

Aquam8612-2U/8112-2U

24-port 2U Rack-mount Onboard Industrial Ethernet Switch



» Overview

Aquam8612-2U/Aquam8112-2U is L3/L2 rack-mount type industrial Ethernet switch designed for railway industry, supporting -40~+70°C wide operating temperature and complying with railway industry standards e.g. EN50155, EN50121, IEC61375-3.

Aquam8612-2U/8112-2U meets demands of operating environment with vibration and shock such as onboard passenger information, onboard CCTV system.

» Key Features

Supports 24x M12 ports, up to 14x 10/100/1000Base-T(X) with 4 Bypass ports

Supports OSPF, RIP, static routing protocols (L3 switch Only)

» Product Specifications

>Software Features

-Switching

Supports VLAN, PVLAN

Supports LACP, Port Trunking

Supports flow control

Supports port speed limit, broadcast storm protection

-Redundancy

Supports VRRP (L3 switch only)

Supports DT-Ring, recovery time < 50ms

Supports DRP, recovery time < 20ms

Supports RSTP/MSTP

-Multicast

Supports IGMP-snooping

Supports GMRP

Supports static multicast

PIM-SM, PIM-DM(L3 switch Only)

IGMP v1/v2/v3(L3 switch Only)

-Routing Protocol (L3 switch Only)

Supports OSPFv2, RIPv2, VRRP

Supports static routing

-Security

Supports IEEE 802.1X

Supports HTTPS/SSL

Supports SSH

Supports account classification

-QoS

Supports ACL

Supports 802.1p and TOS/DiffServ, Supports SP, WRR queuing and scheduling

-Management and Maintenance

Supports Console, Telnet, WEB

Supports SNMPv1/v2c/v3

Supports FTP/TFTP

Supports Port mirroring

Supports Syslog

Supports LLDP

Supports USB auto configuration backup and restore

-Time Management

Supports SNTP client

Supports PTPv2 TC

>Technical Specifications

-Technical Parameters

IEEE 802.3i(10Base-T)

IEEE 802.3u(100Base-TX)

IEEE 802.3ab(1000Base-T)

IEEE 802.3x(flow control)

IEEE 802.1p(priority)

IEEE 802.1Q(VLAN)

IEEE 802.1s(MSTP)

IEEE 802.1w(RSTP)

IEEE 802.1X(Port security)

-Switching Properties

Priority Queues 8

Number of VLANs 4K

VLAN ID 1 ~ 4093

Number of multicast groups 256(L2 Multicast)

Routing table 4K

MAC Table 16K

Buffer 32Mbit

Forwarding rate 44.6Mpps

Switching latency <10 μ s

-Interface

Ethernet:

4 \times 10/100/1000Base-TX M12 X-Code port, 2 pairs of Bypass port ;

20 \times 10/100Base-TX M12 D-Code port or 4 \times 10/100/1000Base-TX M12 X-Code port, 2 pairs of Bypass port ;

10 \times 10/100/1000Base-TX M12 X-Code port, 10 \times 10/100Base-TX M12 D-Code port

USB: RJ45

Console: RS232, RJ45

-LED

Runing LED: Run

Ring LED: Ring

Power LED: PWR1、 PWR2

Alarm LED: Alarm

USB LED: USB

Port LED: Link/ACT

-Power Requirements

Input: 110VDC (77~137.5VDC) redundant input, M23 connector

-Physical Characteristics

Housing: Metal

Cooling: Nature cooling, fanless

Mounting: 2U rack-mount

IP class: 40

Dimensions: 440×88×240mm(W×H×D)

