

20 Port Gigabit Managed Ethernet PoE Switch



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CE FC RoHS

The 20-Ports Gigabit Managed PoE Switch . 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.

Main Features

- 16 x 10/100/1000Mbps auto-sensing PoE Ports, 2 x 10/100/1000Mbps Ethernet Uplink Ports, 2 x Gigabit SFP Uplink Ports, 1 x Console Port
- Support IEEE802.3/IEEE802.3i/IEEE802.3u/IEEE802.3ab/IEEE802.3z
- Compatible with IEEE802.3at (30W) and IEEE802.3af (15.4w)
- Ethernet port supports 10/100/1000M adaptive
- Panel indicator monitoring the status and help failure analysis
- Fanless design, Natural Cooling, 1U Rack Mount
- Support 802.1x port authentication, support AAA authentication, support TACACS+ authentication
- Support WEB, TELNET, CLI, SSH, SNMP, RMON management
- Support PoE Power Management, PoE watch dog
- Surge Protection: General 6KV, Differential 2KV, ESD 8KV air, 6KV contact

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

| Specifications | |
|------------------------|---|
| I/O Interface | |
| Power | AC 100-240V/50-60Hz |
| Ethernet | 16 * 10/100/1000Mbps PoE Port 2* 10/100/1000Mbps Uplink Port 2* 1000Mbps SFP Port 1 * RJ45 Console Port |
| Performance | |
| Bandwidth | 40Gbps |
| Packet Forwarding rate | 29.76Mpps |
| Packet Buffer Memory | 4Mbit |
| Flash Memory | 16MByte |
| DDR SDRAM | 128MByte |
| MAC Address | 8K |
| Jumbo frame | 9.6Kbytes |
| VLANs | 4096 |
| MTBF | 100000 hour |
| Standard | |
| Network protocol | IEEE 802.3: Ethernet MAC Protocol IEEE 802.3i: 10BASE-T Ethernet IEEE 802.3u: 100BASE-TX Fast Ethernet IEEE 802.3ab: 1000BASE-T Gigabit Ethernet IEEE 802.3z: 1000BASE-X Gigabit Ethernet (optical fiber) IEEE 802.3ad: Standard method for performing link aggregation IEEE 802.3x: Flow control IEEE 802.1ab: LLDP/LLDP-MED (Link Layer Discovery Protocol) IEEE 802.1p: LAN Layer QoS/CoS Protocol Traffic Prioritization(Multicast filtering function) IEEE 802.1q: VLAN Bridge Operation IEEE 802.1x: Client/Server Access Control and Authentication Protocol IEEE 802.1d: STP IEEE 802.1s: MSTP IEEE 802.1w: RSTP |

| | |
|--------------------------------|---|
| PoE protocol | IEEE802.3af (15.4W) IEEE802.3at (30W) |
| Industry Standard | EMI: FCC Part 15 CISPR (EN55032) class A EMS: EN61000-4-2 (ESD)、 EN61000-4-5 (Surge) |
| Network Medium | 10BASE-T: Cat3、4、5 or above UTP(≤ 100 M) 100BASE-TX: Cat5 or above UTP(≤ 100 M) 1000BASE-TX: Cat5 or above UTP(≤ 100 M) |
| Fiber Medium | Multi-mode Fiber: 50/125、62.5/125、100/140um Single-mode Fiber: 8/125、8.7/125、9/125、10/125um |
| Certification | |
| Safety Certificate | CE、FCC、RoHS |
| Environment | |
| Working Environment | Working Temperature: $-10\sim 50^{\circ}\text{C}$ Storage Temperature: $-40\sim 70^{\circ}\text{C}$ Working Humidity : 10%~90%, non-condensing Storage Temperature: 5%~95%, non-condensing |
| Physical specifications | |
| Structure Size | Product Dimensions: 440*204*44mm Package Dimensions: 500*290*85mm Product N.W: 2.78KG Product G.W: 3.44KG |
| Packing Info | Carton Dimensions: 520*445*310mm Packing Quantity: 5pcs Packing weight: 18.2KG |
| Power Voltage | Input Voltage : AC 100-240 V/50-60Hz Power Supply: 52V5.76A |
| power | Product power: $\leq 15\text{W}$ POE power: $\leq 280\text{W}$ |
| Package List | Ethernet switch: 1 Set、 Instruction manual: 1 PCS、 Certificate: 1 PCS、 Power cord: 1PCS Serial cable: 1PCS、 Rack ear: 1 Pairs |

