

## 10 Ports Managed PoE Switch

### (HR-AFGM-82NS)

The 10-ports Gigabit Managed PoE Switch is a Green Energy-Saving PoE Switch independently developed by HRUI. It adopts High-Quality and High-Speed Network IC and the most stable PoE Chip. The PoE port meets the IEEE802.3af or IEEE802.3at standard. This model can provide seamless connection for 10/100/1000M Ethernet, and the PoE power port can automatically detect and power the powered devices that comply with the IEEE802.3af or IEEE802.3at standards. The Non-PoE devices are forcibly powered and only transmit data.

#### ● Features

1. Can transfer data for network surveillance cameras;
1. 8 x 10/100/1000Mbps auto-sensing PoE Ports, 2 x 1000Mbps SFP Ports, 1 x Console Port;
2. Support IEEE802.3/IEEE802.3i/IEEE802.3u/IEEE802.3ab/IEEE802.3z, IEEE802.3af/at, store-and-forward;
3. Compatible with IEEE802.3at (30W) and IEEE802.3af (15.4w);
4. Ethernet port supports 10/100/1000M adaptive and PoE functions;
5. Panel indicator monitoring the status and help failure analysis;
6. Fanless design, Natural Cooling, 1U Rack Mount;
5. Support 802.1x port authentication, support AAA authentication, support TACACS+ authentication;
6. Support WEB, TELNET, CLI, SSH, SNMP, RMON management;
7. Support PoE Power Management、PoE watchdog、PoE port timing restart
8. Lightning Protection Surge: General Mode 6KV, Differential Mode 4KV, ESD 15KV.

#### ● Target Industries

- 1.HD monitor transmission and power supply
- 2.Wireless AP layout transmission and power supply
- 3.Network telephone transmission , intelligent house and home system
- 4.Intelligent transportation supervisory system (ITS)
5. High-speed Way supervisory/Tele-Communication System
6. Security protection system, TV medical treatment
7. Long-distance Muti-media Schooling, Campus monitoring
8. Long-distance broadcast television transmission system
9. High-building Security Protection, Military Tele-Com projects

● Technical parameter list

General Performance Indicator	
Product Name	10 Port Gigabit Managed PoE Switch
Product Model	HR-AFGM-82NS
Interface	8*10/100/1000M PoE Ports + 2*Gigabit SFP Ports + 1*Console Port
Network Protocols	IEEE802.3 IEEE802.3u IEEE802.3ab IEEE802.3x IEEE802.3z
PoE Parameters	PoE Standard: IEEE802.3at (30W) and IEEE802.3af (15.4w)
	PoE compatibility: IEEE 802.3af/at adaptive
	PoE port output: DC48-55V
	Power Pin Assignment: Power over spare pairs 1/2(+) and 3/6 (-)
Port Lightning Protection	General Mode 6KV, Differential Mode 4KV, ESD 15KV.
Network Transmission Medium	10BASE-T: Cat3, 4, 5 UTP ( $\leq 100$ m) 100BASE-TX: UTP ( $\leq 100$ m) above Cat5 1000BASE-TX: UTP ( $\leq 100$ m) above Cat5
Optical	MultiMode Fiber: 850nm, 1310nm, Transmission Distance: 550m/2Km Single-Mode Fiber: 1310nm, 1550nm, Transmission Distance: 20/40/60/80/100/120km
DIP Definition	VLAN: 1-8 ports are isolated from each other, and only connect Uplink with 9、10 Port; Default: 1-10 port is standard, all ports can communication; Extend: 7-8 port supports 250m link extension at a rate of 10M.
Power Supply	Input Voltage: AC100~240V; Output: DC 52V2.3A Total power: 120W

