

Aquam8512A-1U

2G+8T/10T port Layer 3 Gigabit Managed EN50155 Industrial Ethernet Switches



» Overview

The Aquam8512A-1U series managed rack mountable onboard M12 switches, specially designed for rail industries, support up to 2 Gigabit copper ports and 8 10/100Base-TX ports. Aquam8512A-1U supports a wide range of operation temperature from -40°C to +75°C, and meets the EN50155, EN50121 and other rail industry standards. The switches support layer 3 routing functions like OSPF, redundant ring protocols including DRP and RSTP. They support VLAN and GVRP, flexible networking and partitioning, multicast, video multicast, and rich network management functions including SNMP. Aquam8512A-1U can be widely deployed in onboard PIS, CCTV systems, and industrial applications asking for anti-vibration and high EMC performance.

» Key Features

Supports 10 10/100Base-TX ports or 2 Gigabit copper ports + 8 10/100Base-TX ports

M12 connector

Supports DT-Ring, STP/RSTP/MSTP, DRP ring protocol and VRRP

Supports OSPF layer 3 routing protocol

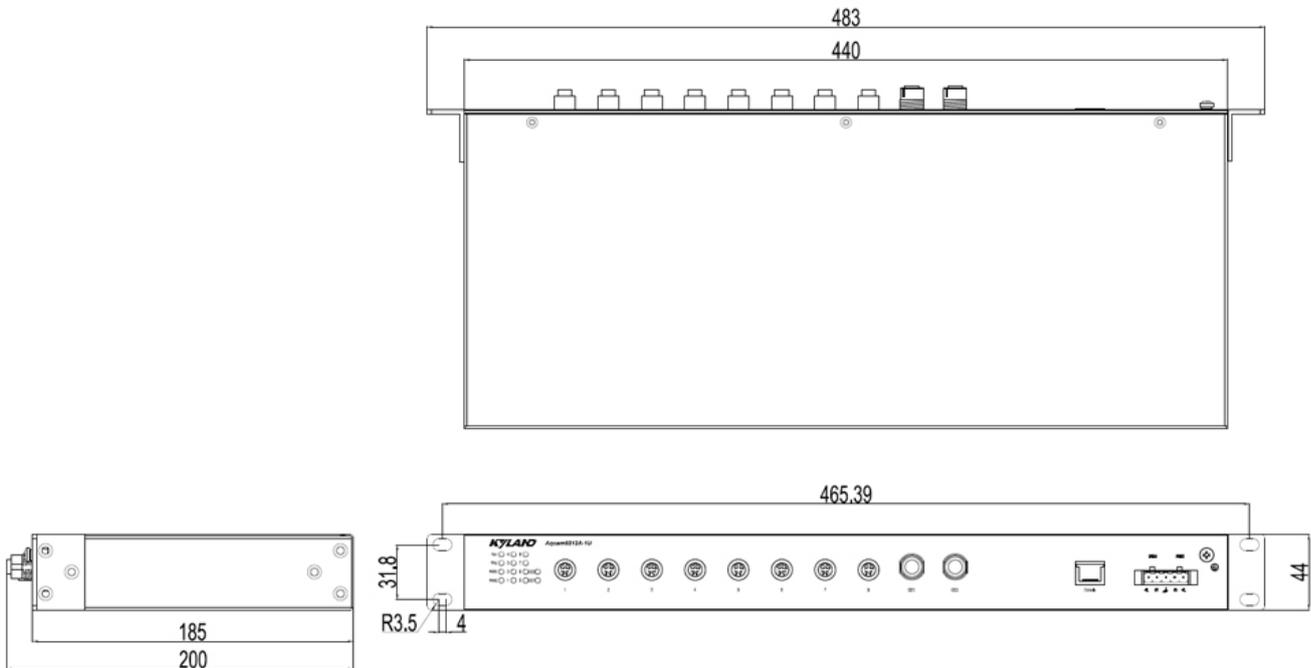
Complies with EN50155 & EN50121

» Product Specifications

Software functions	Switching	Supports VLAN,PVLAN Supports GVRP(pending) Supports port trunk Supports LACP(pending) Supports port flow control Supports speed limit, broadcast storm control
	Redundancy	Supports DT-ring, DT-ring+, DT-VLAN with the recovery time<50ms Supports DRP, with the recovery time<20ms Supports RSTP/MSTP
	Multicast	Supports IGMP-snooping Supports GMRP Supports static multicast
	Routing	Supports OSPFv2 Supports static routing Supports IGMP Supports PIM-SM, PIM-DM(pending)
	Network Security	Supports IEEE 802.1x Supports HTTPs/SSL, SFTP Client Supports SSH Supports RADIUS Supports TACACA+(pending) Supports user classification
	Service Quality	Supports ACL Supports 802.1p and TOS/DiffServ, Supports SP,WRR queue scheduling
	Management and Maintenance	Supports Console, Telnet, WEB management methods Supports SNMPv1/v2c/v3,Kyvison centralized management Supports software upgrade by FTP/TFTP Supports RMON Supports IP/MAC conflict alarm, power failure alarm, port alarm and ring alarm Supports port mirroring Supports Syslog Supports LLDP
	IP Management	Supports DHCP server/client/server option 82
	Clock management	Supports SNTP client

