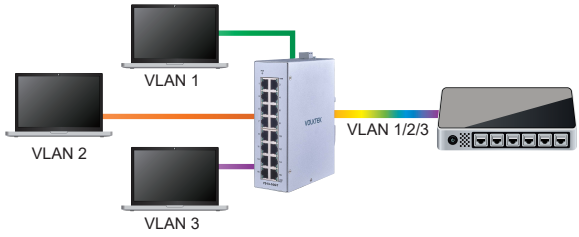
Traffic control mechanisms regulate excessive traffic to avoid delay, data loss and connection issues between devices. This unmanaged switch uses Flow Control to prevent devices from overwhelming each other during the exchange of data hence keeping devices working within their capacity.

### High Port Density for Complex Applications

This high port density switch has 16 10/100/1000 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.

### Intelligent VLAN Data Forwarding

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



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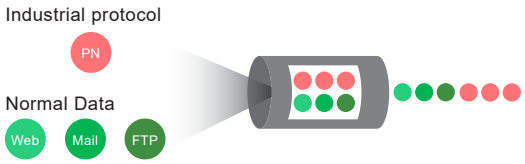
## Features Highlight

### Critical Data Transmission Priority

Woodpecker 7013-16GT-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.

### Prioritizes Industrial Standard Protocols

Industrial automation applications employ packet protocols that focus on delivering data under tight time constrains. This unmanaged switch is configured with iQoS to prioritize PROFINET industrial application protocols and deliver time-sensitive data used in industrial applications first.

