

# Aquam5S/8S/9S

5/8/8+1G port unmanaged PoE IP65 EN50155 switches



## » Overview

Aquam5S/8S/9S as unmanaged Ethernet Switch, supports 5/8 Fast Ethernet or 1 Gigabit and 8 Fast Ethernet interfaces of with M12 connector to ensure the tightness and the firmness of the connection and ensure reliable operation, especially suitable for application that are subject to high vibration and shock. Aquam5S/8S/9S supports panel mounting, supports IP65 protection class to meet the requirements of dustproof and waterproof performance, supports a wide range of operation temperature(-40°C~70°C), and meets EN50155, EN50121, EN55022 Class A&B and FCC CFR47 Part 15 standard requirements, making the product is suitable for the industrial field of various harsh environment, especially rail transportation industry with strict requirements on reliability.

The Aquam5S/8S/9S supports PoE function, provide 5 or 8 fast Ethernet M12 ports with IEEE 802.3at compliant PoE+ (compatible with IEEE802.3af) , and can be used to power up to 8 IEEE 802.3at compliant powered devices (PDs), eliminating the need for additional wiring. The switches are classified as power source equipment (PSE) and provide standard IEEE802.3at and IEEE802.3af ,with PoE power up to 30 watts per port.

## » Key Features

Supports a maximum of 5 or 8 10/100Base-TX ports or 1 Gigabit +8 10/100 Base-TX ports  
Supports M12 connectors with D code for Fast Ethernet ports and X code for Gigabit ports

Supports POE with IEEE802.3af and IEEE802.3at standards, as well as a maximum of 5 or 8 POE ports

Supports panel mounting

Supports redundant power input

Complies with the requirements of EN50155 and EN50121 industrial standards

IP65 protection class

## **Product Specifications**

### **>Technical Specification**

#### **-Technical Parameter**

Standard

IEEE 802.3i(10Base-T)

IEEE 802.3u(100Base-TX)

IEEE 802.3af(PoE)

IEEE 802.3at(PoE+)

IEEE 802.3ab(1000Base-T)(Aquam9S Only)

#### **-Switch Properties**

MAC Table 16K

Packet Buffer 4Mbit

Packet Forwarding Rate

- Aquam9S: 2.7Mpps

- Aquam8S: 1.2Mpps

- Aquam5S: 0.7Mpps

Switching Delay <10us

#### **-Interface**

Fast Ethernet Port 10/100Base-T(X) , M12 D-coded connector

Gigabit Ethernet Port 10/100/1000Base-T(X), M12 X coded connector

#### **-LED**

LEDs on Front Panel

Power LED: PWR1,PWR2

Interface LED: Link/ACT

PoE LED: ACT

**-Power Requirements**

Power Input 24-110VDC ( 16.8-154VDC )

Power Terminal M23

Power Consumption 11.8W@SW(without PD)

140W@MAX(with 80W PD)

Overload Protection Support

Reverse Connection Protection Support

**-Physical Characteristics**

Housing Metal

cooling Nature cooling,fanless

Protection Class IP65

Dimensions 238mm×100mm×89.6mm(W×H×D)

Weight <1.9Kg

Mounting panel mounting

**-Environmental Limits**

Operating Temperature -40 to +70°C

Storage Temperature -40 to +85°C

Ambient Relative Humidity 5 to 95% (non-condensing)

**-Warranty**

MTBF 2092908h

Warranty Period 5 years

**-Approvals**

CE, FCC, EN50121, EN50155, EN45545, EN60950, E mark

**-Industrial 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:  $\pm 2\text{kV}$ ; 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%

