VALTORIS®
Reliable IIoT Connectivity

VT-SW3EC

3-Port 100M DIN-Rail Industrial EtherCAT Switch



- Support 3*100M EtherCAT ports (1 input and 2 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

The VT-SW3EC is equipped with 3 EtherCAT copper ports—1 input and 2 outputs—perfect for creating efficient, high-speed EtherCAT networks. Utilizing an EtherCAT slave controller, this switch dynamically processes data with pure hardware mechanisms, ensuring real-time data insertion and extraction. With distributed clocks, the VT-SW3EC 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-SW3EC 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.

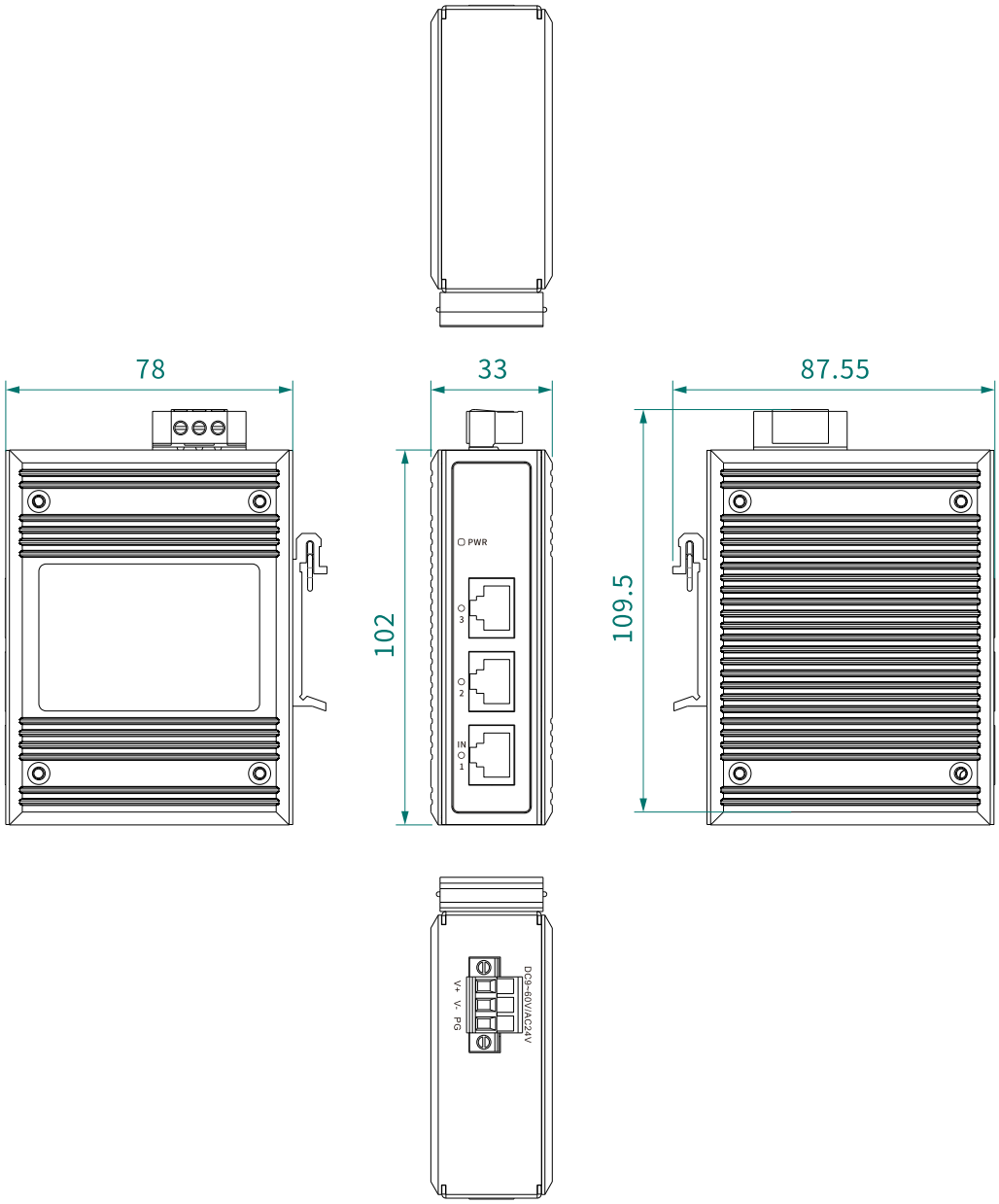
Crafted with high-strength aluminum alloy and designed for a wide operating temperature range of -40℃ to +75℃, the VT-SW3EC is built to endure harsh industrial environments. Its 35mm standard Din-rail installation and industrial-grade components ensure long-lasting, stable communication performance. VT-SW3EC is a 3-port 100M industrial EtherCAT switch designed for precision and performance. Whether you're managing complex automation systems or controlling advanced robotics, this switch provides the real-time, reliable connectivity you need to keep your operations running smoothly.

Specification

Interface	
Ether CAT	Protocol standard: EtherCAT Interface type: 3 port RJ45 (1 in 2 out), supports MDI/MDI-X auto-sensing Transmission rate: 100Mbps Transmission medium: shielded Category 5 cable and above (network cable CAT5 and above) Transmission distance: ⩽100m Number of nodes: ⩽65535
Status LED	Power indicator, interface indicator
Power Supply	
Input Voltage	DC9~60V or AC24V, no polarity
Power Consumption	＜1.5W@DC24V
Connection	3-pin 5.08mm pitch lock terminal block
Physical Characteristics	
Dimensions	102×33×78 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 0.26kg
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 IEC 61000-4-5 (Surge): Level 3 ※The network port supports 6kV lightning protection 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-SW3EC	1	2	DC9~60V or AC24V

Contact Us

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