



# **IS330 Series**

L3 Lite Cloud Managed Access Switch



### **Overview**

The IS330 series switch is a high-performance stackable L3 Lite access switch developed by Maipu. It is applied in SMB LAN network and easy to deploy Layer2/3 switching solution that offers enhanced security and 10GE uplinks, Static Route/RIP/OSPF, L2 Multicast, VST/M-LAG stacking enabled and comprehensive management methods. The IS330 series switch well meets the comprehensive SMB customer requirements such as branch office, hotel, restaurant, school, logistic, chain store, etc.

The IS330 series switch includes IS330-28TXF-AC, IS330-54TXF-AC, and IS330-28GXF-AC.

| Model Name     | Specification   |
|----------------|---|
| IS330-28TXF-AC | <ul> <li>24*10/100/1000M Base-T + 4*10G SFP+</li> <li>Fixed Dual AC Power</li> <li>RJ45 Console/USB2.0 Port</li> <li>Switching Capacity: 128Gbps</li> <li>Reset Button</li> </ul> |
| IS330-54TXF-AC | <ul> <li>48*10/100/1000M Base-T + 6*10G SFP+</li> <li>Fixed Dual AC Power</li> <li>RJ45 Console/USB2.0 Port</li> <li>Switching Capacity: 216Gbps</li> </ul>                       |
| IS330-28GXF-AC | <ul> <li>24*1G SFP + 4*10G SFP+</li> <li>Fixed Dual AC Power</li> <li>RJ45 Console/USB2.0 Port</li> <li>Switching Capacity: 128Gbps</li> <li>Reset Button</li> </ul>              |

### **Key Features**

#### Cloud Management

The IS330 series switch support cloud management by the MMC (Maipu Managed Cloud), the switches can be quickly deployed and configured from the cloud, reducing the installation cost. With cloud management, IT staff can remotely access and manage switches from anywhere with an internet connection, making it easier to troubleshoot.



#### Intelligent stacking technology

The IS330 series switch is equipped with Maipu VST stacking function that allows devices to be stacked into one logical device via the 10G SFP+ ports. VST (Virtual Switching Technology) stacking combines multiple switches to form a logical virtual switch, improving device and link reliability, network expansion, and simplifying configuration and management.

#### High availability

The IS330 series switch offers advanced redundancy and reliability features, catering to diverse networking requirements. In addition to supporting traditional spanning tree protocols such as STP, RSTP, and MSTP, the switch also complies with the ITU-T G.8032 international standard. This Ethernet Ring Protection Switching (ERPS) protocol enables rapid 50ms failover within Ethernet ring network topologies, ensuring seamless connectivity and minimal downtime.

#### Perfect security policy

The IS330 series switch offers a comprehensive suite of security features, including user authentication, port security, ACLs, loopback detection, and 802.1X authentication. It also incorporates IP Source Guard, DHCP/ND Snooping, Host Guard, Dynamic ARP Inspection, and PPPoE+ security mechanisms. These robust security functions ensure user access and network protection.

#### Advanced QoS

The IS330 series switch offers sophisticated QoS capabilities for optimal network performance. Supporting eight queues per port and advanced scheduling algorithms such as SP, RR, WRR, and WDRR. The switch accommodates diverse priority mapping techniques, including 802.1p, COS, and DSCP, enabling fine-grained control over traffic classification and prioritization.

