



## RocketLinx® ES7506

Part Number: 32050-0



### KEY FEATURES AND BENEFITS

- Four 10/100BASE-TX Power over Ethernet ports and two redundant 10/100BASE-TX uplink ports
- DC 48V power input for IEEE 802.3af PoE output (IEEE 802.3af)
- Up to 30W per port for PoE high power applications with DC 55V power input
- Power input for 24VDC 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 IP31 grade protection
- Forced mode powering
- RoHS2 compliant under CE
- Wide operating temperature range (-25° to 60° C)

PoE SWITCH

### PRODUCT DESCRIPTION

Comtrol's RocketLinx ES7506 PoE high power switch 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 Plus 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 the IEEE 802.3af PoE standard and supports 30W power delivery designed for boosting PoE to 30W in each of the four PoE Plus 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 IP31 rigid aluminum flat casing and wide operation temperature range ensure reliable operation in places such as mass transit vehicles or outdoor usage.



connect. communicate. control.

# ROCKETLINX SPECIFICATIONS

## HARDWARE

<b>Bus Interface Specification</b>	10/100BASE-TX
<b>Enclosure</b>	IP31 Grade Aluminum
<b>Installation Method</b>	Panel Mount or DIN-Rail Mount
<b>LED Indicators</b>	Power 1, Power 2, Ring Master (R.M.)10/100BASE-TX Link/Activity, Alarm, PoE Status
<b>Dimensions</b>	6.4" x 1.75" x 5.35" 16.26 x 4.45 x 13.59 cm
<b>Product Weight</b>	1.44 lbs 0.65 kg

## TECHNOLOGY

<b>Standard</b>	IEEE 802.3 IEEE 802.3u IEEE 802.1p IEEE 802.3af IEEE 802.1d IEEE 802.1w	10BASE-T 100BASE-T Class of Service Power Over Ethernet Spanning Tree Rapid Spanning Tree
<b>Flow Control</b>	IEEE 802.3x	Flow Control and Back-Pressure

## PERFORMANCE

<b>Switch Technology</b>	3.2Gbps wire-speed non-blocking Switch Fabric Store and Forward Switch Technology
<b>System Throughput</b>	14,880pps for 10Mbps; 148,880pps for 100Mbps
<b>Number of MAC Address</b>	2K
<b>Packet Buffer Memory</b>	1Mbits
<b>Transfer performance</b>	64 to 1522Bytes (with port-based VLAN)
<b>Priority Queues per Port</b>	4
<b>PoE Technology</b>	End-Span wiring architecture, PD classification detection, class ID 0-3 follow IEEE 802.3af standard, and 30W High power deliver procedures for class ID 4 Pin assignment: V+ (RJ45 Pin 4,5), V- (RJ45 Pin 7,8), TX (RJ45 Pin 1,2), RX (RJ45 Pin 3,6) Protection: Provides over-current protection by PD class ID
<b>PoE Mode</b>	Alternate B

## MANAGEMENT FEATURES

<b>Configuration</b>	Web (http and https), SSH, Telnet, SNMP, and console port, Command Line Interface similar to Cisco. NetVision for Windows for RocketLinx discovery, easy IP configuration, and uploading firmware
<b>Management Security</b>	4 entries for web, telnet, SNMP management security
<b>SNMP Trap</b>	Provides Cold start, Warm start, Port event, Power event, Authentication failure, PoE trap and private trap for proprietary functions
<b>SNMP MIB</b>	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
<b>Firmware upgrade</b>	TFTP, HTTP and NetVision
<b>System Log</b>	1000 system entries for system or remote log server
<b>Event Alarm Relay</b>	Relay alarm for Port link down, PoE, and system power events
<b>Quality of Service</b>	Quality of Service determined by port, Tag and IPv4 Type of Service
<b>Class of Service</b>	IEEE 802.1p class of service, with 4 priority queues
<b>DHCP</b>	DHCP Client and Server function with specified IP exclusion and MAC binding function
<b>Timer</b>	Supports Network Time Protocol (NTP) to synchronize time from NTP Server
<b>VLAN</b>	Port based VLAN
<b>IGMP Snooping</b>	Supports IGMP Snooping v1/v2/v3 and IGMP Query v1/v2
<b>IP Security</b>	IP security to prevent unauthorized access

