48-Port Gigabit and 6-Port 10G SFP+ Managed Switch



Product Highlights

- Comply with 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 standards
- L3 management, support DHCP Server, QoS, ACL control, SNMP V1/V2/V3, IGMP Snooping v1/v2
- Support Spanning Tree Protocol STP/RSTP/MSTP (ERPS), Loop Detection and Self Healing, and Remote Loop Monitoring and Control
- Support multiple VLAN partitions, including MAC VLAN and protocol VLAN
- Support IP address+MAC address+VLAN+port binding, DHCP Snooping, IP source and DAI protection
- Support IPV4/IPV6, RIP v1/v2, OSPFv2
- Support WEB, TELNET, CLI, SSH, SNMP, RMON management

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Hardware Features

Description	Specification
Model	HR230S-48T6XS
Interface	48*1Gbps RJ45 ports 6*10Gbps SFP+ ports 1*Console port
Port Standard	IEEE802.3 (Ethernet) IEEE802.3u (Fast Ethernet) IEEE 802.3ab (Gigabit Ethernet) IEEE 802.3z (Gigabit Ethernet Fiber Standard) IEEE 802.3ae (10G Ethernet) IEEE802.3x (Flow Control) IEEE 802.3az (Efficient and Energy saving Ethernet) IEEE 802.3ad (Link Aggregation) IEEE 802.1AB LLDP/LLDP MED (Link Layer Discovery Protocol) IEEE 802.1D Spanning Tree Protocol IEEE 802.1w Rapid Spanning Tree Protocol IEEE 802.1s Multiple Spanning Tree Protocol (Fast Spanning Tree) IEEE 802.1Q (Virtual Local Area Network) IEEE 802.1p (VLAN Tag) IEEE 802.1X (User Authentication)
Switching Bandwidth	216Gbps
Packet Forwarding Rate	160.76Mpps
Packet Buffer	16Mbit
MAC Address Table	32K
Jumbo Frame	Up to 10K
VLAN	VLAN range 1-4094, maximum active VLAN is 4K
Transmission Method	Store and Forward
Power Supply	AC 100-240V 50/60Hz DC 12V8A
Certification	CE, FCC, RoHS
Fan Nnoise	Max 44dB

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Hardware Features

Description	Specification
Mainboard Power Consumption	42.26W
Structure Information	Product Dimensions: 440*280*44mm Packaging Dimensions: 500*365*85mm Product Net Weight: 3.84KG Product Gross Weight: 4.56KG
Packing Information	Carton Dimensions : 520*445*385mm Packing Quantity: 5PCS Packing Weight: 23.8KG
Package Contents	Switch 1pcs, Power Cord 1pcs, Manual 1pcs, Certificate of Inspection 1pcs, Rack-mounted kit 1 pair
Fan Quantity	1
Installation	Desktop, Rack-mounting
Surge Protection	Port Surge: Common mode 6KV, Differential mode 2KV Electrostatic ESD: Air 15KV, Contact 8KV (Class C)
Operating Temperature	0~40°C
Storage Temperature	-40~70°C
Operation Humidity	10%~90%, non condensing
Storage Humidity	5%~95%, non condensing
PWR Green LED	On: Powered on Off: Powered off
SYS Green LED	Flashing: System startup in progress On: The system is running normally
Ports 1-48	Green LED on: 1Gbpsbps Link normal Yellow LED on: 10/100Mbps Link normal Off: Link blocked Flashing: Data transmitting
Ports 49-54	Blue LED on: 10Gbps Link normal Green LED on: 1G/2.5Gbps Link normal Off: Link blocked Flashing: Data transmitting
Reset	Long press for 6 seconds to restore factory settings

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Software Features

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
	V2
L2 Function	
Port	Port Switch configuration
	Port Description configuration
	Port Speed configuration
	Port Duplex configuration
	Port Flow Control configuration
	Support 10G/2.5G
	Jumbo Frame, Up to 10K
	EEE
	Fiber Module(DDM)
Link Aggregation	Support load balance policy; Base on MAC and IP-MAC
	Static and Dynamic Group
	Support LACP
	Up to 8 groups
Storm Control	Boardcast suppression
	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	Support
Port Rate-limit	Support
Loopback Detection	Support