Safety

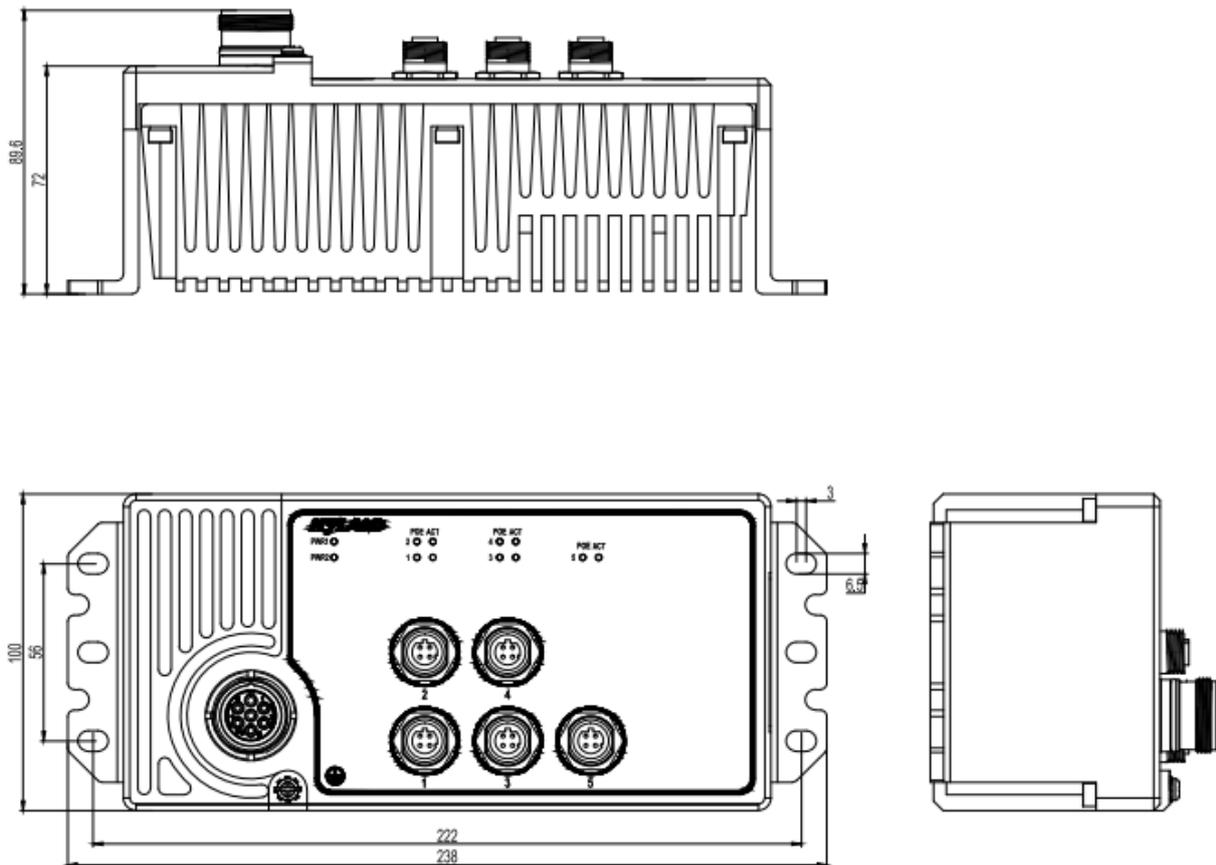
EN60950-1

Machinery

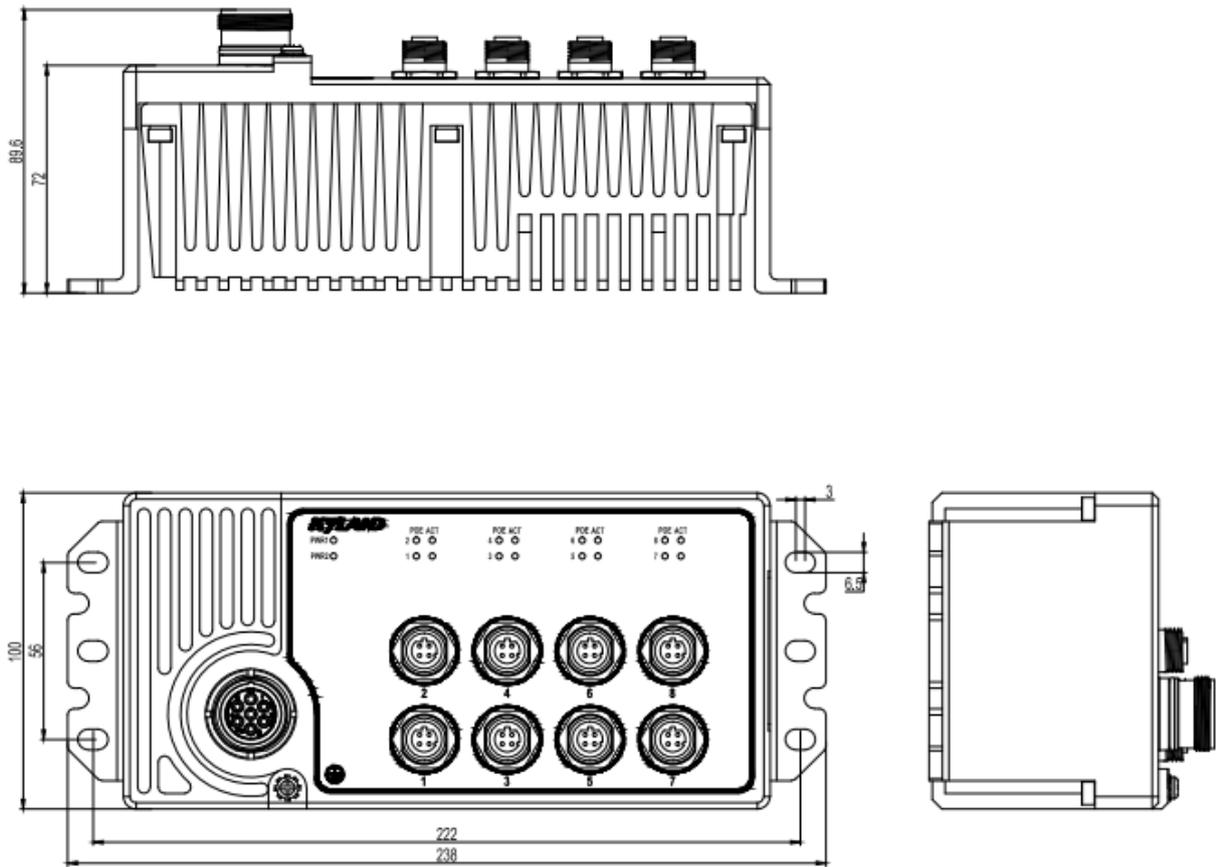
- IEC61373 (Vibration and Shock)
- IEC60068-2-32 (Free Fall)