| function&Indication | |
|---------------------------------|---|
| LED Indicators | PWR, SYS, PoE/ACT、Link/ACT |
| PWR (Power Indicator) | Lighting: Powered Un-Light: No Power |
| SYS (System Indicator) | Flashing: System Start-up Lighting: System Running |
| PoE/ACT (PoE Indicator) | Lighting: PoE on Un-Light: PoE off |
| Link/ACT (Link &Data Indicator) | Lighting: Link connection Flashing: Data transmission Un-Light: Link disconnect |
| Reset | Short press restart, long press 5 seconds to restore factory Settings |

| L3 Function | |
|------------------|---|
| IPv4 | IPv4 VLAN Interface |
| | IPv4 Static Routes |
| | ARP |
| IPv6 | IPv6 VLAN Interface |
| | IPv6 Static Routes |
| | IPv6 ND |
| L2 Function | |
| Port | Port Switch |
| | Port Description |
| | Port Speed |
| | Port Duplex |
| | Port Flow Control |
| | Jumbo, Up to 10K |
| | EEE |
| | 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 |

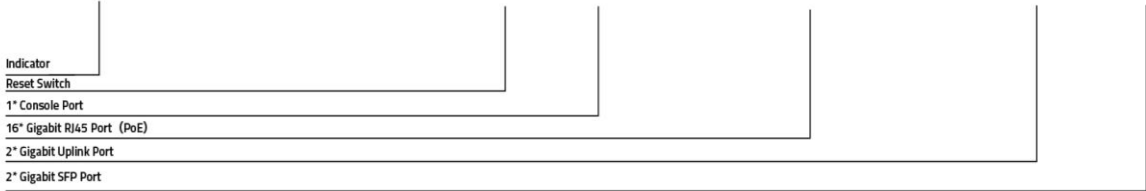
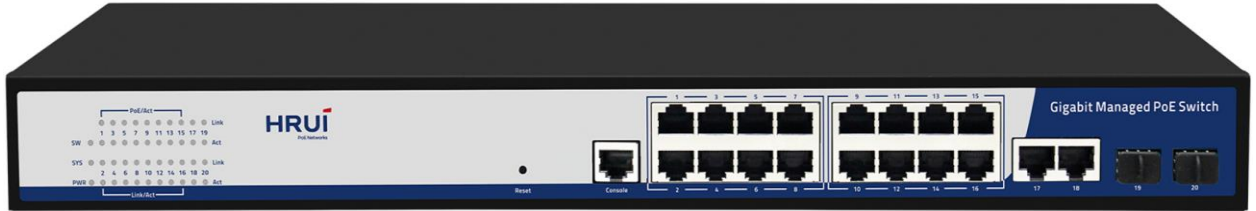
| | |
|------------------------|--|
| Port Mirroring | One to one monitor |
| | Many to one monitor |
| | Ingress/Egress/Both |
| | Up to 4 session groups |
| Port Security | MAC Address Constraints |
| | Port Security MAC Address |
| | Protect/Restrict/Shutdown |
| Port Isolation | |
| Port Rate-limit | |
| Loopback Detection | |
| VLAN | Access/Trunk/Hybrid |
| | VLAN Tunnel (Q-in-Q Tunnel) |
| | Congurable VID from 1 - 4094; Max. 256 static VLAN groups |
| | Voice VLAN |
| | MAC VLAN |
| | Surveillance 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 |
| PoE Schedule | |
| PoE Port Timer Reboot | |
| Services | |
| DHCP | DHCP Server |
| | IP Pool |
| | Static Binding |
| | DHCP Relay |
| 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 |
| 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 | Firmware Upgarde |
| Configuration | Upload and download |
| Save | |
| Restart | |
| Factory Defaults | |

| Standards 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 |
| IEEE 802.3af Power over Ethernet |
| IEEE 802.3at Power over Ethernet 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 |

Panel description



Product structure

