

AQS0108 2.5G Ethernet Switch

8x 2.5G Ethernet Port with 10G SFP+ Switch
Small-Scale 2.5G Ethernet Switch

With the increasing demand for 2.5G access, 2.5G switches began to gradually replace traditional gigabit switches. ASQ0108 is a small scale 2.5G switch, cost effective with high integration and low power consumption, probably a one of the best choices for small scale 2.5G switch in the same type of commercial application.

Application scenarios of 2.5G switches, such as the aggregation of broadband access networks, Internet Café, E-Sport Hotels, and common access methods include WIFI6, 5G base stations and XGPON. Local area network application scenarios include NAS server networking and 2.5G network cards.



Figure 1. AQS0108, PCBA

Feature Highlights

Port capacity, Expansion and POE

Our ASQ0108 2.5G Ethernet Switch, uses non-European and American company Realtek switch chip. The Realtek 2.5G switch chip supports quad-port 2.5G Ethernet PHY Transceiver and 10G Serdes, so that 2 pieces can provide 8x 2.5G Ethernet ports, with upstream 10G SFP+ port, while retaining a capacity expansion connector, can be connected in stacks. ASQ0108 also reserve a connector for POE implementation.

Cost-effective Design

ASQ0108 is low-power, high-performance and highly integrated 2.5G ports and 10G SFP+ switch. The embedded packet storage SRAM in the chip features superior memory management technology to efficiently utilize memory space. The non-blocking switch architecture, with internal integration of high capacity cache, link aggregation function enhances link redundancy and increases bandwidth linearly, all ports can be forwarded at high speed and maintain high switching capacity. Offering wire-speed performance for 2.5G platforms, the ASQ0108 switch provides a cost-effective solution for small scale 2.5G Ethernet switches.

Multi-speed Intelligent Switching Function

ASQ0108 uses state-of-the-art DSP technology and an Analog Front End (AFE) to enable high-speed data transmission and reception over UTP cable. The embeded 2.5G Ethernet PHY Transceiver that complies with 10Base-Te, 100Base-TX, 1000Base-T and 2.5GBase-T, and is fully compatible with IEEE 802.3 standard. Its adaptive ability backward compatible with 10M/100M/1000Mbps standard RJ45 port, can plug and play connect to the existing Cat. 5e cable network and upgrade to 2.5G fast network easily. It adopts non-blocking forwarding mechanism, integrated high-capacity cache, can ensure that all ports can achieve high-speed forwarding and high switching capacity, adapt to more unexpected situations.

Modulation Design

We are engineering based company, have the technical and engineering abilities to develop a new switching product in both hardware and software aspect. We can also base on customer requirements, specific industries or application scenarios, to design the unique specifications and requirements of our customers' own products.



Hardware Specifications

Item	Details
Ethernet Port	8x 10M/100M/1G/2.5G Base-T RJ45
Optical Port	1x 10G Base-R SFP+
Power Input	12VDC @ 2.0A
Power Consumption	< 15W
PCBA Dimension	160mm x 98mm x 18mm
Standard	IEEE802.3, IEEE802.3u, IEEE802.3x, IEEE802.3ab, IEEE802.3az, IEEE802.3bz, IEEE802.1p, IEEE802.1Q, IEEE802.1x
Storage Conditions	Storage Temperature : -10° ~ 85°C
Operating Conditions	Operating Temperature : 0° ~ 70°C
LED	Alarm and Status



ASQ0108 8x 2.5G with SFP+ Switch