

# LP-1501

## LP-1501 System Control Processor

The LP-1501 is a powerful, IP-based System Control Processor (SCP) ideal for use as a single door controller or is expandable to control up to 17 doors with a 240,000 card capacity. Built on the Linux Embedded operating system, the LP series of SCPs modernizes security delivering full end-to-end encryption to ensure data remains secure at all times.

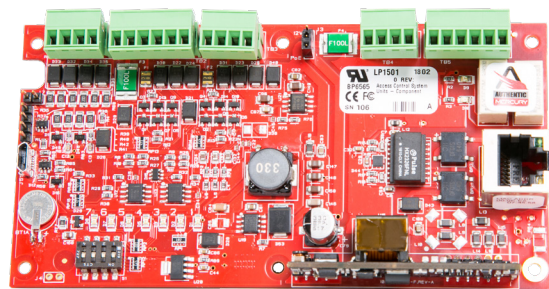
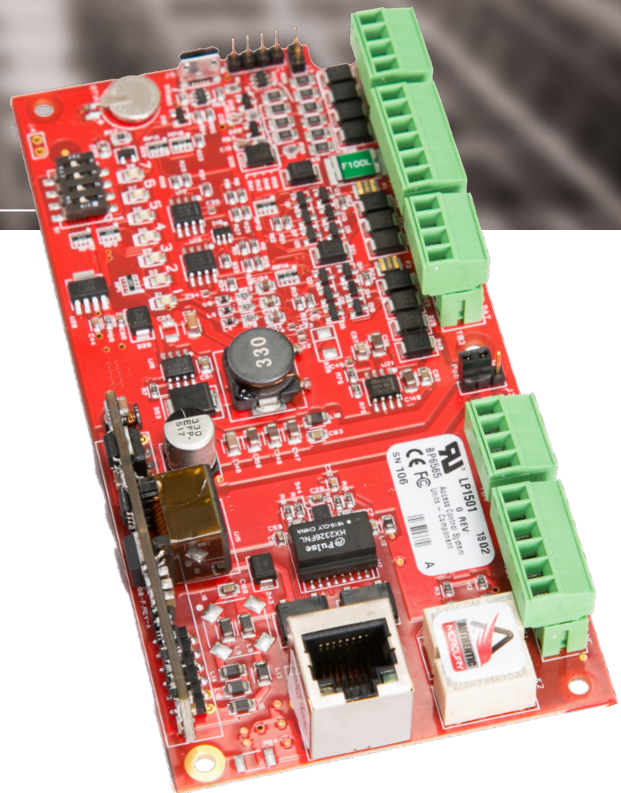
The LP-1501 contains an onboard SIO and can be configured as:

**LP-1501:** The LP-1501 configuration operates as a standalone board with two reader ports capable of controlling 1 door with a paired IN/OUT configuration. The LP-1501 configuration does not have downstream RS-485 communication and is not expandable. In this configuration, the LP-1501 does not count against the SCP license.

**LP-1501Plus:** The LP-1501Plus contains a single reader port that can control 1 door with 2 readers when utilizing OSDP IN/OUT Mode. This configuration also includes downstream RS-485 capability and supports up to a maximum of 17 doors. In this configuration, the LP-1501Plus does count against the SCP License.

The LP-1501 supports PoE and PoE+ delivering up to 1.25 A of power at the door for reader and strike power simplifying deployment. The LP-1501 stores its own cardholder database as well as all schedule information, including unlock/relock times, access times, and holiday information locally. Once configured, the powerful onboard processor allows the LP-1501 to make access decisions locally allowing for operation autonomous from software and can store up to 50,000 events locally. The LP-1501 also supports precision card access, elevator access control, extended door unlock/allowed open timing (ADA required), and includes a full range of anti-passback capabilities.

The LP-1501 can support up to 8 card format/facility code combinations using a wide-range of reader technologies including OSDP with Secure Channel, keypads, biometric readers, Wiegand, clock and data, magnetic stripe, F/2F, and supervised F/2F. It is PIV-II, CAC, and TWIC card compatible. The LP-1501 features AES 256-bit NIST Certified Encryption, and is UL 294 recognized, CE (RoHS) compliant, and HSPD-12/FIPS 201 compliant.