Product Specifications	Standards	IEEE 802.3i(10Base-T) IEEE 802.3u(100Base-TX) IEEE 802.3ab(1000Base-T) IEEE 802.3x(Flow control) IEEE 802.1p(Class of Service) IEEE 802.1Q(VLAN) IEEE 802.1s(MATP) IEEE 802.1X
	Switch Properties	Priority Queues 8 Number of VLANs 4k VLAN ID 1-4093 Number of Multicast Groups 256 Routing Table 3.9K MAC Table 16K Packet Buffer 12Mbit Packet Forwarding Rate 4.2Mpps Switching Delay <10us
	Interface	Gigabit Port 10/100/1000Base-T(X), M12 connector (X-code) Fast Ethernet Port 10/100Base-T(X), M12 connector (D-code) Console Port RS232, RJ45 port
	LED	LED on front panel Running LED: Run Ring LED: Ring Power LED: PWR1, PWR2 Interface LED: Link/ACT
	Power Requirements	Power input 110VDC(77-110VDC) Power Terminal 5-pin 5.08 mm-spacing Power Consumption < 20W Overload Protection Support Reverse Connection Protection Support Redundancy Protection Support
	Physical Characteristics	Housing Metal Cooling Nature cooling, fanless Protection Class IP40 Dimensions 483mm×44mm×185mm Weight <3kg Mounting 1U rack mountable
	Environmental Limits	Operating Temperature -40°C to +75°C Storage Temperature -40°C to +85°C Ambient Relative Humidity 5 ~ 95% (non-condensing)
	Quality Assurance	MTBF 1576622 hrs Warranty 5 years
	Approvals	CE(pending),EN50155(pending),EN50121(pending)
	Industry Standard	EMI FCC CFR47 Part 15,EN55022/CISPR22,Class A EMS IEC61000-4-2 (ESD) ±6kV (contact), ±8kV (air) IEC61000-4-3 (RS) 20V/m (80MHz-2GHz) IEC61000-4-4 (EFT) Power Port: ±2kV; Data Port: ±2kV IEC61000-4-5 (Surge) Power Port: ±1kV/DM, ±2kV/CM IEC61000-4-6 (CS) 10V (150kHz-80MHz) IEC61000-4-8(Power frequency magnetic field)50Hz 100A/m IEC61000-4-9(Pulsed magnetic field)300A/m IEC61000-4-29 (Voltage Short interruptions) 10ms 100% Safety EN60950-1 Machinery IEC61373 (Vibration and Shock) IEC60068-2-32 (Free Fall)

» Mechanical Drawing



» Ordering Information

Aquam8512A-Ports-PS1-PS2

Port

- 10T 10 x 10/100BASE-T(X) M12 port
- 2GE8T 2 x 10/100/1000BASE-T(X) M12 port; 8 x 10/100BASE-T(X) M12 port;

PS1-PS2

- H2-H2 110VDC(77-154VDC), redundant power supplies

Accessory Mode

Description

- M12-D-4P-M Male cable connector with M12, D-Coding, 4 Pin,10/100 Base-TX interface Connector
- M12-X-8P-M Male cable connector with M12, X-Coding, 8 Pin,10/100/1000 Base-TX Connector