## Gigabit Ethernet Switches



#### ITM-5100-28HT-SI 10Gigabit Ethernet Switch

### **Product** overview

10Gigabit Ethernet Switch **ITM-5714-28TC** is standard 2-layer non-blocking switch. Provide **24 10/100/1000M RJ45 ports**, **410GE SFP+ ports**, Based on high-performance ASIC chip technology, the modular structure design, which have a capability of multilayer switching and wire-speed routing forwarding. Can be deployed in the metropolitan area network, and provides a few last 1 km technology to gather and core data exchange. Very suitable for the aggregation application of large-scale network and the core application of medium and small-sized network.

#### 1. High performance

(1) With 128G Backplane bandwidth

(2) Hardware routing, wire-speed 3rd layer switching packet forwarding rate of 95.232Mpps

(3) Can be deployed in the core of metropolitan area network, and provides several final 1 km Technology

#### 2. Safety

(1) Provide DOS, distributed denial of service, deception and virus defense

(2) Support IEEE802.1x, provide port-based user authentication, network shield, safety control, and strategy control technology

(3) Restrict maximum number of connected hosts port, with multi-channel Ethernet interface binding, increasing bandwidth and system redundancy

(4) Powerful ACL, support for L2-L4 layer data filtering

(5) Support QinQ function

(6) Strategy control list, flow regulation

#### 3. Convenient use and maintenance

(1)Use clustering technology, support for more than one device stack, with a unified IP Address to carry on centralized manage ment and address resources savings

(2) All kinds of management method through Web, SNMP and so on

- (3) Support XModem protocol, can be used to upgrade software and BootRom by TFTP/ZMODEM
- (4) Support DHCP server and relay functions, dynamic allocation of IP address
- (5) Support SFP+, but also downward compatible XFP
- (6) Provide redundant power supply, quick failover and quick connection, greatly increasing the reliability of the system

#### 4. Powerful flow and broadcast management

(1) Automatic detecting and broadcast storm restraining, support for IGMP message detection, effectively limit the spread of br oadcast message.

(2) Support full duplex mode and half duplex mode flow control

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(3)Support Ethernet interface with 1M as the rate limiting step

- (4) Advanced buffer management, support 802.1p protocol, 8 transmit queues per port mapping 802.1p 8 priority
- (5) Support IP multicast and QoS

## Product specification

| The product model              | ITM-5714-28TC 10Gigabit Ethernet Switch  |  |  |
|--------------------------------|--|--|--|
| <b>Basic characteristics</b>   |  |  |  |
| Fixed port                     | 24 10/100/1000M RJ45 Electrical ports, 4 10G SFP+ ports                                    |  |  |
| Backplane bandwidth            | 128Gbps  |  |  |
| Packet forwarding rate         | 95.232Mpps   |  |  |
| Processor                      | RISC 400MHz  |  |  |
| Chip                           | ВСМ  |  |  |
| Layer                          | L2 / L3(Available)   |  |  |
| Flash memory capacity          | 8MB  |  |  |
| The memory capacity            | 128MB  |  |  |
| Address table                  | 16K  |  |  |
| <b>Product characteristics</b> |  |  |  |
| Spanning tree                  | Support STP, RSTP, MSTP  |  |  |
|                                | Support port-based VLAN  |  |  |
| VLAN                           | Support 802.1Q labeled VLAN  |  |  |
|                                | Support for Private Vlan   |  |  |
| Flow control                   | Based on a standard IEEE 802.3x flow control   |  |  |
| Flow control                   | Using IEEE 802.1Qbb priority flow control  |  |  |
| Broadcast control              | Restraining broadcast storm, stop sending so long as reaching a critical point             |  |  |
| Multicast control              | IGMP Snooping multicast message automatic monitoring                                       |  |  |
| Port hinding                   | Each group of a maximum of 8, while support 32group  |  |  |
| Port binding                   | LACP dynamic or static polymerization  |  |  |
| Port mirroring                 | Support based on flow classification mirroring and port mirroring                          |  |  |
| <b>Characteristics of DHCP</b> | DHCP Snooping  |  |  |
|                                | Port Security (Port Security) function   |  |  |
|                                | Hardware support for IP ACL, MAC ACL, Vlan ACL   |  |  |
|                                | Hardware support for port based user IP+MAC+Vlan ID+ user account a variety of factors com |  |  |
| Safety characteristics         | bined to bind  |  |  |
|                                | Support IP Source Guard  |  |  |
|                                | Support WEB interface user authentication  |  |  |
|                                | User classification management and password protection                                     |  |  |
|                                | Safety control technology  |  |  |
|                                | Policy control list  |  |  |
|                                | IEEE 802.1Qau congestion mechanism   |  |  |
|                                | Each port 8 send queue mapping 802.1p 8 priority   |  |  |
| Quality of service             | DRR, WRR, SP and FIFO queue scheduling algorithm   |  |  |
|                                | Best-Effort Service  |  |  |
|                                | Differentiated Service   |  |  |

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|                          | Strict Pr     | iority   |            |  |
|--------------------------|---------------|--|------------|--|
|                          | Weighte       | d Round Robin  |            |  |
|                          | First cor     | ne first served  |            |  |
|                          | TOS to 1      | nark   |            |  |
|                          | RTS           |  |            |  |
| Network management       | SNMP v1/v2    |  |            |  |
|                          | Telnet        |  |            |  |
|                          | WEB interface |  |            |  |
|                          | Support       | Support the fan, temperature, system log, hierarchical alarm |            |  |
| Physical characteristics |               |  |            |  |
|                          |               | 440 000 44   | 440 005 44 |  |

| Appearance size                           | 440x230x44mm  | 442mm × 285mm × 44mm |  |
|---|---|----------------------|--|
| Power characteristic                      | AC 110-240V adaptive, 47-63Hz, 1A/230V, RPS power hot backup  |                      |  |
| Power                                     | 80W   |                      |  |
| Indicator lamp                            | Power indicator, indication of system, connecting / transceiver instructions                            |                      |  |
| <b>Environment humidity / temperature</b> | <b>nvironment humidity / temperature</b> 0-50 °C operation,-40-70 °C preservation,0-90% no condensation |                      |  |

|         | ROHS authentication   |
|---------|---|
|         | European Community (CE) Electromagnetic Compatibility Directive:  |
|         | This equipment has been tested and found to comply with the protection requirements of European Emission Standard E     |
|         | N55022/EN60555-2 and the Generic European Immunity Standard EN50082-1.  |
|         | EMC:  |
| Authe   | EN55022(1988)/CISPR-22(1985), class A EN60555-2(1995), class A  |
|         | EN60555-3   |
| nticati | IEC1000-4-2(1995),4K V CD, 8KV, AD  |
| on      | IEC1000-4-3(1995),3V/m  |
|         | IEC1000-4-4(1995),1KV – (power line), 0.5KV – (signal line)   |
|         | Federal Communications Commission (FCC) statement:  |
|         | This equipment has been tested and found to comply with the limits for a class A computing device pursuant to Subpart J |
|         | of part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when operated in |
|         | a commercial environment.   |