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Software Features

VLAN	Access/Trunk/Hybrid VLAN Tunnel （Q-in-Q Tunnel） VLAN range 1-4094, maximum active VLAN is 4K Voice VLAN MAC VLAN Surveillance VLAN Protocol VLAN GVRP
MAC Address	Dynamic MAC address Static MAC address Filtering MAC 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 Support up to 8 queues per port Priority Remarking
ERPS	Only SFP port
Services	
DHCP	DHCP Server IP Pool Static Binding Option 43 DHCP Relay
Access Protocol	HTTP HTTPS Telnet SSHv2 Manager ACL Session Timeout Password Retry Count Silent Time

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Software Features

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

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Software Features

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 Configuration Event Configuration Alarm Configuration
User Management	Support
Firmware Management	Firmware upgrade Double Image; Swap between Active and Alternate firmware image
Configuration Management	Upload and download Upload and download via USB interface
Save	Support
Restart	Support
Factory Defaults	Support

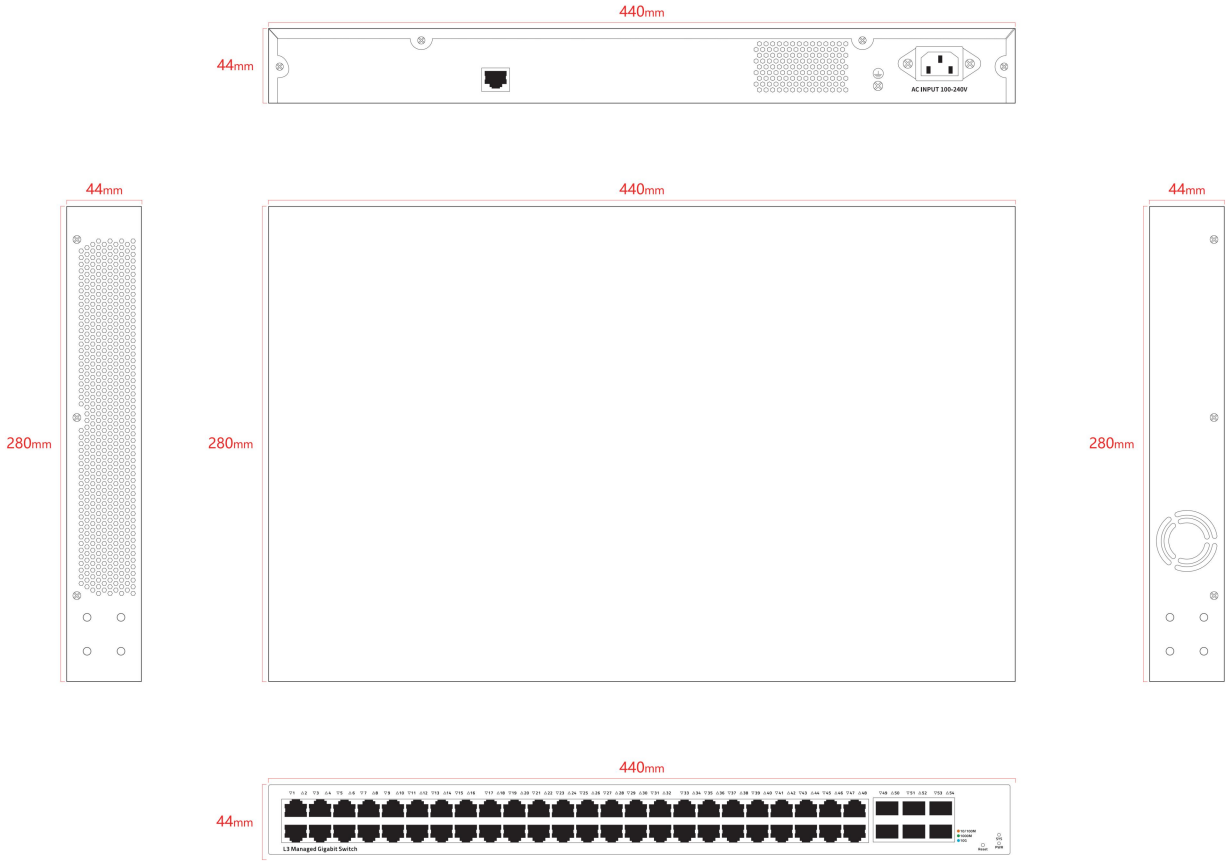
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Software Features

Standard Compliance
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
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
FRC 3810 MLD v2
RFC 2328 OSPF v2

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Product Structure Diagram



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