# 6 Ports Gigabit Managed Industrial PoE Switch

#### (Adopt VTS Industrial Grade Switch Chip)

### **[Product Description]**

6-port Gigabit Industrial Ethernet PoE Switch, 4 Gigabit PoE Ports + 2 Gigabit SFP Port + 1 Console port, supporting Din rail and wall mounting. Supports dual power input (DC12-55V); -40 to 85°C working temperature; Certified by industrial environment and support FCC, CE, CCC, RoHS standards; Reliable industrial design ensures uninterrupted automation system Stable operation.

This series of industrial grade switches can be widely used in wind power, electric power, assembly automation, subway PIS, electric power SCADA, sewage treatment, metallurgy, intelligent transportation, rail transportation, military and other industries. It is a green low-power industrial Ethernet switch.

This series of switches provides advanced network management capabilities: redundant ring, loop protection, VLAN, QOS, speed control, port mirroring, and firmware online upgrades. With standardized industrial design, it can meet the stringent requirements of industrial sites. All components use industrial grade for greater reliability, providing redundant, wide-voltage power inputs and outputs for uninterrupted industrial safety communications.

### [Features]

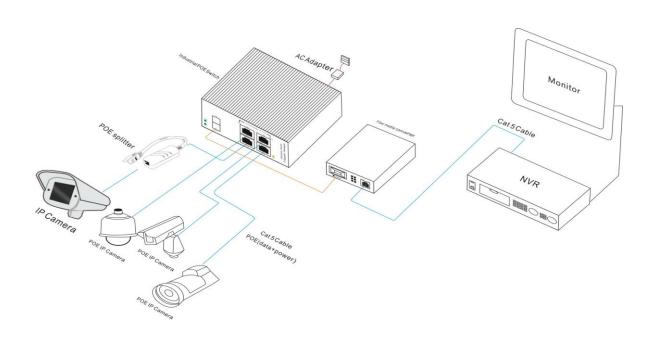
- Support: IEEE802.3、IEEE802.3u, IEEE802.3x, IEEE802.3z/ab, IEEE802.1Q, IEEE802.1p,
   IEEE802.1d/w
- PoE Power Management, PoE Watchdog based on data stream detection.
- Support IEEE802.3af (15.4w) 和 IEEE802.3at (30W).
- Support STP (802.1D) , RSTP (802.1w) , MSTP (802.1s) , ERPS.
- Support SNMP v1/v2/v3.
- Support IGMP Snooping, Static multicast filtering and MLD Snooping.
- Support 802.1x port and AAA Certification, Enhance network security.
- Support WEB, Telnet, CLI,SSH management.

- IP40 protection, rugged high-strength metal case, DIN35 Rail mounting
- EMC grade 4 design, -40 to 85<sup>°</sup>C working temperature.
- Support Redundant power supply access, support anti-reverse connection.
- Support Port lightning protection, Surge: General Mode 6KV, Differential Mode2KV,ESD: 15KV,
   Support EMC EN55032 standard.

### [Application Environment]

- Metropolitan area fiber broadband network: telecommunications, cable TV, network system integration, etc., network operators.
- ◆ Broadband private network: Suitable for financial, government, oil, railway, electric power, public security, transportation, education and other industries.
- Multimedia transmission: image, voice, data integrated transmission, suitable for remote teaching, conference TV, videophone and other applications.
- ◆ Real-time monitoring: simultaneous transmission of real-time control signals, images, data
- Resistant to harsh environment: Suitable for strong electromagnetic interference, networking in harsh environments at long distances.

