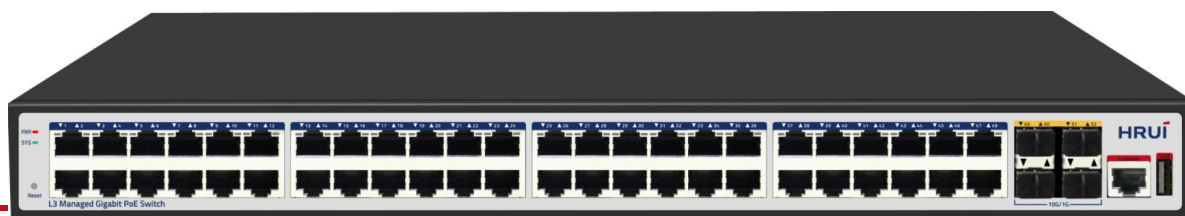


# 52 Port Management 10G Uplink Gigabit POE Switch



[www.hrutech.com](http://www.hrutech.com)

ISO 9001 CE FC RoHS

52 Port 10G Uplink 48 Ports Gigabit L3 Management Ethernet POE switch, provides 48\* 10/100/1000M POE Ethernet Ports, 4\* 10G SFP+ Ports, 1\* console Port, 1\* USB Serial Port. With perfect security control policy and CPU Protect Policy, it can improve fault tolerance and ensure the stable operation of the network and load balance of links. The switch supports automatic DoS attack defense, SNMP, IEEE 802.1, STP, RSTP, and link aggregation. With advanced security features and advanced quality of Service (QoS), it can be used as a core, distribution or access layer switch with high-end port density, ease of management, it is an ideal choice for a variety of business networking applications.

## Main Feature

- Support IEEE 802.1d, IEEE 802.1w, IEEE 802.1s, IEEE 802.1p, IEEE 802.3, IEEE 802.3u, IEEE 802.3x, IEEE 802.3z, IEEE 802.3ab, IEEE 802.3ae standard;
- L3 management , support DHCP Server, QoS, ACL Control, SNMP V1/V2/V3, IGMP Snooping v1/v2 ;
- Support STP/RSTP/MSTP ( ERPS), Support loop detection and self-healing, remote loopback monitoring and control (802.3ah OAM);
- Supports multiple VLAN divisions, MAC VLAN, protocol VLAN, and Private VLAN;
- Support IP address +MAC address +VLAN+ port binding, DHCP Snooping, IP source and DAI protection.;
- Support IPV4/ IPV6, RIP, OSPF;
- Surge Protection: Common mode 6KV, Differential 2KV; ESD : Contact 6KV. air 8KV;
- Support WEB, TELNET, CLI, SSH, SNMP, RMON management;
- Support IEEE802.3af/at (15.4/30W), IEEE802.3bt (90W)
- Support PoE watchdog. PoE Port power supply, Power configuration and PoE time management.

## Application Environment

### **Metro Optical Broadband Network:**

Data network operators such as telecommunications, cable TV, and network system integration,etc.

### **Broadband private network:**

Suitable for financial, government, oil, railway, electric power, public security, transportation, education and other industries

### **Multimedia transmission:**

Integrated transmission of images, voice and data, suitable for remote teaching, conference TV, videophone and other applications

### **Real-time monitoring:**

Simultaneous transmission of real-time control signals, images and data

Specification	
<b>I/O Interface</b>	
Power Input	AC 100-240V 50/60Hz
Ethernet	48* 10/100/1000Mbps POE Ports (Ports 1-4 support BT Power Supply) 4* 10G SFP+ Port 1* RJ45 Console Port 1* USB serial Port
<b>Performance</b>	
Bandwidth	176Gbps
Packet Forwarding Rate	131Mpps
DDR SDRAM	512MByte
Flash Memory	32MByte
Buffer Memory	16Mbit
MAC Address	32K
Jumbo Frame	12KBytes
VLANs	4096
MTBF	100000 Hours
<b>Standard</b>	
Network Protocol	IEEE802.3 Ethernet MAC Protocol IEEE802.3u 100BASE-TX Fast Ethernet IEEE 802.3ab 1000BASE-T Gigabit Ethernet IEEE 802.3z 1000BASE-X Gigabit Ethernet (optical fiber) IEEE 802.3ae 10G Ethernet IEEE802.3x Flow Control IEEE 802.3az Energy-efficient Ethernet IEEE 802.3ad Standard method for performing link aggregation IEEE 802.1AB LLDP/LLDP-MED (Link Layer Discovery Protocol) IEEE 802.1D Spanning Tree Protocol(STP) IEEE 802.1w Rapid Spanning Tree Protocol (RSTP) IEEE 802.1s Multiple Spanning Tree Protocol (MSTP) IEEE 802.1Q ( VLAN Bridge Operation ) IEEE 802.1p ( VLAN Label ) IEEE 802.1X Client/Server Access Control and Authentication Protocol