## NETWORK REDUNDANCY

<b>Rapid Spanning Tree Protocol (RSTP)</b>	IEEE 802.1D-2004 STP and RSTP IEEE 802.1w Rapid Spanning Tree Protocol (RSTP)
<b>Redundant Ring</b>	Failure recovery in less than 5ms
<b>Dual Homing</b>	Inter-operational with higher level switches and RSTP protocol compliant

## POE PLUS FEATURES

<b>Standards</b>	IEEE 802.3af IEEE 802.3at	Power Over Ethernet 4
<b>Number of PoE Injector Ports</b>	4	
<b>Maximum Power/ PoE Port (Max.)</b>	12.9W @ VIN (non-standard PoE mode) 24VDC 15.4W @ VIN (IEEE 802.3af mode) 48VDC 30W @ VIN (high power) 55VDC	
<b>Total Power Budget</b>	Up to 100W (IEEE 802.3at)	
<b>Standard PoE Voltage Output</b>	IEEE 802.3af compliant 44-57VDC	
<b>Non-Standard PoE Voltage Output</b>	24VDC	
<b>PoE Control</b>	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	
<b>Real-time Status on Web Interface</b>	Real-time status on port status, PoE status, PD Status	
<b>Forced Powering</b>	Advanced feature to supply power to non-standard PoE devices that can't be detected as valid PD's	
<b>Power Limit Control</b>	Standard mode for IEEE 802.3af PD Manual mode for user-configuration of power limit to IEEE 802.3af standard PD Ultra mode for user-configuration to perform at the 30W power limitation or forced powering mode for non-standard PD	
<b>PoE Schedule Control</b>	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

<b>DC Input Voltage</b>	Standard PoE Non-Standard PoE	48-57VDC 24VDC
<b>Current Consumption without PD Load</b>	+24VDC +48VDC	330mA 170mA
<b>Power Consumption (maximum)</b>	8W (without PD Load)	
<b>Power Connector</b>		1
<b>Power Connector Type</b>	6-Pin Screw Terminal Block	
<b>Power Input Redundancy</b>	Dual Redundant Independent Power Inputs	
<b>Reverse Polarity Protection</b>		Yes
<b>Power Alarm Relay</b>	Alarm for power failure notification	
<b>Relay Rating</b>		1A Max. @ 24VDC

## ENVIRONMENTAL SPECIFICATIONS

<b>Air temperature</b>	System On System Off	-25° to 60° C -40° to 85° C
<b>Operating Humidity</b>	(non-condensing)	5% to 95%
<b>Mean Time Between Failures</b>		37 Years

## ETHERNET SPECIFICATIONS

<b>Connector Type</b>	RJ45
<b>Number of Ports</b>	4 x 10/100BASE-TX with PoE Injector; 2 x 10/100BASE-TX
<b>Ethernet Cable Type</b>	Cat 3, Cat 4, Cat 5, Cat 5e, Cat 6 (UTP or STP)
<b>Link Distance</b>	100 Meters
<b>Port Alarm Relay</b>	Alarm Relay for Port Failure Notification

Relay Rating 1A Max. @ 24VDC

## SERIAL CONSOLE PORT SPECIFICATION

<b>Connector Type</b>	RJ45	
<b>Number of Ports</b>	1	
<b>Serial Interface</b>	RS-232 (TXD, RXD, Signal GND)	
<b>Baud Rate</b>	9600Bps	
<b>Device Data Control</b>	Data Bits Parity Stop Bits Flow Control	8 None 1 None

## EXPORT INFORMATION

<b>Package Shipping Weight</b>	2.14 lbs 0.97 kg
<b>Package Dimensions</b>	10.1" x 7.0" x 3.6" 25.65 x 17.78 x 9.14 cm
<b>UPC Code</b>	7-56727-32050-0
<b>ECCN</b>	5A992
<b>Schedule B Number</b>	8517.62.0050

## REGULATORY APPROVALS

<b>Emissions</b>	Canadian EMC Requirements ICES-003 European Standard EN55022 CISPR 22 FCC Part 15 Subpart B Class A limit
<b>Immunity</b>	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 1000-4-8/EN61000-4-8: Magnetic Field IEC 1000-4-11/EN61000-4-11: DIPS and Voltage
<b>Variations</b>	
<b>Safety</b>	IEC 60950/EN60950 (LISTED) CSA C22.2 No. 60950/UL60950 Third Edition
<b>Other</b>	European Standard: 2002/95/EC Directive (RoHS2)
<b>Regulatory Approvals</b>	



### Warranty Information

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

### Sales Support

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