

ROCKETLINX ES7506

Industrial Managed PoE Plus Switch

HIGHLIGHTS

- Four 10/100 TX Power over Ethernet ports and two redundant 10/100 TX uplink ports
- DC 48V Power Input for IEEE 802.3af PoE output (IEEE 802.3af)
- Up to 30W per port for PoE plus High Power solution with DC 55V Power Input (IEEE 802.3at)
- DC 24V Power Input for DC 24V output through Ethernet (Non-standard PoE)
- UP to 100W for total power budget
- Support IEEE 802.3af for PoE detection and PoE classification resistors
- PoE control and schedule by hour/weekly basis
- Auto-detect Powered Device status for device auto-reset (LPLD)
- Redundant Ring technology, back up system recovery time less than 5ms
- SNMP v1/v2c/v3, IGMP snooping v1/v2/v3, RMON, VLAN, QoS
- Network security by IP/MAC address, SSL and SSH
- Built-in hardware watchdog timer for system auto-reset
- Aluminum rugged enclosure with IP-31 grade protection
- Forced mode powering
- Wide operating temperature range (-20° to 60° C)

PoE Plus is IEEE 802.3af and IEEE 802.3at compliant



Part Number
32050-0

Product Description

Control's RocketLinx ES7506 product is designed for industrial PoE applications such as IP surveillance or wireless access points, where the power source is not conveniently located.

The RocketLinx ES7506 supports intelligent PoE control and schedule management. Each of the four PoE ports can be configured in a weekly schedule by hourly basis and PoE on/off can be remotely controlled via SNMP and Web.

It is compliant to both IEEE 802.3af PoE as well as the pioneer standard of IEEE802.3at PoE Plus designed for boosting PoE delivery up to 30W in each of the four PoE ports. The RocketLinx ES7506 can auto-detect 24V and 48V power input and can deliver 24V and 48V PoE outputs which allow more applications where 48VDC is not an option.

The two uplink ports can be configured as Redundant Ring ports recovering network failure in less than 5ms, or RSTP ports integrating with other standard switches. Full network management features such as SNMP v3, QoS, IGMP v3 are all supported. If the powered device fails to respond after a pre-configured time interval, the product will reboot the powered device and continue to monitor the powered device in every pre-configured time interval. Also, unmanageable powered devices can be managed through the RocketLinx switch.

The IP-31 rigid aluminum flat casing and wide operation temperature range ensure reliable operation in places such as mass transit vehicles or outdoor usage.

SPECIFICATIONS

HARDWARE

• Bus Interface Specification	10/100BASE-TX
• Enclosure	IP-31 Grade Aluminum, Drop-Waterproof and Dustproof
• Installation Method	Panel Mount or DIN-Rail Mount
• LED Indicators	Power 1, Power 2, Ring Master (R.M.)10/100Base-TX Link/Activity, Alarm, PoE Status
• Dimensions	6.4" x 1.75" x 5.35"
• Product Weight	1.44 lbs

TECHNOLOGY

• Standard	
IEEE 802.3	10Base-T
IEEE 802.3u	100Base-T
IEEE 802.1p	Class of Service
IEEE 802.3af	Power Over Ethernet
IEEE 802.3at	High Power
IEEE 802.1d	Spanning Tree
IEEE 802.1w	Rapid Spanning Tree
• Flow Control	
IEEE802.3x	Flow Control and Back-Pressure

PERFORMANCE

• Switch Technology	3.2Gbps wire-speed non-blocking Switch Fabric Store and Forward Switch Technology
• System Throughput	14,880pps for 10Mbps; 148,880pps for 100Mbps
• Number of MAC Address	2K
• Packet Buffer Memory	1Mbits
• Transfer performance	64 to 1522Bytes (with port-based VLAN)
• Priority Queues per Port	4
• PoE Technology	End-Span wiring architecture PD classification detection, class ID 0-3 follow IEEE802.3af standard, and 30W High power deliver procedures for class ID 4 Pin assignment: V+ (RJ-45 Pin 4,5), V- (RJ-45 Pin 7,8), TX (RJ-45 Pin 1,2), RX (RJ-45 Pin 3,6) Protection: Provides over-current protection by PD class ID

MANAGEMENT FEATURES

• Configuration	NetVision Utility, HTTP, HTTPS, SSH, SNMP V1/V2C/V3, Traps, Web Browser, CLI Management, Admin Password, DHCP Client, status, Scheduling, TFTP/HTTP/NetVision update for firmware
• Management Security	4 entries for web, telnet, SNMP management security
• SNMP Trap	Provides Cold start, Warm start, Port event, Power event, Authentication failure, PoE trap and private trap for proprietary functions
• SNMP MIB	RFC 1213 MIBII, RFC 1493 Bridge MIB, RFC 1757 RMON MIB, RFC 2674 VLAN MIB, RFC 1643 Ethernet like MIB, RFC1215 Trap MIB, RFC 3621 Power Ethernet MIB, Private MIB
• Firmware upgrade	TFTP, HTTP and NetVision
• System Log	1000 system entries for system or remote log server
• Event Alarm Relay	Relay alarm for Port link down, PoE, and system power events
• Quality of Service	Quality of Service determined by port, Tag and IPv4 Type of Service
• Class of Service	IEEE802.1p class of service, with 4 priority queues
• DHCP	DHCP Client and Server function with specified IP exclusion and MAC binding function
• Timer	Supports Network Time Protocol (NTP) to synchronize time from NTP Server
• VLAN	Port based VLAN
• IGMP Snooping	Supports IGMP Snooping v1/v2/v3 and IGMP Query v1/v2
• IP Security	IP security to prevent unauthorized access