-Environment

Operating temperature: -40°C~+70°C

Storage temperature: -40°C~+85°C

Ambient relative humidity: 5 ~ 95% non-condensing

-Warranty

Warranty Period: 5 years

-Certifications

Pending: CE, FCC, EN62368(CE-LVD), EN50155, EN50121, EN45545

-Industrial standards

EMI

FCC CFR47 Part 15,EN55022/CISPR22,Class A

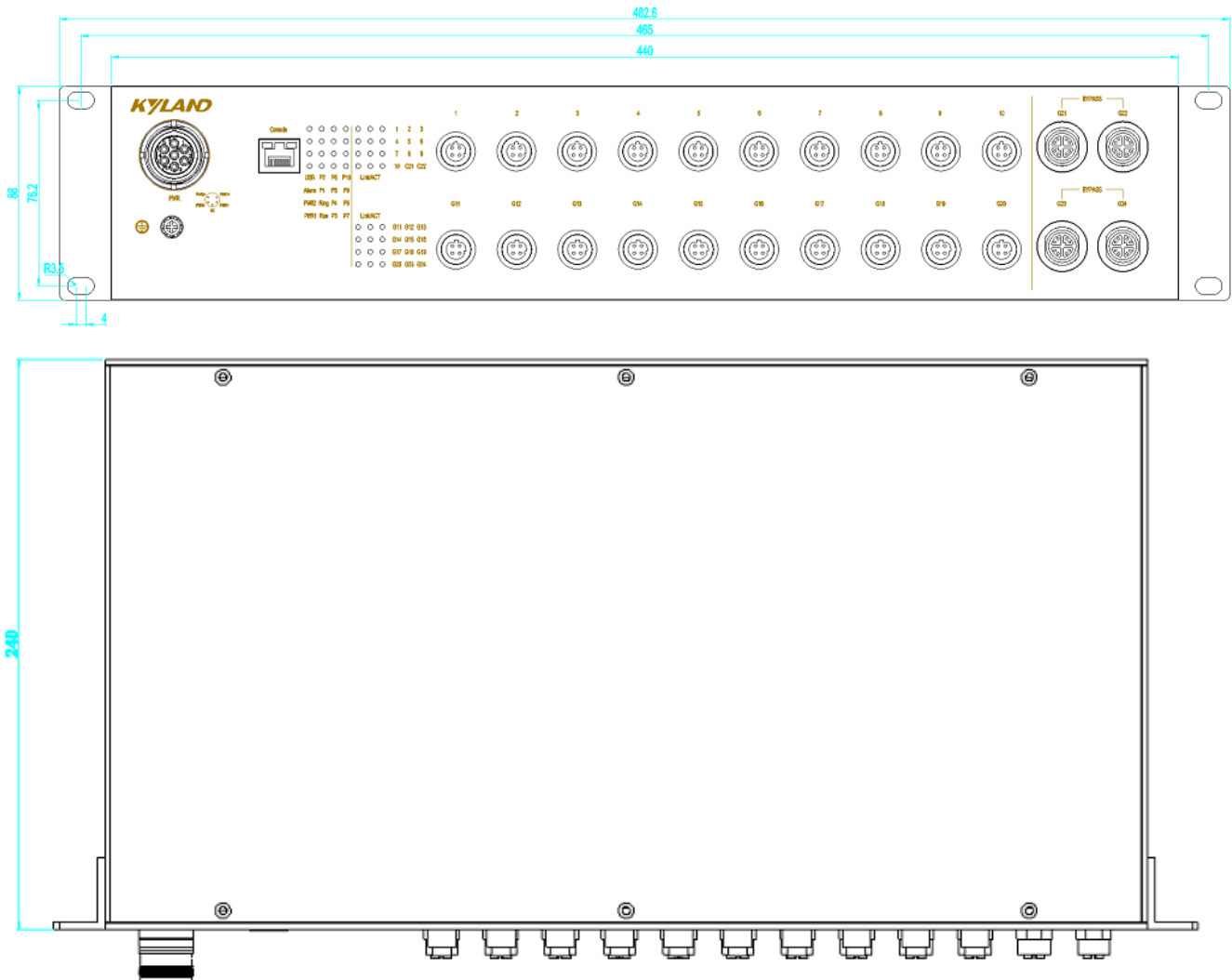
EMS

IEC61000-4-2 (ESD) ±6kV (contact), ±8kV (air)

IEC61000-4-3 (RS) 20V/m (80MHz-2GHz)

- IEC61000-4-4 (EFT) Power Port: $\pm 2\text{kV}$; Data Port: $\pm 2\text{kV}$
- IEC61000-4-5 (Surge) Power Port: $\pm 1\text{kV/DM}$, $\pm 2\text{kV/CM}$
- 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%
- IEC61373-2010(Shock and Vibration)

» Mechanical Drawing



» Ordering Information

L2 managed switch

| | |
|-----------------|---|
| Model | Aquam8112-2U-B-Ports -PS1-PS2 |
| Code Definition | Ordering Codes |
| B: | 4×1000M with 2 pairs of Bypass ports |
| Ports: | 14GE10T=14×10/100/1000Base-T(X) M12 port, 10×10/100Base-T(X) M12 port; 4GE20T=4×10/100/1000Base-T(X) M12 port, 20×10/100Base-T(X) M12 port |
| PS1-PS2: | H6-H6=72-110VDC(50.4-137.5VDC), redundant inputs |

L3 managed switch

| | |
|-----------------|---|
| Model | Aquam8612-2U-B-Ports-PS1-PS2 |
| Code Definition | Ordering Codes |
| B: | 4×1000M with 2 pairs of Bypass ports |
| Ports: | 14GE10T=14×10/100/1000Base-T(X) M12 port, 10×10/100Base-T(X) M12 port; 4GE20T=4×10/100/1000Base-T(X) M12 port, 20×10/100Base-T(X) M12 port |
| PS1-PS2: | H6-H6=72-110VDC(50.4-137.5VDC), redundant inputs |

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