# **Technical Specifications**

| Model                       | IS330-28TXF-AC   | IS330-28GXF-AC  | IS330-54TXF-AC  |
|-----------------------------|--|---|---|
| Hardware Specification      |  |   |   |
| Physical Traffic Port       | 24*10/100/1000M Base-T<br>interfaces<br>4*10G SFP+ interfaces                      | 24*1G SFP interfaces<br>4*10G SFP+ interfaces   | 48*10/100/1000M Base-T<br>interfaces<br>6*10G SFP+ interfaces |
| Switching Capability        | 128Gbps  | 128Gbps   | 216Gbps   |
| Fixed Power Supply          | Dual AC Power  | Dual AC Power   | Dual AC Power   |
| Fixed Fan                   | Yes  | Yes   | Yes   |
| Power Consumption           | ≤30W   | ≤38W  | ≤55W  |
| Dimension (W×D×H)mm         | 442×220×44.2   | 442×320×44.2  | 442×420×44.2  |
| Physical Management<br>Port | 1*RJ45 Console<br>1*USB2.0 Port  |   |   |
| Input Voltage               |  | AC:100-240V/50-60Hz   |   |
| Temperature                 | Work Temperature: -5°C to 50°C   |   | C   |
|                             |  | Storage Temperature: -40℃ to 70°  |   |
| Humidity                    | Work Humidity:10% ~ 90%, non-condensing  Storage Humidity:5% ~ 95%, non-condensing |   |   |
| Anti-Lightning              | Otora  | 6KV   |   |
| Anti-Static                 |  | 6KV   |   |
| MTBF                        |  | >80000 hours  |   |
| Performance Parameters      |  |   |   |
| MAC Address Entry           | 16K  | 16K   | 32K   |
| Jumbo Frame                 | 12K  | 12K   | 12K   |
| ARP Entry                   | 2K   | 2K  | 8K  |
| ND Entry                    | 1.5K 1.5K  |   | 8K  |
| VLAN Entry                  | 4K   | 4K  | 4K  |
| LACP Group                  | 64   | 64  | 64  |
| LACP Member in Group        | 8  | 8   | 8   |
| MSTP Instance               | 64   | 64  | 64  |
| IPv4 Routing Entry          | 423  | 423   | 12K   |
| L2 Multicast Entry          | 3K   | 3K  | 6K  |
| Software Specification      |  |   |   |
| Interface                   | Physical Interface   | Auto MDI/MDIX , Port Type UNI/NNI, Port Speed, Port MTU, Switch Port, Port Loopback, Port Energy Control  |   |
|                             | Logic Interface  | Loopback Interface, L2/L3 VLAN Interface, L3 Ethernet Interface   |   |
|                             | MAC Address Management   | Storm Control, Flood Control, MAC Address Aging Time, Mac<br>Address Learning on off, Mac Address Learning Limitation, Mac<br>Address VLAN Binding, MAC Debug |   |
| VLAN                        | VLAN Management  | VLAN, QINQ, Flexible QINQ, VI<br>VLAN Trunk, MAC VLAN, Proto<br>VLAN, Voice VLAN, Private VLA<br>GVRP, VLAN Isolation   | col VLAN, Subnet VLAN, Super                                  |

| Ring Protection     | Spanning Tree Protocols  | STP/RSTP/MSTP, BPDU Guard, Flap Guard, Loop Guard, Root Guard, TC Guard  |  |
|---------------------|--|--|--|
|                     | Other Ring Protocols   | VIST/VIST+, G.8032(ERPSv1&v2)  |  |
| Link Aggregation    | LACP Configuration   | LACP Link Aggregation, LACP Port Priority, LACP Load Balance, LACP Rate Monitor, LACP Debug  |  |
| Error Handling      | Error-disable Configuration  | Error-disable Based on bpduguard Dai DHCP Snooping Link-Flap Loopback-detect Port Security Storm Control Transceiver Power, Error-disable Recovery                   |  |
| Fault Detection     | Fault Detection Features   | ULFD, Track, Loop-back Detection, CFM(802.1ag)   |  |
| IP Services         | IP Protocol  | ARP, DNS, NTP Server/Client, ICMP  |  |
|                     | Routing Protocol   | Static Routing v4/v6, RIP/RIPng, OSPF v2/v3  |  |
|                     | DHCP Service   | DHCP v4/v6 Server, DHCP v4/v6 Client, DHCP v4/v6 Relay, DHCP Snooping, DHCP Option51/82  |  |
| Multicast Protocols | L2 Multicast Protocols   | IGMPv1/v2/v3 Snooping, IGMP Snooping Proxy, MLD Snooping, MVR, MVP   |  |
| QoS                 | Priority Mapping   | 802.1P Priority, DSCP priority   |  |
|                     | Traffic Classification   | Three Color Marker, Priority Remark, Traffic Redirect, Traffic Meter, Traffic Mirror   |  |
|                     | Traffic Control  | Rate Limit, Traffic Shaping  |  |
|                     | Scheduling Algorithm   | SP, RR, WRR, WDRR, SP+WRR, SP+WDRR   |  |
|                     | Congestion Management  | Tail-drop, RED, WRED   |  |
| Security            | Port Security  | Port Security On aging deny permit violation ACL   |  |
|                     | Network Access Control   | IP Source Guard(ISG), DHCP Snooping, ND Snooping, Host Guard   |  |
|                     | Threat Prevention  | Dynamic ARP Inspection(DAI), ARP Check, AARF ARP-Guard, ARP Speed Limit, ARP Source Suppression, PPPoE+  |  |
|                     | Access Control List  | Standard IP ACL, Extended IP ACL, Standard MAC ACL, Extended MAC ACL, Standard Hybrid ACL, Extended Hybrid ACL, Standard IPv6 ACL, Extended IPv6 ACL, Time-based ACL |  |
|                     | Anti-Attack  | Anti-Attack Detect Drop Flood Log, URPF, White List, Black List  |  |
|                     | AAA  | AAA, Radius, TACACS+, 802.1x, Portal   |  |
| High Availability   | Device Virtualization  | H-VST, M-VST   |  |
|                     | Multi-Active Detection   | MAD LACP, MAD BFD, MAD Fast-Hello, MAD LACP  |  |
|                     | High Availability Protocols  | HA, ULFD, UDLD, G.8032, ULPP, Monitor Link, EEP, BFD with Static Route   |  |
| Configuration and   | Monitoring and Diagnostics   | SPAN, RSPAN, VLAN SPAN, s-Flow, Telemetry, LLDP  |  |
| Maintenance         | Device Management  | TR069, SNMP v1/v2/v3, MIB, RMON, SYSLOG, WEB(HTTP/HTTPS), CLI, Telnet, FTP/SFTP/TFTP/FTPS, Debug, Telemetry, ISSU, Hot Patch, Keepalive Gateway, Cloud Management    |  |
|                     | Zero Touch Provisioning  | ZTP Provisioning Through DHCP Server, ZTP Provisioning Through USB Flash Disk  |  |
| IEEE Standard       | IEEE 802.3 (10BASE-T) IEEE 802.3u (100BASE-T) IEEE 802.3z (1000BASE-X) IEEE 802.3ab (1000BASE-T) IEEE 802.3ae (10G BASE-X) IEEE 802.3ah (Ethernet in the | First Mile Operations, Administration, and Maintenance)  |  |

