VALTORIS®
Reliable IIoT Connectivity

# VT-SW6EC

## 6-Port 100M DIN-Rail Industrial EtherCAT Junction Switch




- Support 6*100M EtherCAT ports (1 input and 5 outputs)
- Support high-speed real-time transmission, provide nanosecond transmission delay, and ensure fast data transmission and synchronization in real-time control systems
- Support flexible topology, such as linear, tree, star and other topologies or combinations
- Support cascading and expansion, each network segment can accommodate up to 65535 slaves
- Comply with EtherCAT conformance test
- Support DC9~60V or AC24V power input, non-polarity
- High-strength aluminum alloy shell, IP40 protection grade, the equipment can work reliably in -40℃~+75℃ harsh industrial environment

## Product Description

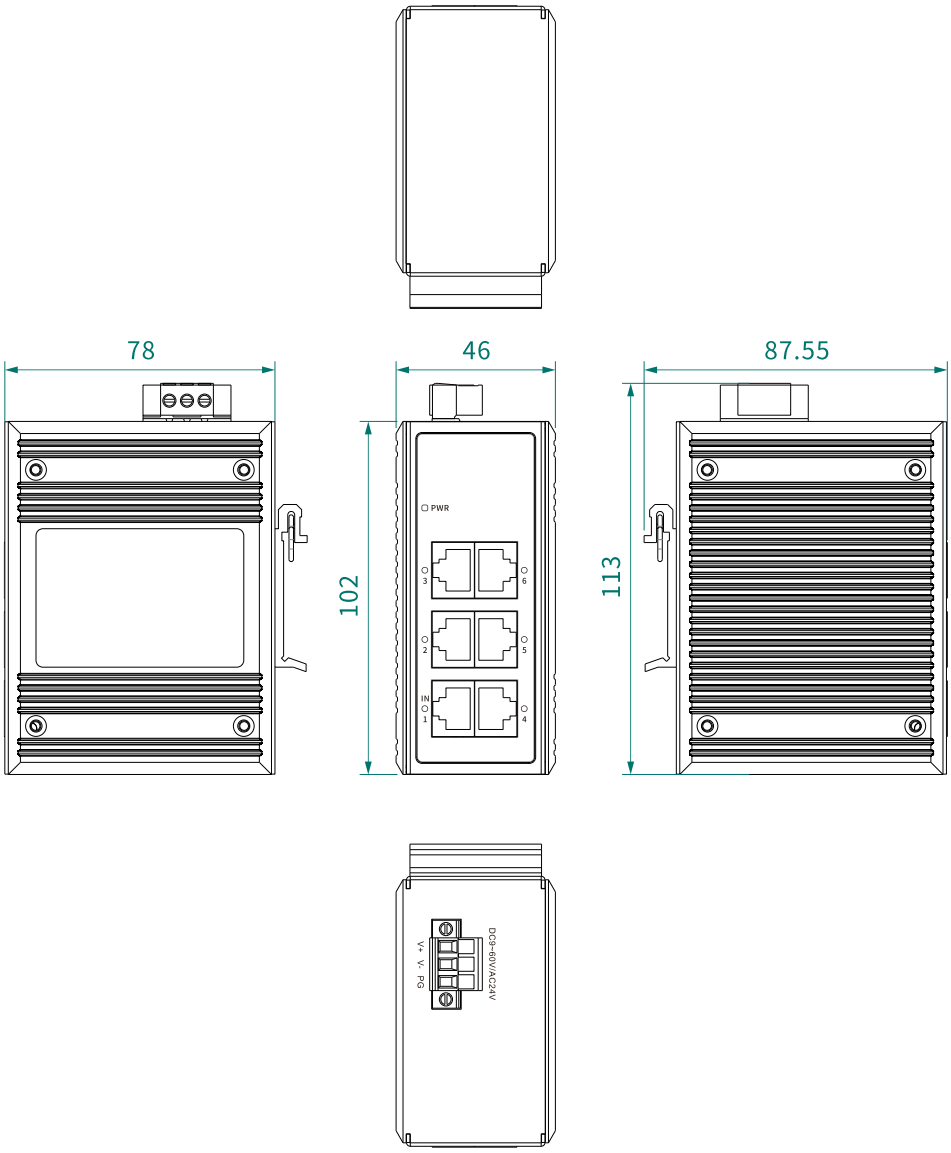
Equipped with 6 EtherCAT copper ports—1 input and 5 outputs—the VT-SW6EC ensures seamless connectivity for your EtherCAT network. Its EtherCAT slave controller enables dynamic, high-speed data processing with pure hardware mechanisms, delivering efficient real-time data handling. With distributed clocks, the VT-SW6EC offers precise synchronization across your EtherCAT slave devices, making it ideal for time-sensitive industrial applications. Built on Ethernet transmission, this switch uses standard Ethernet frames, interfaces, and cables, providing full-duplex 100M bandwidth. Its logical ring structure ensures that over 90% of each frame is usable data, supporting linear, tree, and star topologies. The VT-SW6EC supports up to 65,535 slave node devices, with unlimited topology configurations. This flexibility is further enhanced by EtherCAT configuration tool topology management, giving users the freedom to scale and adapt their networks as needed. Crafted with high-strength aluminum alloy and designed for a wide operating temperature range of -40℃ to +75℃, the VT-SW6EC is built to endure harsh industrial environments. Its 35mm standard rail-mounted installation and industrial-grade components ensure long-lasting, stable communication performance.

## Specification

| | |
|---|---|
| **Interface** | |
| Ether CAT | Protocol standard: EtherCAT<br>Interface type: 6* RJ45 (1 in 5 out), supports auto MDI/MDI-X<br>Transmission rate: 100Mbps<br>Transmission medium: shielded Category 5 cable and above (network cable CAT5 and above)<br>Transmission distance: ⩽100m<br>Number of nodes: ⩽65535 |
| Status LED | Power indicator, interface indicator |
| **Power Supply** | |
| Input Voltage | DC model: DC9~60V or AC24V, no polarity |
| Power Consumption | ＜3.5W@DC24V |
| Connection | 3-pin 5.08mm pitch lock terminal block |
| **Physical Characteristics** | |
| Dimensions | 102×46×78 mm (DIN rail mounting clip excluded) |
| Installations | Standard installation on 35mm DIN rails |
| IP Code | High-strength aluminum alloy housing, IP40 protection grade |
| Weight | About 0.35kg |
| **Working Environment** | |
| Operating Temp | -40℃~ +75℃ |
| Storage Temp | -40℃~ +85℃ |
| Relative Humidity | 5%~95% (non-condensing) |
| **Industry Standard** | |
| EMC | IEC 61000-4-2 (ESD): Level 3<br>IEC 61000-4-5 (Surge): Level 3<br>IEC 61000-4-4 (EFT): Level 3 |
| Certification | CE, FCC, RoHS |

## Dimensions

Unit: mm



## Ordering Information

| Standard Model | 100M Copper Ether CAT(Input) | 100M Copper Ether CAT(Output) | Input Voltage |
|---|---|---|---|
| VT-SW6EC | 1 | 5 | DC9~60V Or AC24V |

## Contact Us

**Shanghai Valtoris Electronic Technology Co., Ltd.**

Address: 1088 Fanghe Road, Minhang District, Shanghai, China (201109)
Mail: sales@valtoris.com
Official site: www.valtoris.com

Copyright © Valtoris Technology All rights reserved