

# ROCKETLINX® MP1204-XT

Part Number: 32145-3

PoE SWITCH



## KEY FEATURES AND BENEFITS

- Provides eight 10/100/1000 BASE-TX PoE ports and four 100/1000BASE-FX SFP slots
- IEEE 802.3af 15.4W / IEEE 802.3at 30W High Power PoE
- Total PoE power budget: Maximum. 240W PSE power delivered
- LLDP-MED
- Voice VLAN
- Supports TACACS+
- Network redundant LACP, STP, RSTP, MSTP, and quick ring protection(< 20 ms)
- Port-based /tag-based VLAN, IEEE 802.1 ad/QinQ VLAN, Add/remove VLAN
- Multicasting supports IGMP v1/v2/v3, proxy and snooping
- Multicast/broadcast/flooding storm control
- IEEE802.1x access control
- VLAN mirroring
- CLI/Web/SNMP management interfaces
- PoE PSE power management and PD power consumption monitoring
- Dual power input and reverse power protection
- DIN-rail and wall mounting option
- Green Ethernet (EEE, ActiPHY, and PerfectReach)
- Extended temperature range, -40° – 75° C

## PRODUCT DESCRIPTION

The RocketLinx MP1204-XT is a Gigabit 12-port industrial PoE switch with eight PoE Plus ports, which are IEEE 802.3af and IEEE 802.3at compliant and also provides four SFP slots. The

MP1204-XT provides an extended operating temperature range, which is ideal for IP camera, access point, and critical PoE devices.



## HARDWARE

### Network Interface

Eight 10/100/1000 BASE TX PoE ports and four 100/1000BaseFX SFP slots

### Connector Types

8 - RJ45 copper ports  
4 - SFP slots

### Ingress Protection

IP30

### Enclosure

Steel

### Installation Method

EN50022 DIN Rail

### LED Indicators

Power, Alarm, PoE, Link/Activity, Ring Role, and Ring Status

### Alarm Relay

Relay output with current carrying capacity of 0.5A @ 24VDC. Configurable alarm profile to enable Alarm LED, alarm relay and SNMP traps

### Serial Console Port

RJ45 to DB9 RS-232 (Tx/D, Rx/D, Signal Ground)

### Dimensions

6.06"(H) x 5.04"(D) x 3.03"(W)  
154mm(H) x 128mm(D) x 77mm(W)

### Switch Technology

Store and forward, L2 wire-speed/non-blocking switching engine

### Product Weight

3.15 lbs  
1.43kg

## ETHERNET SPECIFICATIONS

### Number of Ports

12

### RJ45

8: 10/100/1000BASE-T PoE Plus  
Auto MDI/MDIX, Auto-negotiation (Speed/Duplex mode)

### SFP Slots

4: SFP (pluggable) Ports 100/1000BASE  
Auto-negotiation (Speed/Duplex Mode)

### SFPs (Optional)

Supports 100FX SFP transceivers or 1000BASE-TX SFP transceivers

### Cable Types

Cat 3, Cat 4, Cat 5, Cat 5e, Cat 6 (UTP or STP)

### Link Distances

RJ45: 100 meters  
SFP (Depends on the SFP model)

### Port Alarm Relay

Yes

### Jumbo Frame Size

9K Bytes

### Standards

IEEE 802.3u: 10BASE-T Ethernet  
IEEE 802.3u: 100BASE-TX Fast Ethernet  
IEEE 802.3u: 100BASE-FX Fast Ethernet Fiber  
IEEE 802.3z: Gigabit Ethernet Fiber  
IEEE 802.3ab: 1000BASE-T Gigabit Ethernet Copper  
IEEE 802.1AB: Link Layer Discovery Protocol (LLDP)  
IEEE 802.1ad: Double Tagging (Q in Q)  
IEEE 802.1D-2004: Rapid Spanning Tree Protocol (RSTP)  
IEEE 802.1p: Class of Service  
IEEE 802.1Q: VLAN Tagging, GVRP, and Double Tag VLAN  
IEEE 802.1s: Multiple Spanning Tree Protocol (MSTP)  
IEEE 802.1w: RSTP  
IEEE 802.1X: Port Based Network Access Control  
IEEE 802.3ad: Port Trunking with Link Aggregation Control Protocol (LACP)  
IEEE 802.3x: Flow Control and Back-Pressure  
Supports IPv4 and IPv6

