RS2 Technologies

Access Control Solutions

LP-2500

LP-2500 System Control Processor

The LP-2500 is a powerful, IP-based System Control Processor (SCP) expandable to control up to 64 doors with a 600,000 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-2500 features dual RS-485 busses for added flexibility and freedom in system design and deployment. Each bus can be configured to use separate protocols allowing for a mixture of devices such as locksets and traditional Mercury hardware to be controlled from a single controller board. Two RS-485 busses also creates flexibility in wiring and device topology delivering a cost-effective solution while maintaining flexibility.

The downstream RS-485 busses allow up to 32 SIO subpanels to be added for a maximum of 64 total doors. Support for multiple lockset products are supported natively and the dual RS-485 busses allow for different device types to be used on the single panel.

The LP-2500 is a suitable solution for most situations. Designed to easily replace legacy series panels, the LP-2500 uses an identical footprint and interface as the EP-2500 panel. The LP-2500 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 on-board processor allows the LP-2500 to make access decisions locally allowing for operation autonomous from software and can store up to 50,000 events locally. The LP-2500 also supports precision card access, basic elevator access control, extended door unlock/ allowed open timing (ADA required), and includes a full range of anti-passback capabilities.

The LP-2500 can support up to 8 card format/facility code combinations. The LP-2500 is UL 294 recognized, CE (RoHS) compliant, HSPD-12/FIPS 201 compliant, and uses AES 256-bit NIST Certified Encryption.

The LP-2500 includes these features:

- Built on the Linux Embedded Platform providing enhanced
- Communication over 10/100 Ethernet with support for IPV4 and IPV6
- Card Capacity up to 600,000 cards
- Support for up to 8 unique card format/facility code
- Supports up to 32 reader/input/output SIO subpanels and control up to a maximum of 64 doors
- Supports integrations with multiple wired and wireless lockset brands and models
- 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
- Flash firmware capability for easy field upgrades
- UL294 Recognized, CE Compliant, RoHS, NIST Certified Encryption





The LP-2500 provides the support for up to 600,000 cards for high-volume locations. Dual RS-485 busses provide flexibility in installation and device topology.





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-2500

Technical Specifications	
Access Configurations	
Access Control	600,000 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
LP-2500 Configuration	2 Downstream RS-485 Supports up to 32 SIOs Counts against SCP Count Expandable up to 64 doors total
Power	
Primary Power	12 to 24 Vdc +/- 10% 250 mA maximum
Communication	
Host Communication	10-BaseT/100Base-TX IP Server or IP Client Communication TLS 1.1/1.2 or AES-128/256 Encryption
SIO Communication	10-BaseT/100Base-TX 2 RS-485 TLS 1.1/1.2 or AES-128/256 Encryption

Technical Specifications	
Panel Specifications	
Inputs	1 Unsupervised Cabinet Tamper 1 Unsupervised Power Monitor
Cabling	
Power	1 Twisted Pair - 18 to 16 AWG
Ethernet	CAT-5 Minimum
SIO RS-485	1 Twisted Pair with Drain Wire and Shield, 120 Ohm Impedance, 24 AWG, 4,000 Foot Maximum
Physical Specifications	
Dimensions	5 in. (127 mm) W x 6 in. (152.4 mm) L x 1 in. (25 mm)
Humidity	5 to 95% RHNC
Temperature	-55 to +85 °C Storage 0 to +70 °C Operating
Weight	4.1 oz