# DATA SHEET



POE Standard	IEEE802.3af (15.4W), IEEE802.3at (30W), IEEE802.3bt (90W)
Industry Standard	EMI: FCC 47 CFR Part 15 Subpart B (Class A) EMS: EN61000-4-2 (ESD),EN61000-4-5 (Surge)
Network Medium	10Base-T : Cat3, 4, 5 or above UTP(≤100m) 100Base-TX : Cat5 or above UTP(≤100m) 1000Base-TX : Cat5 or above UTP(≤100m)
Fiber Medium	Multi-mode Fiber: 50/125, 62.5/125, 100/140um Single-mode Fiber: 8/125, 8.7/125, 9/125, 10/125um
<b>Certification</b>	
Safety Certificate	CE, FCC, RoHS
<b>Environment Standard</b>	
Working Environment	Working Temperature : -10~50°C Storage Temperature : -40~70°C Working Humidity : 10%~90% , non-condensing Storage Temperature : 5%~90% , non-condensing
<b>Function Indicator</b>	
Indicator	PWR (Power Indicator), SYS (system Indicator), Link (Link Indicator), ACT (ACT Indicator)
PWR	On: Powered On Off: Powered Off
SYS	On: System On Flashing: System Off or Failed
Link& ACT	On: Link Connecting Flashing: Data Transmitting Off: Link Off
<b>Physical Specification</b>	
Structure Size	Product Dimensions: 440*360*44.5mm Package Dimensions: 580*440*120mm Product N.W: 5.30KG Product G.W:6.58 KG
Packing Info	Carton Dimensions: 600*460*278mm Packing Quantity: 2Pieces Packing weight: 14.2KG
Power Voltage	Working Voltage: AC100-240V 50/60Hz Power Supply: 52V 11.5A/ 12V 6A
Power Consumption	POE: POE Total Power<600W Power Consumption: Machine<67.5W
Package List	Switch: 1 set; instruction manual: 1 set; certificate of quality: 1 set; power cord: 1 set; serial cable: 1 set; mounting ear: 1 pair

L3 Function	
IPv4	IPv4 VLAN Interface
	IPv4 Static Routes
	ARP
IPv6	IPv6 VLAN Interface
	IPv6 Static Routes
	IPv6 ND
RIP	V1/V2
OSPF	Router-ID
	Authentication
L2 Function	
Port	Port Switch
	Port Description
	Port Speed
	Port Duplex
	Port Flow Control
	Jumbo, Up to 10K
	Support 10G/2.5G (2023.3.2)
	Fiber Module(DDM)
Link Aggregation	Supports load balance policy; Base on MAC and IP-MAC
	Static and Dynamic Group
	Supports LACP
	Up to 8 groups
Storm Control	Boardcast
	Unknown Multicast
	Unknown Unicast
Port Mirroring	One to one monitor
	Many to one monitor
	Ingress/Egress/Both
	Up to 4 session groups
Port Security	MAC Address Constraints
	Port Security MAC Address
	Protect/Restrict/Shutdown
Port Isolation	
Port Rate-limit	
Loopback Detection	
VLAN	Access/Trunk/Hybrid
	VLAN Tunnel ( Q-in-Q Tunnel )
	Congurable VID from 1 - 4094; Max. 4K static VLAN groups
	Voice VLAN
	MAC VLAN
	Surveillance VLAN
	协议VLAN / Protocol VLAN
	GVRP

MAC Address	Dynamic Address
	Static Address
	Filtering Address
Spanning Tree Protocol	STP/RSTP/MSTP
	BPDU Filter
	BPDU Guard
	Edge Port
LLDP	LLDP
	LLDP MED
Multicast	IGMP Snooping
	IGMP V1/V2/V3
	Router Port
	Static IGMP group address
	IGMP groups filtering
	Querier
	MLD Snooping
	MVR
QoS	Traffic classification based, Strict priority and WRR
	Port Priority
	802.1P Priority
	IP TOS Priority
	IP DSCP Priority
	Supports up to 8 queues per port
	Priority Remarking
PoE	
PoE Configuration	PoE Temperature
	PoE Type/Level/Power/Voltage/Current
	PoE Switch
	PoE Watchdog
	PoE power AF/AT adaptation
	IEEE 802.3bt , compatible with IEEE 802.3af/802.3at PoE
PoE Schedule	
PoE Port Timer Reboot	
Services	
DHCP	DHCP Server
	IP Pool
	Static Binding
	DHCP Relay
	Option 43