*The LP-1501 provides a cost-efficient option for a single door controller or control up to 17 doors*



### The LP-1501 includes these features:

- Built on the Linux Embedded Platform providing enhanced security, communication, and feature sets
- Onboard SIO controls up to 2 doors with all needed I/O
- Supports up to 17 reader/input/output SIO subpanels and controls up to a maximum of 17 doors
- Identical footprint to the EP-1501 model allowing for seamless upgrade transitions for existing deployments
- Communication over 10/100 Ethernet with support for IPV4 and IPV6
- Power options of 12 Vdc, PoE(12.95 W), and PoE+ (25 W)
- Up to 1.25 A of power available for reader and lock power using 12 Vdc and PoE+ power sources
- Card Capacity up to 240,000 cards
- Port-based authentication based on the IEEE 802.1X standard for port-based Network Access Control
- Host communication secured using TLS 1.1/1.2 and AES-128/256
- Reader communication support for OSDP 2 with Secure Channel
- UL294 Recognized, CE Compliant, RoHS, NIST Certified Encryption



**Technologies**

RS2 Technologies has constructed an integrated family of access management software and hardware that can be configured to provide a cost-effective solution for very small to very large systems. The LP series of hardware relies on open architecture to maximize freedom for users, control costs, and allow for interoperability via integration to provide the most complete solution from a platform trusted worldwide.

# LP-1501

Technical Specifications	
<b>Access Configurations</b>	
<b>Access Control</b>	240,000 Card Capacity 50,000 Transaction Buffer 8 Card Formats Up to 255 Access Levels Per Card PIV, CAC, TWIC Compatible If/Then Logic Task Automation Anti-passback support
<b>Configurations</b>	LP-1501 Standalone Single reader port Supports 1 Door, 2 Readers (Paired IN/OUT) Does not count against SCP Count
	LP-1501+ Single reader port Supports 1 Door, 2 Readers (Paired IN/OUT) Supports up to 16 SIOs and up to 17 Doors Does count against SCP Count
<b>Power</b>	
<b>Primary Power</b>	12 Vdc +/- 10%, 1.8 A maximum PoE (12.95 W) IEEE 802.2af compliant PoE+ (25 W) IEEE 802.3at compliant
<b>Auxiliary Power Output</b>	12 Vdc 12 Vdc @ 1.25 A including reader and auxiliary output
	PoE 12 Vdc @ 625 mA including reader and auxiliary output
	PoE+ 12 Vdc @ 1.25 A including reader and auxiliary output
<b>Reader Power</b>	12 Vdc +/- 10%, PoE, PoE+ or local power supply 300 mA maximum
<b>Communication</b>	
<b>Host Communication</b>	10-BaseT/100Base-TX IP Server or IP Client Communication TLS 1.1/1.2 or AES-128/256 Encryption
<b>SIO Communication</b>	100-BaseT/100Base-TX 1 RS-485 TLS 1.1/1.2 or AES-128/256 Encryption
<b>Readers</b>	OSDP with Secure Channel, Wiegand, keypads, biometric readers, clock and data, magnetic stripe, and F/2F

Technical Specifications	
<b>Panel Specifications</b>	
<b>Inputs</b>	1 Unsupervised/Supervised Door Contact 1 Unsupervised/Supervised Request to Exit 1 Unsupervised Cabinet Tamper Programmable Supervised End-of-Line Resistance Values
<b>Outputs</b>	1 Door Strike Form-C Contact 2 A @ 30 Vdc, resistive 1 Auxiliary Form-C Contact 2 A @ 30 Vdc, resistive
<b>Readers</b>	1 Reader Port & 1 RS-485 Bus OR 2 Reader Ports OSDP with Secure Channel, Wiegand, Keypads, Biometric Readers, Clock and Data, Magnetic Stripe, F/2F
<b>Cabling</b>	
<b>Power &amp; Relays</b>	1 Twisted Pair - 18 to 16 AWG
<b>Ethernet</b>	CAT-5 Minimum
<b>F/2F</b>	4-Conductor, 18 AWG, 500 Foot Maximum
<b>Magstripe and Wiegand(TTL)</b>	6-Conductor, 18 AWG, 500 Foot Maximum
<b>OSDP RS-485</b>	1 Twisted Pair, Shielded, 120 Ohm Impedance, 24 AWG, 2,000 Foot Maximum
<b>SIO RS-485</b>	1 Twisted Pair with Drain Wire and Shield, 120 Ohm Impedance, 24 AWG, 4,000 Foot Maximum
<b>Physical Specifications</b>	
<b>Dimensions</b>	5.5 in. (140 mm) W x 2.75 in. (70 mm) L x .96 in. (24 mm) H without bracket 5.5 in. (140 mm) W x 3.63 in. (92 mm) L x 1.33 in. (33 mm) H with bracket
<b>Humidity</b>	5 to 95% RHNC
<b>Temperature</b>	-55 to +85 °C Storage 0 to +70 °C Operating
<b>Weight</b>	3.6 oz without bracket 4.43 oz with bracket