#### [Connection diagram]



## [Technical parameters]

| Product Name    | 6 Ports Gigabit Managed Industrial PoE Switch                           |   |  |
|-----------------|---|---|--|
| Product Model   | ZX600-AFGI  | M-42S   |  |
| Port Definition | 4 Gigabit Po  | E Ports + 2 Gigabit SFP Port + 1 Console port |  |
|                 | IEEE802.3   |   |  |
|                 | IEEE802.3u  |   |  |
| Network         | IEEE802.3z  |   |  |
| Protocols       | IEEE802.3ab   |   |  |
| 1 10100013      | IEEE802.3x  |   |  |
|                 | IEEE802.1d  |   |  |
|                 | IEEE802.1w  |   |  |
|                 | POE Standa  | rd: IEEE 802.3af / IEEE 802.3at               |  |
|                 | Single PoE F  | Port Power Output:                            |  |
|                 | Max: 15.4 W   | (IEEE 802.3af)                                |  |
| POE             | Max: 30 W (I  | EEE 802.3at)                                  |  |
| Parameters      | PoE Compatibility: IEEE 802.3af / at adaptive                           |   |  |
|                 | POE Power Output: DC 48-55V POE Power Pin: 1/2-; 3/6+                   |   |  |
|                 |   |   |  |
|                 | 10BASE-T: Cat3,4,5 UTP(≤100 M)  |   |  |
| Network Media   | 100BASE-TX  | K: Cat5 or above UTP(≤100 M)                  |  |
|                 | 1000BASE-TX: Cat5 or above UTP(≤100 M)                                  |   |  |
| Fiber Media     | Multi-mode:   | 850nm, 1310nm Transmission Distance: 550m/2Km |  |
|                 | Single-mode: 1310nm, 1550nm Transmission Distance: 20/40/60/80/100/120K |   |  |
|                 | PWR   | Lighting: Powered                             |  |
|                 |   | Un-Light: No Power                            |  |
| LED Indicator   | SYS   | Lighting: System is operating normally        |  |
| LLD Indicator   | 313   | Un-Light: System is not running               |  |

|                        | Valland Balat                                 | Lighting: PoE Powered                              |  |  |
|------------------------|---|--|--|--|
|                        | Yellow light                                  | Un-Light: No PoE Powered                           |  |  |
|                        |   | Slow Flashing: 10/100/1000 Link normally           |  |  |
|                        | Green light                                   | Un-Light: Link disconnect                          |  |  |
|                        |   | Flashing: Link data transmission                   |  |  |
|                        |   | Lighting: Fiber Connection is Normal               |  |  |
|                        | G5-G6   | Un-Light: Disconnect                               |  |  |
|                        |   | Flashing: Link data transmission                   |  |  |
|                        | Input Voltage                                 | e: DC12 ~ 55V                                      |  |  |
| Power Supply           | Type of input                                 | : 4 PIN Industrial Terminal (block V1+V1- V2+ V2-) |  |  |
|                        | Protect grade: IP40                           |  |  |  |
|                        | Installation: DIN Rail                        |  |  |  |
|                        | Product weig                                  | ht: 0.6KG Package weight: 0.8 KG (Without power)   |  |  |
| Physical structure     | Product Dimensions (L×W×H): 145mm×108mm×40 mm |  |  |  |
|                        | Package Dimensions (L×W×H): 245mm×190mm×60mm  |  |  |  |
|                        | Standard packing(L×W×H): 505mm× 320 mm× 400mm |  |  |  |
|                        | Standard pac                                  | cking quantity: 20 (PCS)                           |  |  |
| Working                | Operating temperature: -40 ~ 85 °C            |  |  |  |
| Working<br>Environment | Storage temperature: -40 ~ 85 °C              |  |  |  |
|                        | Humidity: 5%~95 % ( No condensation)          |  |  |  |
|                        | EMI: FCC Pa                                   | art 15, CISPR (EN55032) class A                    |  |  |
| Industry               | EMS: EN610                                    | 00-4-2 (ESD)                                       |  |  |
| Standard               | EN61000-4-4                                   | 1 (EFT)  |  |  |
|                        | EN61000-4-5 (Surge)                           |  |  |  |
| Certification          | CE , FCC , ROHS                               |  |  |  |
|                        |   |  |  |  |