| IEEE 802.1x (Port-Based Network Access Control) |
|---|
| IEEE 802.3ad (Link Aggregation)                 |
| IEEE 802.3x (Flow Control)                      |
| IEEE 802.3az (Energy Efficient Ethernet)        |
| IEEE 802.1d (Spanning Tree Protocol)            |
| IEEE 802.1ab (Link Layer Discovery Protocol)    |
| IEEE 802.1Q (Virtual LAN)                       |
| IEEE 802.1w (Rapid Spanning Tree Protocol)      |
| IEEE 802.1s (Multiple Spanning Tree Protocol)   |
| IEEE 802.1p (Class of Service Priority)         |
| IEEE 802.1ag (Connectivity Fault Management)    |

## **Order Information**

| r                      | Model             | Description   |  |
|------------------------|-------------------|---|--|
| IS330 Series Hos       | IS330 Series Host |   |  |
| IS330 Series           | IS330-28GXF-AC    | 24-Port 1G SFP fiber interfaces, 4-Port 10G SFP+ interfaces, Dual AC Power          |  |
|                        | IS330-28TXF-AC    | 24-Port 10/100/1000M electric interfaces, 4-Port 10G SFP+ interfaces, Dual AC Power |  |
|                        | IS330-54TXF-AC    | 48-Port 10/100/1000M electric interfaces, 6-Port 10G SFP+ interfaces, Dual AC Power |  |
| Stacking Cable         |                   |   |  |
| Stacking Cable         | SFP-STACK-15      | High speed stacking cable, SFP+ to SFP+,10Gbps, L=1.5m                              |  |
|                        | SFP-STACK-30      | High speed stacking cable, SFP+ to SFP+,10Gbps, L=3.0m                              |  |
|                        | SFP-STACK-50      | High speed stacking cable, SFP+ to SFP+,10Gbps, L=5.0m                              |  |
| SFP Module             |                   |   |  |
| 1.25G<br>Dual-Core SFP | MP-S85123-3CDLM   | 1.25G SFP 850nm 550m LC DDM Multi-mode  |  |
|                        | MP-S31121-3CDL20  | 1.25G SFP 1310nm 10-20Km LC DDM Single-mode   |  |
| 1.25G<br>BIDI SFP      | MP-B35121-3CDL20  | 1.25G SFP Tx1310/Rx1550nm 10-20Km LC DDM Single-mode                                |  |
|                        | MP-B53122-3CDL20  | 1.25G SFP Tx1550/Rx1310nm 10-20Km LC DDM Single-mode                                |  |
| 1.25G Copper           | SFP-GETA          | V2 Version: 10/100/1000M Base-T, RJ45 interface, Serdes                             |  |
| 10G<br>Dual-Core SFP+  | MP-S851X3-NCLM    | 10G SFP+ 850nm 300m LC DDM Multi-mode   |  |
|                        | MP-S311X2-NCL10   | 10G SFP+ 1310nm 10Km LC DDM Single-mode   |  |
|                        | MP-S311X2-NCL20   | 10G SFP+ 1310nm 20Km LC DDM Single-mode   |  |
| 10G<br>BIDI SFP+       | MP-B231XL-3CD10   | 10G SFP+ Tx1270/Rx1330nm 10Km LC DDM Single-mode                                    |  |
|                        | MP-B321XL-3CD10   | 10G SFP+ Tx1330/Rx1270nm 10Km LC DDM Single-mode                                    |  |
| 10G Copper             | SFP-XGEA          | SFP-XGEA, 10GBASE-T RJ45, 30m   |  |



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