» Mechanical Drawing

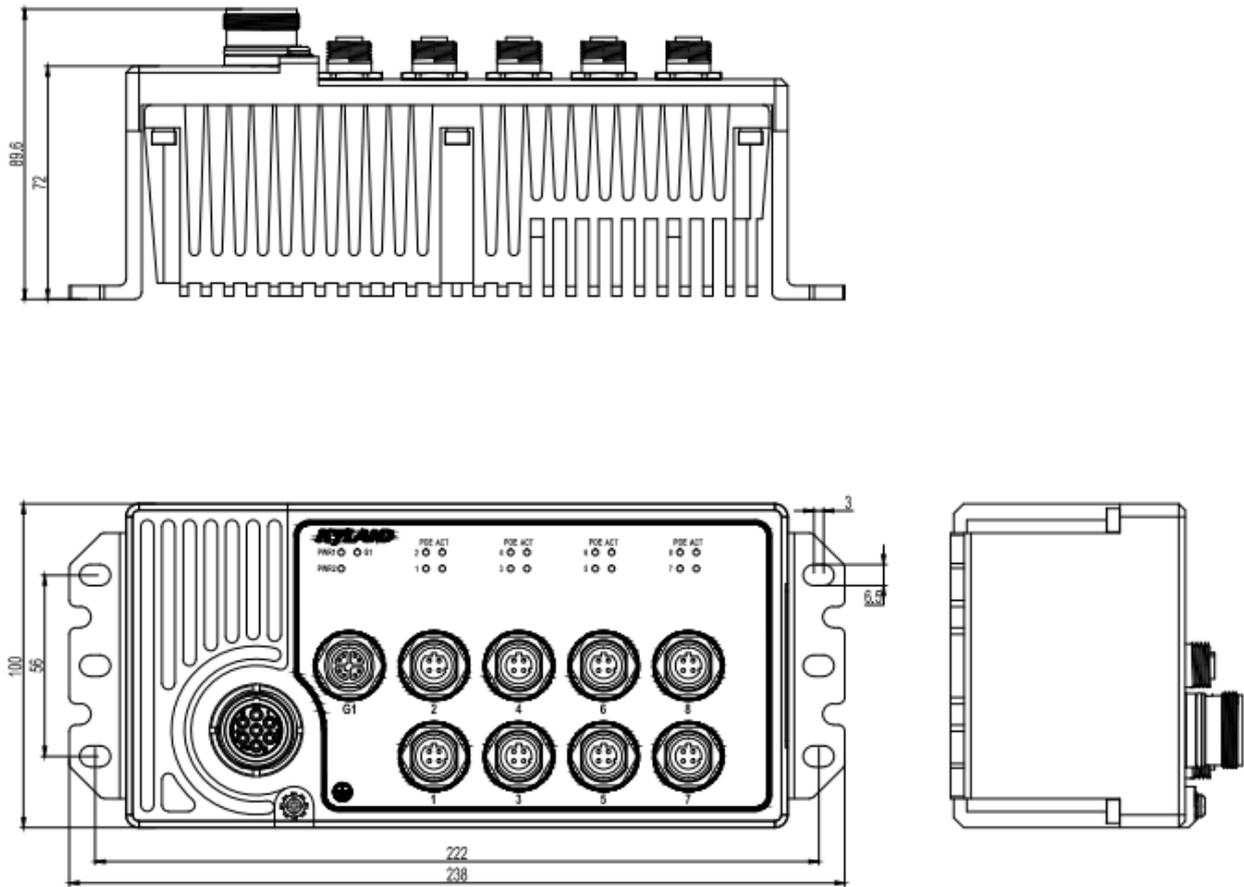
Aquam5S



Aquam8S



Aquam9S



## » Ordering Information

### Ordering Information

Product Model Aquam5S-Ports-PS1-PS2

Code Definition Ordering Codes

Ports 5P = 5 X 10/100BASE-T(X) M12 PoE ports

Product Model Aquam8S-Ports-PS1-PS2

Ports 8P = 8 X 10/100BASE-T(X) M12 PoE ports

Product Model Aquam9S-Ports-PS1-PS2

Ports 1GE8P = 1X 10/100/1000Bsase-T(X) M12 ports, 8 X 10/100BASE-T(X) M12 PoE ports

PS1-PS2 (Power Supply) WV-WV=24-110VDC(16.8-154VDC), redundant power inputs

## Accessories

Accessory Model	Description	Note
M23-5P-F-Crimp	Female cable connector with M23, 5 Pin , Crimp	Power interface Connector
M12-D-4P-M	Male cable connector with M12, D-Coding, 4 Pin	10/100Base-TX interface Connector
M12-X-8P-M	Male cable connector with M12, X-Coding, 8 Pin	10/100/1000Base-TX interface Connector

Version:2022-01-06 13:44:58