

Q2-AP-C Intelligent industrial Ethernet L3 switch

Intelligent industrial Ethernet 24-port L3 switch with 4x10 GbE, HSR rings and integrated computing CPU based on Power Architecture® T2080 processor for various applications

The Q2-AP-C is a 24-port industrial Ethernet switch which can perform as high-speed 10 Gbps backbone for various applications whenever network transmission of large amounts of data including audio and video is required. The presence of SFP/SFP+ slots on the switch provides flexibility for the use of both optical and metallic connections. In addition, the basic switch functionality is extended through an internal bus connection to an integrated computer powered by a multicore Power Architecture® T2080 processor, which can provide ample computing power and high encryption level ideal for cybersecurity applications. Further, it also allows the switch to access the HSR networks with zero-time recovery data and as such can be utilized to build High Availability Seamless Redundancy Systems.

GENERAL FEATURES:	
Switch features	Maximum Switching Bandwidth 80 Gbps
	L3 static and dynamic routing (RIP v2, OSPF v2 v3)
	32 MBit of integrated shared packet memory
	Jumbo frame support
	Port Mirroring
	QoS - supports four QoS queues per port interface with strict or weighted fair queuing scheduling - CoS (Class of Service) - 8 priority levels; PFC; QoS Control List; QoS Egress Port Shapers / Ingress Port Policers / Egress Port Scheduler for all port interfaces
	ACL (Access Control List)
	DHCP server (IPv4)
	DHCP snooping (IPv4, IPv6)
	IGMPv2, IGMPv3 support
	IGMP snooping
	SNMP v1/v2/v3 for network management
	Management interfaces: CLI interface, Web interface - L3 static routing
Main CPU	Computer with Power Architecture® T2080 processor (OS Linux) connected to the switch via internal bus 1 Gbps Connection and operation in HSR network type

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**Technology customized
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GENERAL SPECIFICATION:	
Switch hardware	RAM: 512 MiB
	Flash: 32 MB
	Max. VLAN count: 4 K
	Max. managed VLANs: 4 K (may be limited by configuration)
	ID range of VLANs: 1..4094
	MAC table size: 32 K
	Max. Jumbo frame size: 10240
CPU HARDWARE:	
Main CPU	NXP T2080, Power Architecture®, 1.8 GHz
Core/Thread	4 / 8 1.5 GHz threads
RAM	8 GB
Expandable storage	1x mSATA (under cover)
INTERFACES:	
Front-side interfaces	4x 10 GbE SFP+ Ports
	4x 1 GbE SFP Ports
	4x 1 GbE RJ45 (auto-negotiation 10/100/1000 Mbps)
	1x 1 GbE fixed link to computer (T2080)
Back-side interfaces	4x 1 GbE SFP Ports
	8x 1 GbE RJ45 (auto-negotiation 10/100/1000 Mbps)
	1x DC Input 24 V DC (16 to 36 V DC) with 1.5 kV isolation, M12 A connector (M)
	1x RS232 with RJ45 connector (terminal)
	1x mini USB-A
	1x Reset button computer (CPU)
	1x Reset button switch (SW RST)
	1x Switch button (SW BTN)
ENVIRONMENT:	
Operating temperature range	-10°C to +70°C (optionally -40°C to +85°C)
Relative humidity	0% to 95%
Airflow	Internal cooling fan
COMPLIANCE: (meets the following requirements and standards)	
	IEEE 802.3 (10BASE-T)
	IEEE 802.3u (100BASE-T)
	IEEE 802.3ab (1000BASE-T)
	IEEE 802.3z (1000BASE-X)
	IEEE 802.3ae (10GBASE-T)
	IEEE 802.3ad (Link Aggregation / Port Trunk)
	IEEE 802.3x (Flow control)
	IEEE 802.1Q (VLAN tagging)
	IEEE 802.1Qbb (QoS)
	IEEE 802.1D-2004 (Spanning Tree Protocol)
	IEEE 802.1s (Multiple Spanning Tree Protocol)
	IEEE 802.1w (Rapid Spanning Tree Protocol)

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	IEEE 802.1p (Class of Service)
	IEEE 802.1X (Network Security)
	IEC 62439-3:2016 (High Availability Seamless Redundancy)
	ITU-T G.8032 (Ethernet ring protection switching)
	SNMP v1/v2/v3
CONSTRUCTION:	
Design and built	Aluminium housing
Dimensions	480.2 mm (W) x 204.5 mm (D) x 44.0 mm (H)
Weight	Approx. 3.7 kg
MTBF:	>230 000 hours (at 40°C)