NETWORK REDUNDANCY

• Rapid Spanning Tree Protocol (RSTP)	IEEE802.1D-2004 STP and RSTP
• Redundant Ring	IEEE802.1w Rapid Spanning Tree Protocol (RSTP)
• Dual Homing	Failure recovery in less than 5ms
• Inter-operational with higher level switches and RSTP protocol compliant	

PoE PLUS FEATURES

• Standards		
IEEE802.3af	Power Over Ethernet	
IEEE802.3at	High Power PoE	
• Number of PoE Injector Ports	4	
• Maximum Power/ PoE Port (Max.)		
12.9W @ VIN (non-standard PoE mode)	24VDC	
15.4W @ VIN (IEEE802.3af mode)	48VDC	
30W @ VIN (IEEE802.3at mode)	55VDC	
• Total Power Budget	Up to 100W (IEEE802.3at)	
• Standard PoE Voltage Output	IEEE802.3af compliant	
	44-57VDC	
• Non-Standard PoE Voltage Output	24VDC	
• PoE Control	User-configuration for PoE enable, disable, or schedule-based PoE function	
• Smart Powered Device Alive-Check	User-configuration to monitor real-time status of connected PD's. PoE port is reset to bring a PD back to working state, if connected PD fails	
• Real-time Status on Web Interface	Real-time status on port status, PoE status, PD Status	
• Forced Powering	Advanced feature to supply power to non-standard PoE devices that can't be detected as valid PD's	
• Power Limit Control	Standard mode for IEEE802.3af PD Manual mode for user-configuration of power limit to IEEE802.3af standard PD Ultra mode for user-configuration to perform at the 30W power limitation or forced powering mode for non-standard PD	
• PoE Schedule Control	PoE ports are configurable as on/off by hourly/weekly basis. Each PoE port can be scheduled to activate/deactivate PoE power with different rule using web interface.	

ELECTRICAL SPECIFICATIONS

• Device	
DC Input Voltage	24-55VDC
Current Consumption without PD Load	
+24VDC	330mA
+48VDC	170mA
Power Consumption (maximum)	8W (without PD Load)
• Power Connector	1
• Power Connector Type	6-Pin Screw Terminal Block Dual Redundant Independent Power
• Power Input Redundancy	
Inputs	
• Reverse Polarity Protection	Yes
• Power Alarm Relay	Alarm for power failure notification
• Relay Rating	1A Max. @ 24VDC

ENVIRONMENTAL SPECIFICATIONS

• Air temperature	
System On	-20° to 60° C
System Off	-40° to 85° C
• Operating Humidity (non-condensing)	5% to 95%
• MTBF (Mean Time Between Failures)	37 Years

ETHERNET SPECIFICATIONS

• Connector Type	RJ-45
• Number of Ports	4 x 10/100Base-TX with PoE Injector; 2 x 10/100Base-TX
• Ethernet Cable Type	CAT-3, CAT-4, CAT-5, CAT-5e, CAT-6 (UTP or STP)
• Link Distance	100 Meters
• Port Alarm Relay	Alarm Relay for Port Failure Notification
• Relay Rating	1A Max. @ 24VDC

SERIAL CONSOLE PORT SPECIFICATION

• Connector Type	RJ-45
• Number of Ports	1
• Serial Interface	RS-232 (TXD, RXD, Signal GND)
• Baud Rate	9600Bps
• Device Data Control	
Data Bits	8
Parity	None
Stop Bits	1
Flow Control	None

EXPORT INFORMATION

• Packaged Shipping Weight	2.14 lbs
• Package Dimensions	10.1" x 7.0" x 3.6"
• UPC Code	7-56727-32050-0
• ECCN	5A991
• Schedule B Number	8517.62.0050

REGULATORY APPROVALS

• Emissions	
Canadian EMC Requirements	ICES-003
European Standard EN55022	CISPR 22
FCC Part 15 Subpart B	Class A limit
• Immunity	
European Standard EN55024:	
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 1000-4-6/EN61000-4-8: Magnetic Field	
IEC 1000-4-6/EN61000-4-11: DIPS and Voltage Variations	
• Safety	
IEC 60950/EN60950 (LISTED)	
CSA C22.2 No. 60950/UL60950 Third Edition	
• Other	
European Standard: 2002/95/EC Directive (RoHS)	
• Regulatory Approvals	
RoHS 2002/95/EC	
CE	
FCC	
UL/cUL	

ORDERING INFORMATION

32050-0 RocketLinX ES7506

PRODUCT SUPPORT & SERVICE INFORMATION

Warranty Information

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

Sales Support

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