### Internet Protocol

Supports IPv4 and IPv6

## POE FEATURES

### PoE Modes

802.3af  
802.3at (2-event)  
802.3at (LLDP-MED)

### Number of PoE Plus Injector Ports 8

### PSE Type

802.3at Type 2  
Alternative A

### Standards

IEEE 802.3af PoE  
IEEE 802.3at LLDP PoE Plus

### LLDP-MED

Extension of IEEE 802.1ab and is defined by ANSI/TIA-1057

### Maximum PoE Power/Port

15.4W (IEEE 802.3af)  
30W (IEEE 802.3at)

### Total Power Budget (Max)

240W

### Power Consumption

Without PD load (Max): 14W  
PoE with PD load (Max): 265W with 240W PSE  
IEEE 802.3af: 2.92A @ 48VDC [134W]  
IEEE 802.3at: 4.89A @ 53VDC [247W]

### PoE Control

Enable or disable PoE, set/port PoE mode, and schedule-based PoE functions

### Real-Time PoE Status

Yes

### PoE Output Pin-Out (RJ45)

Pins 1, 2 - V+  
Pins 3, 6 - V-

### PoE Scheduling

PoE ports are configurable as On/Off by hourly/daily/weekly basis

## MANAGEMENT FEATURES

### Configuration and Monitoring Interfaces

Out-Band Management: console port with Command Line Interface (CLI) - Similar to Cisco CLI  
In-Band Management: web interface (HTTP/HTTPS) or a telnet/ssh console with CLI

### System Upgrade/Backup

Web interface support for firmware upgrade and configuration backup/restore

### SNMP

SNMP v1, v2c and v3

### SNMP MIB

RFC 1757 RMON 1,2,3,9; RFC 2674 Q-Bridge MIB, RFC-1213 MIB-II; RFC-1493 Bridge MIB; RFC 2233 IF MIB

### System Log

Supports server mode syslog

## SECURITY FEATURES

### Port Security

IP and MAC-based access control  
IEEE 802.1X authentication network access control

### NAS

Supports system and port configuration

### User Privilege

16 configurable user privileges.

### Authentication Levels

Console, telnet, ssh, and http

### Access Management

Up to 16 entries

### Server Authentication

RADIUS and TACACS+

## NETWORK REDUNDANCY

### Loop Protection

Provides Layer 2 loop prevention through STP, RSTP, and MSTP. Loop protection increases the efficiency of STP, RSTP, and MSTP by preventing ports from moving into a forwarding state that would result in a loop in the network

### Multiple Spanning Tree

IEEE 802.1s MSTP

### Rapid Spanning Tree Protocol

IEEE 802.1D-2004 Rapid Spanning Tree Protocol (RSTP), Compatible with legacy STP and IEEE 802.1w

### Redundant Ring Technology

Supports single and multiple rings; ring coupling; dual-homing; chain

### Port Trunk with LACP

Static trunk or dynamic via LACP (Link Aggregation Control Protocol)

## NETWORK PERFORMANCE

### Access Control List

Permit/ Deny Access Control Lists

### Back-Pressure

IEEE 802.3x Back-Pressure(Half Duplex)

### Class of Service (CoS)

IEEE 802.1p - 8 Priority Queues/Port

### DHCP

Client, Server, Relay, Snooping, Option 82

### Flow Control Pause Frame

IEEE 802.3x (Full Duplex)

### Green Ethernet

EEE, ActiPHY, and PerfectReach

### IEEE 802.1ad

Double-Tag for Private VLAN Access

### IGMP

IGMP v1/v2/v3, proxy, snooping, and querying

### IP Source Guard

Assign authorized IP addresses to specific port, 112 rules permitted per switch

### LLDP

IEEE 802.1ab: Link Layer Discovery Protocol

### LLDP-MED

Supports Link Layer Discovery Protocol Media Endpoint Discovery

### Port-Based Network Access Control/EAP

IEEE 802.1X: Port-Based network access control with EoPL (Extensible Authentication Protocol over LAN) to permit or deny interface access with remote RADIUS server authentication, TACACS+

