

# 12-Port 10G Web Management Ethernet Switch



## Product Highlights

- 8\*10Gbps RJ45 ports+4\*10Gbps SFP+ ports
- Comply with IEEE 802.3, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3bz, IEEE 802.3ae, and IEEE 802.3x standards
- Ethernet Ports support 100M/1G/2.5G/10Gbps self-adaptive
- Support automatic port flipping (Auto MDI/MDIX)
- The panel indicator LEDs will monitor the working status and assist in fault analysis
- Flow control method, IEEE802.3x standard for full duplex and Backpressure standard for half duplex
- Support QoS data priority

Hardware Features

| Description                 | Specification                                                                                                                        |
|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| Model                       | HR510S-8T4XS                                                                                                                         |
| Interface                   | 8*10Gbps RJ45 ports                                                                                                                  |
|                             | 4*10Gbps SFP+ ports                                                                                                                  |
| Port Standard               | IEEE802.3 (Ethernet)                                                                                                                 |
|                             | IEEE802.3u (Fast Ethernet)                                                                                                           |
|                             | IEEE802.3ab (Gigabit Ethernet)                                                                                                       |
|                             | IEEE 802.3bz (5G Ethernet)                                                                                                           |
|                             | IEEE 802.3z (Gigabit Ethernet)                                                                                                       |
|                             | IEEE 802.3ae (10G Ethernet)                                                                                                          |
|                             | IEEE802.3x (Flow Control)                                                                                                            |
|                             |                                                                                                                                      |
| Switching Bandwidth         | 240Gbps                                                                                                                              |
| Packet Forwarding Rate      |                                                                                                                                      |
|                             | 178.56Mpps                                                                                                                           |
| Packet Buffer               | 16Mbit                                                                                                                               |
| MAC Address Table           | 32K                                                                                                                                  |
| Jumbo Frame                 | Support                                                                                                                              |
| VLAN                        | VLAN range 1-4094, maximum active VLAN is 4K                                                                                         |
| Transmission Method         | Store and Forward                                                                                                                    |
| Power Supply                | AC 100-240V 50/60Hz                                                                                                                  |
|                             | DC 12V8A                                                                                                                             |
| Mainboard Power Consumption | 48.75W                                                                                                                               |
| Structure Information       | Product Dimensions: 320*207*45mm<br>Packaging Dimensions: 370*290*85mm<br>Product Net Weight: 1.72KG<br>Product Gross Weight: 2.28KG |

Hardware Features

| Description           | Specification                                                                                                                 |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------|
| Packing Information   | Carton Dimensions: 445*310*390mm<br>Packing Quantity: 5PCS<br>Packing Weight: 12.4KG                                          |
| 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 4KV, Differential mode 1KV<br>Electrostatic ESD: Air 8KV, Contact 6KV                                 |
| 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<br>Off: Powered off                                                                                            |
| SYS Green LED         | On: The system is normal<br>Flashing: System startup in progress                                                              |
| Ports 1-8             | Green LED on: 10Gbps Link normal<br>Yellow LED on: 1G/2.5Gbps Link normal<br>Off: Link blocked<br>Flashing: Data transmitting |
| Ports 9-12            | Green LED on: 10Gbps Link normal<br>Yellow LED on: 1G/2.5Gbps Link normal<br>Off: Link blocked<br>Flashing: Data transmitting |
| Reset                 | Long press for 6 seconds to restore factory settings                                                                          |

## Software Features

| Description      | Specification                                       |
|------------------|-----------------------------------------------------|
| L2 Function      |                                                     |
| Port             | Port Switch configuration                           |
|                  | Port Description configuration                      |
|                  | Port Speed configuration                            |
|                  | Port Duplex configuration                           |
|                  | Port Flow Control configuration                     |
|                  | Jumbo Frame                                         |
|                  | EEE                                                 |
| Link Aggregation | Support load balance policy; Base on MAC and IP-MAC |
|                  | Static and Dynamic Group                            |
|                  | 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                             |
|                  | Protect/Restrict/Shutdown                           |
| Port Isolation   | Support                                             |
| Port Rate-limit  | Support                                             |
| VLAN             | Access/Trunk/Hybrid                                 |
|                  | VLAN Tunnel (Q-in-Q Tunnel)                         |
|                  | VLAN range 1-4094, maximum active VLAN is 4K        |
| MAC Address      | Filtering MAC Address                               |
|                  | Static MAC address                                  |

Software Features

| Description            | Specification                                            |
|------------------------|----------------------------------------------------------|
| Spanning Tree Protocol | STP/RSTP                                                 |
|                        | BPDU Filter                                              |
|                        | BPDU Guard                                               |
|                        | Edge Port                                                |
| Multicast              | IGMP Snooping                                            |
|                        | Router Port                                              |
|                        | Static IGMP Join                                         |
|                        | IGMP V1/V2                                               |
| QoS                    | Traffic classification, Supporting SP and WRR scheduling |
|                        | Port Priority                                            |
|                        | 802.1P Priority                                          |
|                        | IP DSCP Priority                                         |
|                        | Priority Remarking                                       |
| ERPS                   | Support up to 8 queues per port                          |
|                        | Main Ring                                                |
| Services               |                                                          |
| Access Protocol        | HTTP                                                     |
|                        | Session Timeout                                          |
| Security               | DHCP Snooping                                            |
| Diagnostics            |                                                          |
| Copper Test            | Support                                                  |
| Ping                   | Support                                                  |
| Equipment Management   |                                                          |
| Manager Acces          | HTTP                                                     |
|                        | SNMP                                                     |
| Manager IP             | Static Address                                           |
|                        | Manager VLAN                                             |
|                        | DNS                                                      |
|                        | DHCP Client                                              |

Software Features

| Description                                | Specification               |
|--------------------------------------------|-----------------------------|
| SNMP                                       | V2C                         |
|                                            | Community                   |
|                                            | Trap Host                   |
| SNMP MIB                                   | RFC 1213 MIB-II             |
|                                            | RFC 1643 Ethernet MIB       |
|                                            | RFC 2863 Interface MIB      |
| User Management                            | Support                     |
| Firmware Management                        | Firmware upgrade            |
| Configuration Management                   | Upload/Backup Configuration |
| Save                                       | Support                     |
| Restart                                    | Support                     |
| Factory Defaults                           | Support                     |
| 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 802.1p Class of Service               |                             |
| IEEE 802.1Q VLAN tagging                   |                             |
| 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                           |                             |

Product Structure Diagram

