



Features

- 16 10/100/1000BaseT Ports
- 4 100/1000/2500 Base X SFP ports
- L2 management and security features (L2 Model)
- Operating wide temperature -40°C to 75°C
- Din Rail mounting (rack mounting kits optional)

Description

Features and Benefits

- Support network redundancy for < 50ms recovery time
- Support Media Redundancy Protocol (compliant with IEC62439)
- Any two ports can establish a self-recovery ring and support multiple independent self-recovery rings
- Support Dying gasp function and initiatively report power-down state through SNMP protocol
- Support MODBUS/UDP/SNMP remote monitoring and various mainstream OPC software
- Built-in unified real-time operating systems
- Dual redundant power inputs design
- Fanless design
- -40°C ~ 75°C wide operating temperature
- MTBF >600, 000 hours

Specifications

Technical Specifications-I

- IEEE 802.3 CSMA/CD method and physical Layer specifications
- IEEE 802.1p Priority Queuing
- IEEE 802.1q VLAN tagging
- IEEE 802.1d Spanning Tree Algorithm
- IEEE 802.1w Rapid Spanning Tree
- IEEE 802.1s Multiple Spanning Tree
- IEEE 802.3ac VLAN Tagging
- IEEE 802.1x Authentication
- IEEE 802.3ad Link Aggregation
- IEEE 802.3x Flow Control
- IEEE 802.3 Ethernet
- IEEE 802.3u Fast Ethernet
- IEEE 802.3z Gigabit Ethernet
- RFC 768 UDP
- RFC 791 IP
- RFC 792 ICMP
- RFC 793 TCP
- RFC 826 ARP
- RFC 854 Telnet Client & Server
- RFC 862 Echo Protocol
- RFC 863 Discard Protocol
- RFC 904 Exterior Gateway Protocol Formal Specification
- RFC 1027 Using ARP to Implement Transparent Subnet Gateways
- RFC 1059 1119 NTPv1/2
- RFC 1112 IGMP

Technical Specifications-II

- RFC 1812 Requirements for IP Version 4 Routers
- RFC 1994 PPP Challenge Handshake Authentication Protocol (CHAP)
- RFC 2068 HTTP
- RFC 213 DHCP Server
- RFC 2138 RADIUS
- RFC 2139 RADIUS Accounting
- RFC 2236 IGMPv2
- RFC 2474 DiffServ Precedence
- RFC 2865 Remote Authentication Dial User Service (RADIUS)
- RFC 3046 DHCP Relay Agent Information Option
- GMRP GARP
- GVRP GARP
- SSH2 Secure Shell 2
- IGMP snooping
- SNMPv3

■ Specifications

Hardware Description

Backplane Bandwidth	68Gbps
CPU	333MHz RISC
Switch Architecture	Store-and-Forward
MAC Table Size	16K
Packet Buffer Size	4Mbit
Exchange Rate	148, 800 pps/100M ports; 1, 488, 000pps/1000M ports

Mechanical Characteristics

Vibration	IEC 60068-2-6
Shock	IEC 60068-2-27
Freefall	IEC 60068-2-31
Circuit Board	Approved by IPC

Software Functions

Management Mode	Web, serial port, STD-17 MIB-II, STD-58 SMiv2, STD-59 RMON, STD-62SNMPv3, SNMPv2c, SNMPv1, RFC2925 Ping MIB, Private MIBs Present
Diagnosis Mode	Indicator light, journal file, relay, RMON, port mirroring, TRAP
Redundancy	MRP, RSTP, port trunking
Time Synchronization	SNTP
Others	4K VLANs, IPv4/IPv6 multi-cast, storm control, MC/BC protection Jumbo Frame

Environment

MTBF	> 600, 000 hours
Storage Temperature	-40°C ~ 85°C
Operating Temperature	-40°C ~ 75°C
Ambient Relative Humidity	5% ~ 95% (non-condensing)

Industrial Certification and Testing (In Process)

Product Safety	CE IEC/EN609501 FCC Part 15 Subpart B Class A IEC/EN55022 Class A
Industrial Control Industry	UL/cUL61010