## 10 Ports Managed PoE Switch

LED indicator	POWER	Lighting: Powered Un-Light: No Power
	SW	Lighting: LVAN Un-Light: Default Flashing: Extend
	SYS	Flashing: System Start-up Lighting: System Running
	9-10	Lighting: Link connection Flashing: Data transmission Un-Light: Link disconnect
	PoE/ACT (1-8 Port)	Lighting: Powered Un-Light: No Power
	Link/ACT (1-8 Port)	Lighting: Link connection Flashing: Data transmission Un-Light: Link disconnect
Physical Dimension	Product size (L×W×H): 270mm× 180mm× 45mm Package size (L × W × H): 312mm × 260mm × 84mm	
Working Environment	Operating Temperature: -20℃ ~ 50℃; Storage Temperature: -40℃ ~ 85℃; Operating Humidity: Max 90%, non-condensing Storage Humidity: Max 95%, non-condensing Working Height: Max to 10,000 feet (3,000 meters) Storage Height: Max to 10,000 feet (3,000 meters)	
Package Contents	1. Switch: 1 set 2. Instruction manual: 1 3. Certificate of conformity: 1 4. Warranty card: 1 5. Power Supply 1 6. A pair of hanging ears	
Certification	CE, FCC, RoHs, 3C	
MTBF:	100,000 hours	
Warranty	2 years warranty	
Technical Indicators		
Bandwidth	20Gbps	

Packet Forwarding rate	14.88Mpps
Packet Buffer Memory	4M
Memory Capacity	128MB
Flash Capacity	16MB
Jumbo frame	9.6Kbytes
VLANs	4096
MAC	8K
Forwarding Mode	Store-And-Forward
<b>Layer 2 Software Function</b>	
Port Management	Enable/Disable Port
	Speed、Duplex、MTU Setting
	Flow-control
	Port Information Check
Port Mirroring	Supports both side-way port mirroring
Port Speed Limit	Supports port speed limit, speed limit granularity 32Kbps
Port Isolation	Support the downlink port isolation, and can communicate with the uplink port
Storm Suppression	Supports unknown unicast, multicast, unknown multicast, broadcast type storm suppression Storm suppression based on bandwidth regulation and storm filtering
Link Aggregation	Support static manual aggregation Support LACP dynamic aggregation
VLAN	Access
	Trunk
	Hybrid
	Support port, protocol, MAC-based VLAN partitioning
	Support GVRP dynamic VLAN registration
	Voice VLAN
MAC	Support static addition, deletion
	MAC address learning limit
	Support dynamic aging time setting
Spanning tree	Support STP spanning tree protocol Supports RSTP Rapid Spanning Tree Protocol Supports MSTP Rapid Spanning Tree Protocol

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Multicast	Support static addition, deletion IGMP-snooping
	Support MLD-Snooping
	Support v1/2/3 dynamic multicast monitor
DDM	Support SFP/SFP+DDM
<b>Extended Function</b>	
ACL	Based on source MAC, destination MAC, protocol type, source IP, destination IP, L4 port
Qos	Based on 802.1p (COS) classification
	Based on DSCP classification
	Classification based on source IP, destination IP, and port number
	Support SP, WRR scheduling strategy
	Support flow rate limit CAR
LLDP	Support LLDP link discovery protocol
User settings	Add / delete users
Log	User login, operation, status, events
Anti-attack	DOS defense
	Support CPU protection and limits the rate of sending cpu packets
	ARP binding (IP, MAC, PORT binding)
Certification	Support 802.1x port authentication
	Support AAA certification
Network diagnosis	Support ping、telnet、trace
System Management	Device reset, configuration save/restore, upgrade management, time setting, etc.
<b>Management function</b>	
CLI	Support serial port command line management
SSH	Support SSHv1/2 remote management
TELNET	Support telnet remote management
WEB	Support Layer 2 settings, Layer 2 and Layer 3 monitor
SNMP	SNMP V1/V2/V3
	Support trap: ColdStart、WarmStart、LinkDown、LinkUp
RMON	Support RMON v1
PoE	Support PoE configuration, PoE scheduling management,PoE watchdog 、 PoE port timing restart

Other functions	Support DHCP Snooping、Option82
	Support Ring-Network Protection
	Support dynamic ARP detection
	Support TACACS+ certification
	Support DNS certification
	Support port security settings
	Support MVR protocol
	Support cable detection VCT function
	Support UDLD protocol