| MTBF                         | 100,000 hours  |  |
|------------------------------|--|--|
| Packing list                 | <ol> <li>Industrial grade switch: 1 Set</li> <li>Instruction manual: 1 PCS</li> <li>Certificate, warranty card: 1 PCS</li> <li>Serial cable: 1PCS</li> <li>Operation manual CD: 1 PCS</li> </ol> |  |
| Warranty                     | 5 years  |  |
| Hardware Parar               | meters   |  |
| Bandwidth                    | 12Gbps   |  |
| Packet<br>Forwarding<br>Rate | 8.928Mpps  |  |
| RAM                          | 128MB  |  |
| Flash                        | 16MB   |  |
| Packet Buffer<br>Memory      | 4M   |  |
| Jumbo frame                  | 9.6Kbytes  |  |
| VLANs                        | 4096   |  |
| MAC                          | 8K   |  |
| Forwarding<br>Mode           | Store-And-Forward  |  |

| Menu Items  | Submenus           | Secondary Submenus | Triple Submenus |
|-------------|--------------------|--------------------|-----------------|
|             | System Information |                    |                 |
|             | IP Status          |                    |                 |
| Information | Syslog             |                    |                 |
| & Status    | Detailed Syslog    |                    |                 |
|             | MAC Table          |                    |                 |
|             | VLANs              | Membership         |                 |

| Menu Items | Submenus        | Secondary Submenus   | Triple Submenus |
|------------|-----------------|----------------------|-----------------|
|            |                 | Ports                |                 |
|            |                 | Traffic Overview     |                 |
|            | Ports           | Detailed Statistics  |                 |
|            |                 | System Status        |                 |
|            | LACP            | Port Status          |                 |
|            |                 | Port Statistics      |                 |
|            | Green Ethernet  |                      |                 |
|            |                 | Neighbors            |                 |
|            | LLDP            | Port Statistics      |                 |
|            | Loop Protection |                      |                 |
|            | Spanning Tree   | Bridge Status        |                 |
|            |                 | Port Status          |                 |
|            |                 | Port Statistics      |                 |
|            |                 | Status               |                 |
|            | IGMP Snooping   | Groups Information   |                 |
|            |                 | IPv4 SFM Information |                 |
|            |                 | Status               |                 |
|            | MLD Snooping    | Groups Information   |                 |
|            |                 | IPv6 SFM Information |                 |
|            | DHCP            |                      | Statistics      |
|            |                 | Server               | Binding         |

| Menu Items | Submenus   | Secondary Submenus  | Triple Submenus |
|------------|------------|---------------------|-----------------|
|            |            |                     | Declined IP     |
|            |            | Snooping Table      |                 |
|            |            | Relay Statistics    |                 |
|            |            | Detailed Statistics |                 |
|            |            | D 16 ''             | Switch          |
|            |            | Port Security       | Port            |
|            |            | Access Management   |                 |
|            |            | Statistics          |                 |
|            | Security   | 200.41/             | Switch          |
|            |            | 802.1X              | Port            |
|            |            | ACL Status          |                 |
|            |            | AAA                 | RADIUS Overview |
|            |            |                     | RADIUS Details  |
|            |            | QoS Statistics      |                 |
|            | QoS        | QCL Status          |                 |
|            | IP Config  |                     |                 |
|            | IP Status  |                     |                 |
| Network    |            | Mode                |                 |
| Admin      | DHCPServer | Excluded IP         |                 |
|            |            | Pool                |                 |
|            | NTP        |                     |                 |

| Menu Items | Submenus       | Secondary Submenus | Triple Submenus |
|------------|----------------|--------------------|-----------------|
|            | Timezone       |                    |                 |
|            |                | System             |                 |
|            |                | Trap               |                 |
|            |                | Communities        |                 |
|            | SNMP           | Users              |                 |
|            |                | Groups             |                 |
|            |                | Views              |                 |
|            |                | Access             |                 |
|            | Syslog         |                    |                 |
|            | Ports          |                    |                 |
|            |                | Static             |                 |
|            | Aggregation    | LACP               |                 |
| Port       | Mirroring      |                    |                 |
| Configure  | Green Ethernet |                    |                 |
|            |                | DDM Configuration  |                 |
|            | DDM            | DDM Overview       |                 |
|            |                | DDM Detailed       |                 |
| Dol        | PoE Setting    |                    |                 |
| PoE        | PoE Status     |                    |                 |
| Advanced   | MAC Table      |                    |                 |
| Configure  | VLANs          |                    |                 |