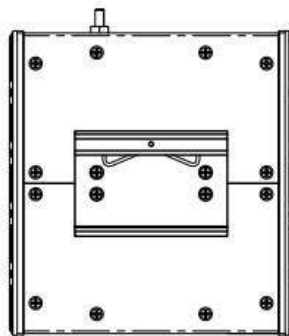
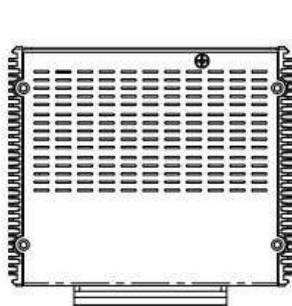
Electromagnetic Characteristics

EMI	FCC 47 CFR Part 15 Class A EN55022 Class A
EMS	IEC (EN)61000-4-2, Class 4 IEC (EN)61000-4-4, Class 3 IEC (EN)61000-4-5, Class 4 IEC (EN)61000-4-8, Class 5 IEC (EN)61000-4-11, Class 4 IEC (EN)61000-4-12, Class 3

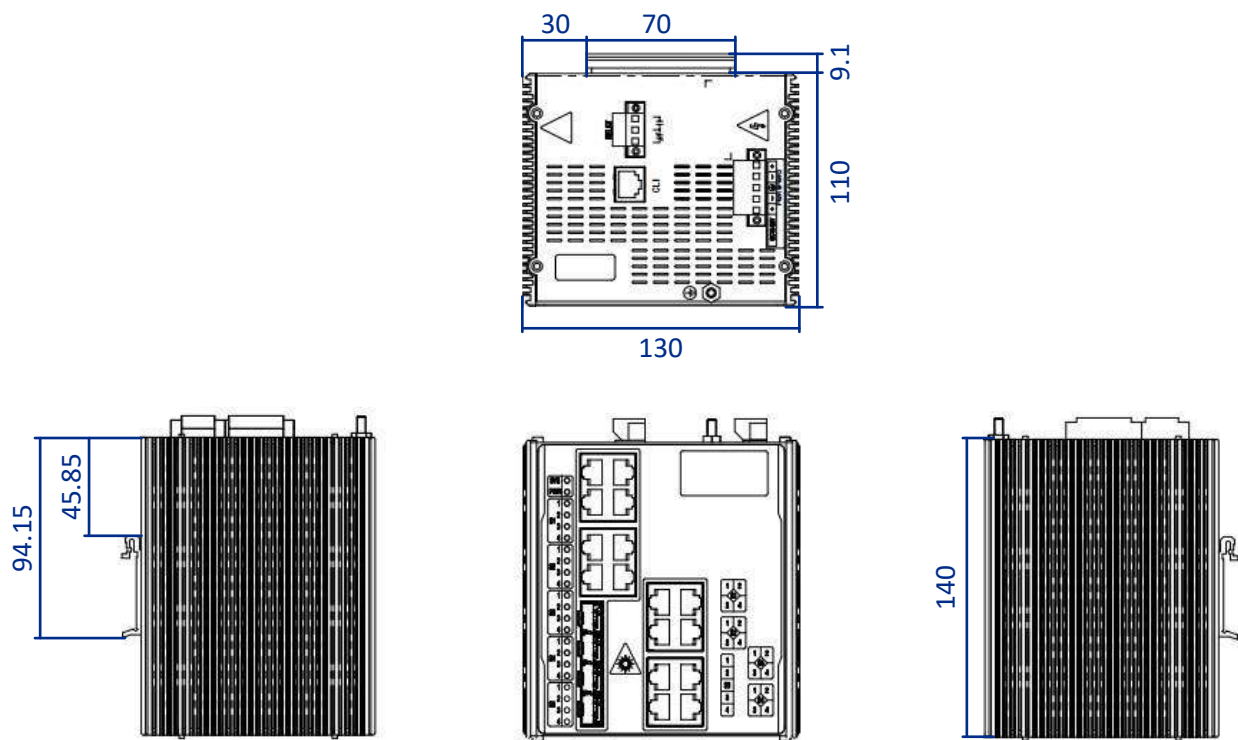
Physical

Dimensions(W x H x D) (mm)	130 x 140 x 110
Protection Grade	IP40
Weight	1.3KG (Max)
Power Consumption	20.5W (Max)

■ Mechanical Drawings (Unit = mm)



■ Mechanical Drawings (Unit = mm)



■ Ordering Codes

Model Number	Description
XTR-D2020G-4F-T-X6M	Layer 2, 4 100/1000/2500 Base X SFP Ports (SFP module not included) and 16 10/100/1000BaseT Ports. Isolated Dual 18-60VDC Power Inputs.

XTR-D2020G-4F-T-X6M-15-04-2024