

## Altai MIS120P

Altai MIS120P is an industrial-grade managed switch featuring four 1GbE PoE ports, and two 100/1000BASE-X SFP slots. The switch, with a rugged IP40 metal case and an ultra-wide temperature range from -40 °C to 80 °C, is designed to operate in harsh industrial environments such as factory, warehouse, and container port.

### Power over Ethernet

The switch supports 802.3at Power over Ethernet, a system to transmit electrical power up to 30 watts, along with data, to remote devices over standard twisted-pair Ethernet cable. Each MIS120P has four 1GbE P.S.E. ports, with a total power budget of 120W.

### Redundant Ring and Fast Recovery

The MIS120P supports the advanced ITU-T G.8032 ERPS (Ethernet Ring Protection Switching) redundant ring technology and Spanning Tree Protocols (STP/RSTP/MSTP) for enhancing the system reliability and uptime of any industrial networks. In a ring topology, the recovery time of the data link can be as low as 20 ms.

### Secure Management

To enable IT to easily secure any industrial network, the MIS120P offers a wide-range of cybersecurity features that ensure secured switch



management, such as SSHv1/v2, SSLv3, RADIUS user account management, and SNMPv3. Furthermore, the switch can be monitored by the AltaiGate or AltaiCare On-Premises virtual appliance.

### Applications

The MIS120P is specifically designed to work with Altai APs. A typical use case is as an access switch for an outdoor site, where multiple APs and other devices are co-located.

With its anti-shock and anti-vibration capabilities, the switch can readily be used in an RTG or AGV for connecting a Wi-Fi CPE such as A2e and VX200 to a PLC.

## Key Features and Benefits

- Four 10/100/1000BASE-T PoE ports
- Two 100/1000BASE-X SFP slots
- IP40 aluminum case
- 48 – 57 VDC redundant power with polarity reverse protection
- 4 kV power and data port surge protection
- 8 kV Ethernet ESD protection
- Support ERPS redundant ring technology with recovery time as low as 20 ms
- DIN-rail mount
- Support STP/RSTP/MSTP
- Support up to 255 VLAN groups and 4094 VLAN IDs
- Support IGMP snooping v1/v2
- Support RADIUS user access authentication
- Support SSH, SSL, and SNMP v1/v2/v3 management
- Support status monitoring by AltaiGate or AltaiCare On-Premises virtual appliance \*

### Hardware Specifications

- Copper Ports 4 x 10/100/1000 PoE Ports
- SFP/Mini-GBIC Slots 2 x 100/1000 SFP Slots
- Console 1 x RS232 Serial Port
- Switch Architecture Store-and-Forward
- Switch Capacity 128 Gbps
- Throughput 8.93 Mpps @ 64-Byte Packet
- Address Table 8K Entries, Automatic Source Address Learning and Aging
- Shared Data Buffer 4 Mbits
- Jumbo Frame 9.6 KBytes
- Reset Button Support
- ESD Protection Contact Discharge: ±8 kV  
Air Discharge: ±15 kV  
Power Line: ±4 kV  
Data Line: ±2 kV
- EFT Protection
- Enclosure IP40 Aluminum Case
- Installation DIN-Rail Mount
- DC Connector Removable 6-Pin Terminal Block
- LED Power: Green  
System: Green  
Per RJ45 Port: LNK/ACT (Green)  
Per SFP Port: LNK/ACT (Green)
- Dimensions 145 x 134.5 x 47.5mm
- Weight 0.6kg
- Input Power DC 48 – 57VDC
- Power Consumption Max 8W( Without PoE)

### Power Over Ethernet

- PoE Standard IEEE 802.3af/at, max. 30W
- Power Supply Pin 1/2 (+), 3/6 (-)
- PoE Power Budget Max 120W (48 VDC)

### Software Features

- Port Mirroring Support
- VLAN 802.1q Tagged-Based VLAN  
GVRP  
Up to 255 VLAN Groups  
Up to 4094 VLAN IDs
- Link Aggregation IEEE 802.3ad LACP/Static Trunk
- QoS 8-Level Priority for Switching  
Port Number  
802.1p  
DSCP/TOS
- IGMP Snooping IGMP (v1/v2) Snooping
- Bandwidth Control Per Port Bandwidth Control
- Storm Control Unicast/Multicast/Broadcast
- Redundancy ERPS ring, Self-Healing < 20 ms  
STP/RSTP/MSTP
- DHCP DHCP Client  
DHCP Snooping
- Network Security Port Isolation  
MAC/IP Address Binding  
Dynamic ARP Inspection  
RADIUS User Access

- Mgmt. Interface CLI  
Web (HTTP/HTTPS)  
SNMP v1/v2c/V3  
SSH  
Telnet
- Mgmt. Platform AltaiGate/AltaiCare On-Premises\*

### Environment

- Operating Temp. -40 to +80°C
- Storage Temp. -40 to +85°C
- Humidity 5 to 90% (Non-Condensing)
- MTBF 539,608 Hours

### Certification

- EMC FCC Part 15 Subpart B  
EN 55024  
EN 55032
- Free Fall IEC 60068-2-32
- Shock IEC 60068-2-27
- Vibration IEC 60068-2-6
- Safety IEC 62368-1



### Product Ordering Information

#### MIS120P (Part No.: SD.IS120-1223-000)

- Industrial 6 Gigabit Ports Managed PoE Switch

#### Optional Module

- 1.25Gb/s 20 km SFP Transceiver, Single-mode

#### Contact Us

- Email: [sales@altaitechnologies.com](mailto:sales@altaitechnologies.com)

MIS120P-PB-20210324

*\*Will be available in the future  
Note: Specifications are subject to change without notice*