

# RS120T Series

20-port IEC61850-3 Industrial Ethernet switches



- ▶ 16 Gigabyte Ethernet ports and 4 Gigabit fiber optic ports
- ▶ Designed for Railway application and fully compliant with the requirement of IEC 61850-3 and IEEE 1613
- ▶ RSTP/STP(IEEE 802.1s/w/D)
- ▶ IGMP v2/v3 (IGMP snooping support) for filtering multicast traffic
- ▶ Port Trunking for easy of bandwidth management
- ▶ SNMP v1/v2c/v3 support for secured network management
- ▶ Event notification through Syslog, Email, SNMP trap, and Relay Output
- ▶ support centralization management and configurable by Web-based, Telnet, Console(CLI)
- ▶ PoE/PoE+ option



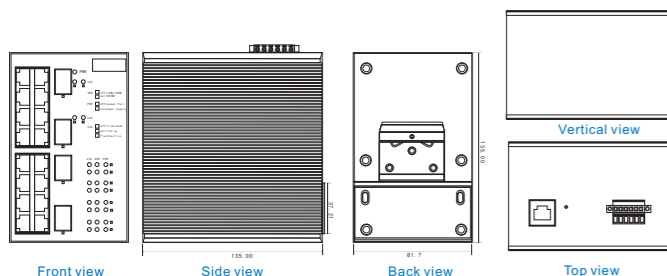
## Overview:

The RS120T series are IEC 61850-3 managed Redundant Ring Ethernet switch with 16 Gigabyte Ethernet ports and 4 Gigabit fiber optic ports. It is designed for power substation application and rolling stock application, fully compliant with the requirement of IEC 61850-3 and IEEE 1613. With completely support of Ethernet Redundancy protocol, ERPS and RSTP/STP can protect your mission-critical applications from network interruptions or temporary malfunctions with its fast recovery technology. It allows multiple redundant network rings of different redundancy protocols to join and function together as a larger and more robust compound network topology.

The RS120T series provided ease-of-use while maximizing fault-recovery swiftness, flexibility, compatibility, and cost-effectiveness in one set of network redundancy topology. In addition, the wide operating temperature range from -40 to 85°C can satisfy most of operating environment. Therefore, these switches are one of the most reliable choices for highly-managed Fiber Ethernet power substation and rolling stock application.

## Dimensions:

Size: (mm)



## Order information:

| Model No     | Description         |                     |
|--------------|---------------------|---------------------|
|              | 10/100/1000BaseT(X) | 1000BaseF(X) or SFP |
| WT-CS-90416G | 16                  | 4                   |

## Specifications:

|                                 |  |   |                          |
|---------------------------------|--|---|--------------------------|
| <b>Protocols</b>                | IGMPv1/v2/v3, GMRP, GVRP, SNMPv1/v2c/v3, DHCP Server/Client, DHCP Option 66/67/82, BootP, TFTP, SNMP, SMTP, RARP, RMON, HTTP, HTTPS, Telnet, SSH, Syslog, EtherNet/IP, PROFINET, Modbus/TCP, SNMP Inform, LLDP, IEEE 1588 PTP V2, IPv6, NTP Server/Client  |   |                          |
| <b>MIB</b>                      | MIB-II, Ethernet-Like MIB, P-BRIDGE MIB, Q-BRIDGE MIB, Bridge MIB, RSTP MIB, RMON MIB Group 1, 2, 3, 9   |   |                          |
| <b>Flow Control</b>             | IEEE 802.3x flow control, back pressure flow control   |   |                          |
| <b>Switch Properties</b>        | Priority Queues: 4<br>Max. Number of Available VLANs: 64<br>VLAN ID Range: VID 1 to 409  | IGMP Groups: 256<br>MAC Table size: 8K<br>Packet Buffer Size: 4Mbit | Jumbo Frame Size: 9.6 KB |
| <b>Interface</b>                | Fiber Ports: 1000BaseF(X) or SFP<br>Rj45 Ports: 10/100/1000BaseT(X) auto negotiation speed, and auto MDI/MDI-X connection<br>Console port: RS-232 (RJ45 connector)<br>LED Indicators: PWR, L/A, SPD, PoE(option)   |   |                          |
| <b>Power Requirement</b>        | Input Power: 100~240VAC with power cord and dual +12~+48 VDC or -12~-48 VDC inputs in 6-pin terminal block<br>Power Consumption: 12 Watts<br>Overload Current Protection: Present  |   |                          |
| <b>Physical Characteristics</b> | Housing: Aluminum, IP40 protection<br>Dimensions: 135 x 125 x 85mm (5.3 x 4.9 x 3.3 in)<br>Weight: 900g<br>Installation: DIN-rail mounting, Wall mounting  |   |                          |
| <b>Environmental Limits</b>     | Operating Temperature: -40 ~ 85 °C ( - 40 ~ 185 °F)<br>Storage Temperature: -40 ~ 85 °C ( - 40 ~ 185 °F)<br>Ambient Relative Humidity: 5 ~ 95% (non-condensing)  |   |                          |
| <b>Standards</b>                | Power Automation:<br>IEC 61850-3, IEEE 1613<br>EMI:<br>FCC Part 15, CISPR (EN55022) class A<br>EMS:<br>EN61000-4-2 (ESD), EN61000-4-3 (RS), EN61000-4-4 (EFT), EN61000-4-5 (Surge), EN61000-4-6 (CS), EN61000-4-8, EN61000-4-11<br>Shock: IEC 60068-2-27<br>Free fall: IEC 60068-2-32<br>Vibration: IEC 60068-2-6<br>Safety: EN60950-1<br>IEEE 802.3 for 10Base-T<br>IEEE 802.3u for 100Base-TX<br>IEEE 802.3ab for 1000Base-T<br>IEEE 802.3z for 1000Base-X<br>IEEE 802.3x for Flow control<br>IEEE 802.3ad for LACP (Link Aggregation Control Protocol)<br>IEEE 802.1p for COS (Class of Service)<br>IEEE 802.1Q for VLAN Tagging<br>IEEE 802.1D for STP (Spanning Tree Protocol)<br>IEEE 802.1w for RSTP (Rapid Spanning Tree Protocol)<br>IEEE 802.1s for MSTP (Multiple Spanning Tree Protocol)<br>IEEE 802.1 for Authentication<br>IEEE 802.1AB for LLDP (Link Layer Discovery Protocol) |   |                          |
| <b>Warranty</b>                 | 5 years  |   |                          |