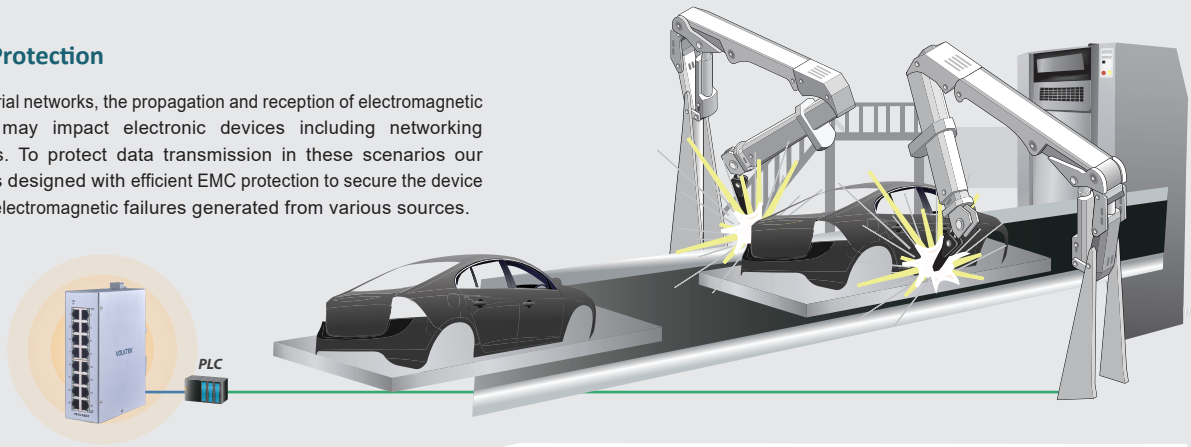


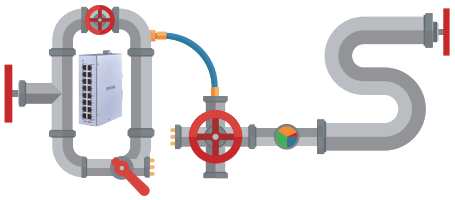

## Applications

### Factory Automation

#### EMC Protection

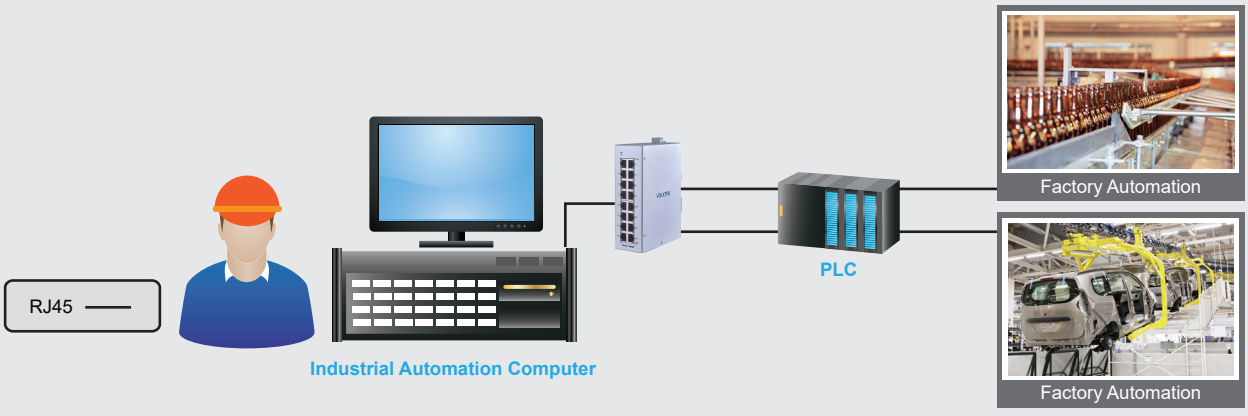
In industrial networks, the propagation and reception of electromagnetic energy may impact electronic devices including networking switches. To protect data transmission in these scenarios our switch is designed with efficient EMC protection to secure the device against electromagnetic failures generated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



#### QoS Features

In factory automation, some tasks need to be prioritized in the execution of a process. The switch uses QoS 802.1p Tag Qos and iQoS (industrial) for **PROFINET** protocol. It defines the services priority in relation to their time-relevance and importance in automated applications.



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## Specifications

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|---|---|
| **Standards** | |
| **IEEE 802.3** | 10BASE-T |
| **IEEE 802.3u** | 100BASE-TX |
| **IEEE 802.3ab** | 1000BASE-T |
| **IEEE 802.3** | Nway Auto-negotiation |
| **IEEE 802.3x** | Flow Control |
| **IEEE 802.1p** | Class of Service |
| **Interface** | |
| **Ports** | 16 x 10/100/1000BASE-T (RJ45) |
| **Connectors** | Terminal Block |
| **LED Panel** | PWR |
| **Features** | |
| **Performance** | Jumbo frame Size: 10KBytes |
| | MAC Table Entries: 8K |
| | L2 Forwarding Rate: 23.8Mpps |
| | Switch Fabric: 32Gbps |
| **QoS** | 8 Hardware Queues |
| | Support priority tagged frame (VID=0) |
| **Power** | |
| **Input Voltage** | Primary inputs: 12~48VDC |
| **Connection** | Teminal Block |
| **Power Consumption** | 14W |
| **Reverse Polarity** | Present |
| **Mechanical and Environment** | |
| **Housing** | Metal (IP40 protection) |
| **Mounting** | DIN-Rail |
| **Operating Temperature** | -40°C~75°C (-40°F~167°F) |
| **Storage Temperature** | -40°C~85°C (-40°F~185°F) |
| **Operating Humidity** | 5~95% RH (non-condensing) |
| **Storage Humidity** | 5~95% RH (non-condensing) |
| **Weight (w/ RJ45 cap)** | 900g (2.18 lb) |
| **Weight (w/o RJ45 cap)** | 880g (1.94 lb) |
| **Dimension (WxHxD)** | 50 x 163.4 x 120mm (1.97 x 6.43 x 4.72in) |

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|---|---|
| **Certifications** | |
| **EMI** | FCC Part 15 Subpart B Class A |
| | EN 55011 class A |
| | EN 55032 class A |
| | EN 61000-6-4 |
| **EMS** | EN 61000-6-2 |
| | EN 55024 |
| | 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 Test** | IEC 60068-2-27 |
| **Freefall Test** | IEC 60068-2-31 |
| **Vibration** | IEC 60068-2-6 |
| **Safety** | UL 61010-1, UL 61010-2-201 |
| **Ordering Information** | |
| **Woodpecker 7013-16GT-I** | Unmanaged 16 x 10/100/1000 RJ45 Industrial Switch |
| **Optional Accessories** | |
| **Power Supply** | 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