| Menu Items | Submenus          | Secondary Submenus     | Triple Submenus |
|------------|-------------------|------------------------|-----------------|
|            | GVRP              | Global config          |                 |
|            |                   | Port config            |                 |
|            | Double letien     | Port Group             |                 |
|            | Port Isolation    | Port Isolation         |                 |
|            | Loop Protection   |                        |                 |
|            |                   | Bridge Setting         |                 |
|            |                   | MSTI Mapping           |                 |
|            | Spanning Tree     | MSTI Priorities        |                 |
|            | IPMC Profile      | CIST Ports             |                 |
|            |                   | MSTI Ports             |                 |
|            |                   | Profile Table          |                 |
|            |                   | Address Entry          |                 |
|            | MEP               |                        |                 |
|            | ERPS              |                        |                 |
|            |                   | Basic Configuration    |                 |
|            | IGMP Snooping     | VLAN Configuration     |                 |
|            |                   | Port Filtering Profile |                 |
|            |                   | Basic Configuration    |                 |
|            | IPV6 MLD Snooping | VLAN Configuration     |                 |
|            |                   | Port Filtering Profile |                 |
|            | LLDP              |                        |                 |

| Menu Items | Submenus            | Secondary Submenus  | Triple Submenus |
|------------|---------------------|---------------------|-----------------|
|            | Users               |                     |                 |
|            | Privilege Levels    |                     |                 |
|            | SSH                 |                     |                 |
|            | Port Security Limit |                     |                 |
|            | Access Management   |                     |                 |
|            | 802.1X              |                     |                 |
|            |                     | Ports               |                 |
|            | ACL                 | Rate Limiters       |                 |
|            |                     | Access Control List |                 |
| Conveite   | DHCP                | Snooping Setting    |                 |
| Security   |                     | Snooping Table      |                 |
| Configure  |                     | Relay               |                 |
|            |                     | Relay Statistics    |                 |
|            |                     | Detailed Statistics |                 |
|            | IP&MAC Source       | Configuration       |                 |
|            | Guard Source        | Static Table        |                 |
|            |                     | Dynamic Table       |                 |
|            |                     | Port Configuration  |                 |
|            | ARP Inspection      | VLAN Configuration  |                 |
|            |                     | Static Table        |                 |
|            |                     | Dynamic Table       |                 |

| Menu Items  | Submenus            | Secondary Submenus | Triple Submenus |
|-------------|---------------------|--------------------|-----------------|
|             |                     | RADIUS             |                 |
|             | AAA                 | TACACS+            |                 |
|             | Port Classification |                    |                 |
|             | Port Policing       |                    |                 |
|             | Queue Policing      |                    |                 |
|             | Port Scheduler      |                    |                 |
|             | Port Shaping        |                    |                 |
| QoS         | Port Tag Remarking  |                    |                 |
| Configure   | Port DSCP           |                    |                 |
|             | DSCP-Based QoS      |                    |                 |
|             | DSCP Translation    |                    |                 |
|             | DSCP Classification |                    |                 |
|             | QoS Control List    |                    |                 |
|             | Storm Policing      |                    |                 |
|             | Ping                |                    |                 |
| Diagnostics | Cable Diagnostics   |                    |                 |
|             | CPU Load            |                    |                 |
|             | Restart Device      |                    |                 |
| Mainten     | Factory Defaults    |                    |                 |
| Maintenance | Firmware Upgrade    |                    |                 |
|             | Firmware Select     |                    |                 |

| Menu Items | Submenus      | Secondary Submenus | Triple Submenus |
|------------|---------------|--------------------|-----------------|
|            | Configuration | Download           |                 |
|            |               | Upload             |                 |
|            |               | Activate           |                 |
|            |               | Delete             |                 |

## [Ordering Information]

| Equipment model | Description  |
|-----------------|--|
| ZX600-AFGM-42S  | Layer 2 Management, 4 Gigabit PoE Ports + 2 Gigabit SFP Port + 1 |
|                 | Console port   |

## 【Product Picture】