### Port Configuration

Port link speed, link mode, port status, enable/disable

### Port Mirroring

Online traffic monitoring on multiple selected ports

### Port Security

Assign authorized MAC addresses to specific port using the dynamic ARP inspection table, which can contain up to 256 entries

### Port Trunk/Link Aggregation

IEEE 802.3ad LACP - Port Aggregation and Static Port Trunk  
Each trunk member supports up to 12 ports

Maximum of 6 trunk groups including Gigabit Ethernet ports

### Private VLAN

Direct client ports in isolated/community VLAN to port in primary VLAN

### sFlow

Supported

### Time Synchronization

NTP protocol with Daylight Saving Function and Localize Time Sync Function.

### Traffic Prioritization (QoS)

8 physical queues per port  
Weighted Fair Queuing (WRR) or Strict Priority Scheme, which follows 802.1p QoS tag ID and IPv4 ToS/ Diffserv information to prioritize network traffic  
Traffic shaper, which provides port-based shaping  
RADIUS-assigned QoS class

### VLAN

IEEE 802.1Q VLAN with 4K (Max)  
IEEE 802.1ad double tagging (Q in Q)  
Maximum four multicast VLANs (MVR)  
Port based  
MAC-based VLAN  
Protocol-based VLAN  
IP Subnet-based VLAN  
RADIUS assigned

### VoIP

Voice VLAN, LLDP-MED

## ELECTRICAL SPECIFICATIONS

### Device

DC Input Voltage 46-58 VDC

### Power Consumption

Max. 14W without PD connected  
265W with 240W PSE power delivered

### Number of Power Inputs

2

### Power Connector Type

6-Pin Screw Terminal Block

### Power Input Redundancy

Dual Redundant Inputs

### Reverse Polarity Protection

Yes

### Digital Output (Relay Output)

DC Input Voltage 24VDC  
Current Consumption (30VDC) 0.5A Maximum

### Multi-Event Relay Feature

Low and High Temperature Port Link

## ENVIRONMENTAL SPECIFICATIONS

### Air temperature

System On -40° to 75 C  
System Off -40° to 85 C

### Operating Humidity (non-condensing)

0% to 90%

### Mean Time Between Failures

>25 years

## EXPORT INFORMATION

### Packaged Shipping Weight

4.1 lbs

1.86kg

### Package Dimensions

9.5" x 7.5" x 5.2"  
240mm x 190mm x 132mm

### UPC Code

7-56727-32145-3

### ECCN

5A991

### Schedule B Number

8517.62.0050

## REGULATORY APPROVALS

### Emissions

European Standard 61000-6-4  
Canadian EMC Requirements - ICES-003  
CISPR 22  
FCC Part 15 Subpart B  
Class A limit

### Immunity

European Standard 61000-6-2:  
IEC 1000-4-2/EN61000-4-2: ESD  
IEC 1000-4-3/EN61000-4-3: RF  
IEC 1000-4-4/EN61000-4-4: Fast Transient/ Burst  
IEC 1000-4-5/EN61000-4-5: Surge  
IEC 1000-4-6/EN61000-4-6: Conducted Disturbance  
IEC 1000-4-8/EN61000-4-8: Magnetic Field  
IEC 1000-4-9/EN61000-4-9: Pulse Magnetic Field  
IEC 1000-4-9/EN61000-4-11: Dips and Voltage Variations

### Safety

IEC 60950/EN60950  
CSA C22.2 No. 60950/UL60950

### Other

European Standard: 2011/65/EU RoHS2  
NEMA TS2 Compliant

### Vibration

IEC60068-2-6

### Shock

IEC 60068-2-27

### Free Fall

IEC 60068-2-32

### Regulatory Approvals



### Warranty Information

Comtrol offers a 30-day satisfaction guarantee and 5-year limited warranty.

### Sales Support

+1.763.957.6000  
sales@comtrol.com

### Technical Support

+1.763.957.6000  
www.comtrol.com/support

### Email, FTP, and Web Support

info@comtrol.com  
ftp.comtrol.com  
www.comtrol.com