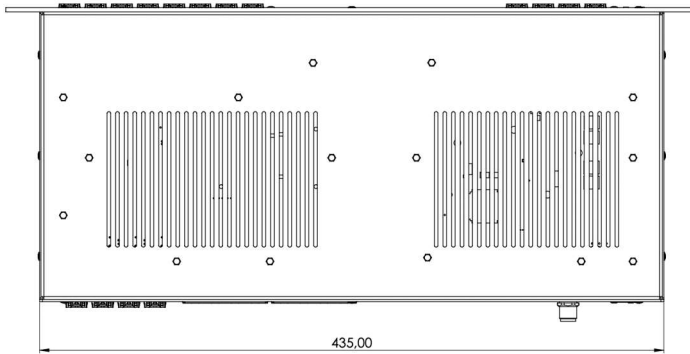
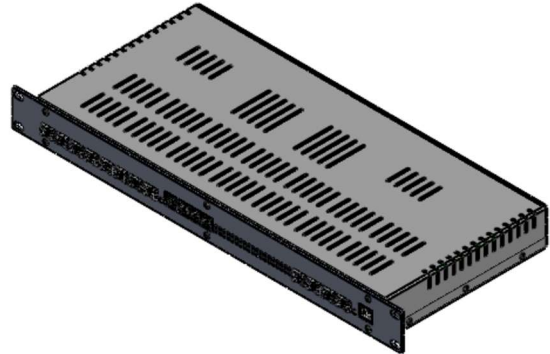
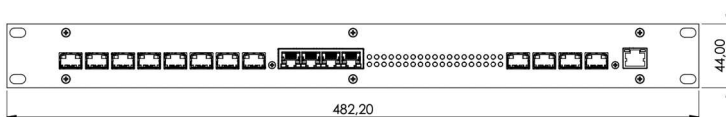
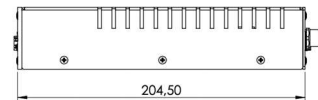
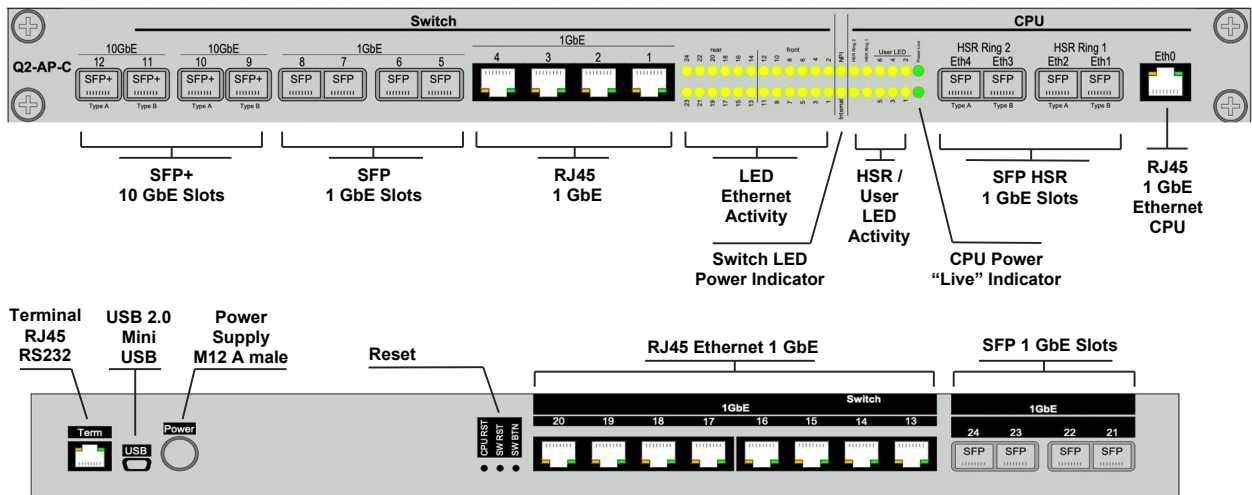
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TOP VIEW:

PERSPECTIVE VIEW:

FRONT VIEW:

SIDE VIEW:

CONNECTOR DESCRIPTION:


PRODUCT NAME	CATALOGUE NO.	DESCRIPTION / VERSION
Q2-AP-C	To be determined	-

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