Access Protocol	HTTP
	HTTPS
	Telnet
	SSHv2
	Manager ACL
	Session Timeout
	Password Retry Count
	Silent Time
Security	
AAA	RADIUS
	TACACS+
	802.1X
	Base on port/MAC/local/WEB
DHCP Snooping	Global/VLAN
	Option 82
	Circuit ID
IP Source Guard	
Dynamic ARP Inspection	
DoS	
ACL	MAC ACL
	IPv4 ACL
	IPv6 ACL
Diagnostics	
Syslog	Logging Message
	Remote Server
Ping	
Traceroute	
Copper Test	
UDLD	
Managemnet	
Manager Access	Console
	HTTP/HTTPS
	Telnet
	SSH
	SNMP
Manager IP	Static Address
	DHCP Client
	Supports IPv4 and IPv6 address
	Manager VLAN
	DNS
Time Synchronization	SNTP
	Manual Time

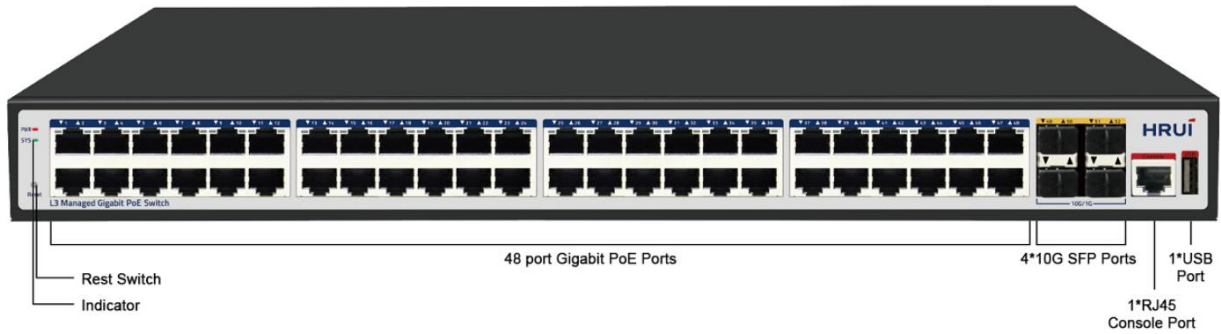
# DATA SHEET



SNMP	V1/V2C/V3
	Community
	V3 User
	Group
	Trap Host
SNMP MIB	RFC 1213 MIB-II
	RFC 1493 Bridge MIB
	RFC 1643 Ethernet MIB
	RFC 2819 RMON MIB (Groups 1, 2, 3 and 9)
	RFC 2863 Interface MIB
	LLDP
	Private MIB
RMON	Statistics
	History
	Event
	Alarm
User	
Firmware	Double Image; Swap between Active and Alternate firmware image.
	Firmware Upgrade
Configuration	Upload and download
	Upload and download via USB interface
Save	
Restart	
Factory Defaults	
<b>Standards Compliance</b>	
IEEE 802.3x flow control and back pressure	
IEEE 802.3ad port trunk with LACP	
IEEE 802.1D Spanning Tree Protocol	
IEEE 802.1w Rapid Spanning Tree Protocol	
IEEE 802.1s Multiple Spanning Tree Protocol	
IEEE 802.1p Class of Service	
IEEE 802.1Q VLAN tagging	
IEEE 802.1x Port Authentication Network Control	
IEEE 802.1ab LLDP	
IEEE 802.3af Power over Ethernet	
IEEE 802.3at Power over Ethernet Plus	
IEEE 802.3bt PoE++ Power over Ethernet Plus Plus	
RFC 768 UDP	
RFC 793 TFTP	
RFC 791 IP	
RFC 792 ICMP	
RFC 2068 HTTP	
RFC 1112 IGMP v1	
RFC 2236 IGMP v2	
RFC 3376 IGMP v3	
RFC 2710 MLD v1	
RFC 3810 MLD v2	
RFC 2328 OSPF v2	

Order Info	
HR-AXGM-SWTG3448S-650	52 Port 10G Uplink 48 Ports Gigabit L3 Management Ethernet POE switch

## Panel description



## Structure Size Drawing

