24 Port Ethernet Network Switch+Controller

AVP-Controller-102

Version: 20250418

User Manual

Introduction

AVP-Controller-102 is a multi-functional device that perfectly integrates a network switch with an AV over IP control box, making it especially suitable for HDMI over IP and IP camera applications.

As a user-friendly OT (Operational Technology) PoE switch, it provides quick access buttons for specific scenarios, allowing users to switch quickly between different application settings, reducing the operational threshold. It also features a built-in Watchdog system for real-time monitoring of the overall system status. This enables detailed tracking of the operation of each RJ45 port and, based on monitoring information, automatically controls the PoE port's power on/off or restart to perform instant troubleshooting.

As a powerful 4K over IP control box, it includes a redundancy mechanism that automatically switches to a backup system when the primary controller encounters an issue, ensuring uninterrupted operation of the video system. Paired with professional management software, AVP-Controller-102 can achieve matrix switching, video wall control, and scheduled tasks, making it widely applicable in fields such as education, digital signage, and surveillance systems.

Features

- Standard Compliance with IEEE802.3, IEEE8.203u IEE802.3ab IEEE802.3x, IEEE802.1q.
- IEEE802.3x flow control for Full-duplex Mode and backpressure for Half- duplex Mode
- Used store-and-forward mode
- Support IEEE802.3af , IEEE802.3at PoE Standards
- Support loop detection
- Support 10K Mac Address Table
- Supports PoE power up to 30W for each PoE port, all power up to 400W
- Switching Capacity up to 166Gbps.
- Supports Web GUI management
- Support Jumbo Frame.
- Dedicated control interface for different applications, such as AV over IP.
- Support graphic control to see the status of each port and reboot PoE independently
- Independently detect power and current for each LAN port
- Support partial L3 protocols, such as IGMP Multicast
- Allow custom 3rd party software embedded to support more functions, such as aegis AV over IP
- Support IP watchdog to reboot PoE for troubleshooting.

Package Contents

Item	Qty
AVP-Controller-102	1
AC C13 power cord	1
Mounting Ear	2
User Manual	1

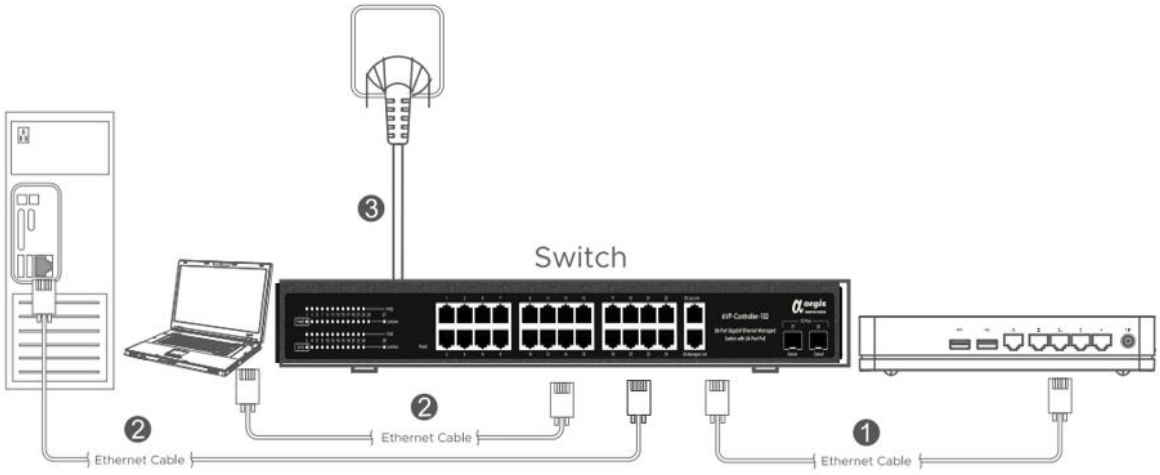
Technical Specifications

AVP-Controller-102 Specification		
Chipset	Quad-core Cortex-A55	
Standard Compliance	IEE802.3 , IEE802.3u , IEE802.3ab , IEE802.4x , IEE802.1q	
Interface	24 x 10/100/1000Mbps PoE ports + 1 x Uplink + 2 x optical port	
Transmission Mode	Store-and-Forward	
Mac Address Table	10K	
Switching Capacity	166Gbps	
Packet forwarding rate	123.504Mbps	
Packet Buffer	4M bits	
Jumbo Frame	10K	
Power Supply	AC 100-240V 50/60Hz	
Power Consumption	Up to 400w	
Operating Temperature	-10ºC～70ºC RH 10 ~ 90% (non-condensing)	
Storage Temperature	-20ºC～75ºC RH 5 ~ 90% (non-condensing)	
LED indicator (Device)	Power	Green
	Sync	Green
LED indicator (Port)	Link/ACT	Green
	PoE	Green
Dimensions (W x L x H)	300 x 440 x 46 mm	

Management Characters

System	System information, log information, port information, link aggregation, MAC address table
Network	DNS configuration, DNS host configuration, system time
Ports	Port Configuration, Port Anomaly Protection, Link Aggregation, EEE Configuration, Jumbo Frame Configuration, Port Security, Port Isolation, Storm Control
VLAN	VLAN configuration, Voice VLAN, Protocol VLAN configuration, MAC VLAN configuration, Surveillance VLAN, GVRP
Mac Address	Dynamic MAC address table, static MAC address table, MAC address filtering table, port security MAC address table
Spanning Tree Protocol	Function settings, port settings, instance settings, instance port settings, message statistics
ERPS	Functional Configuration, ERPS Example
DHCP	Feature configuration, address pool configuration, VLAN interface address group configuration, client list, client static binding table
Multicast	Basic Functions, IGMP Snooping, MLD Snooping, MVR
Routing	IPv4 Management Interface, IPv6 Management Interface, Static routing
Security	RADIUS, TACACS+, AAA Management channel configuration, authentication features, port security, port isolation, storm control, DDoS anti-attack, dynamic ARP inspection, DHCP Snooping, IP Source Guard
ACL	MACACL、MAC ACE、PV4 ACL、PV4 ACE、Pv6 ACL、PV6 ACE、ACL binding
QoS	Basic Functions, Bandwidth Limiting
Equipment Diagnostics	Logging function, mirroring function, Ping, Traceroute, Electrical port Testing, optical module information, UDLD protocols
Equipment Management	User configuration, firmware management, configuration management, SNMP configuration, RMON configuration

Connection Diagram



Panel Description

1	LEDs	Indicate the status of PoE and Link
2	RJ45 PoE ports	Connect to LAN via RJ-45
3	RJ45 Port	Connect to LAN via RJ-45
4	Optical port	Connect to LAN via Fiber

Connecting to the Switch Web GUI

To use your browser to configure Switch

1. Record your computer's TCP/IP configuration settings, and then configure the computer with a static IP address of 192.168.2.x and 255.255.255.0 as the subnet mask

2. Plug the switch into a power outlet and then connect your computer to the switch using an Ethernet cable.

3. Open your internet browser (Google Chrome, Mozilla, Edge etc).

4. Type the network switch default IP address into the web browser bar

5. Enter the default user name and password

Default IP address: 192.168.2.254

User: admin

Password: admin

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