

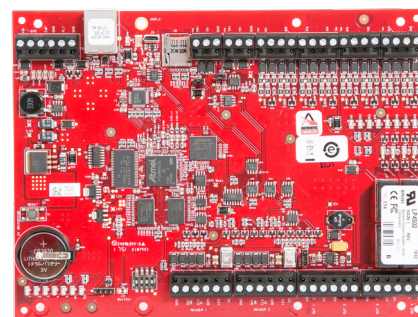
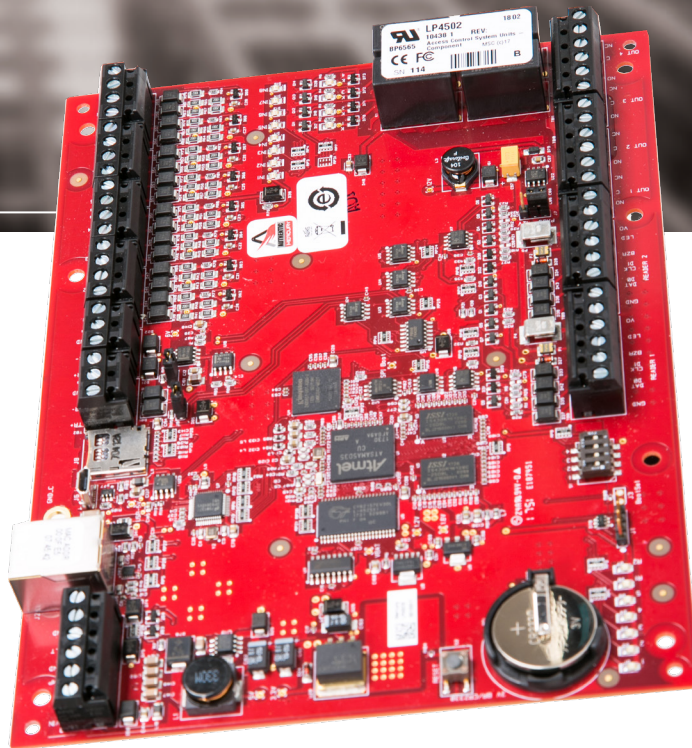
LP-4502

LP-4502 System Control Processor

The LP-4502 is a powerful, IP-based System Control Processor (SCP) expandable to control up to 64 doors. Featuring an impressive 2,000,000 card capacity, the LP-4502 can meet the needs of even the most demanding of facilities. 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-4502 uses the identical footprint and interface as the EP-4502 simplifying the migration process. The LP-4502 contains an onboard SIO and is capable of controlling 2 doors with 4 readers when utilizing OSDP IN/OUT mode. Dual downstream RS-485 busses allow for an additional 31 SIO subpanels to be added for a maximum of 64 total doors. The dual RS-485 busses also allow 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. Extended feature options include Elevator Destination Dispatch, BACnet control, and embedded FICAM Authentication.

The LP-4502 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-4502 to make access decisions locally allowing for operation autonomous from software and can store up to 50,000 events locally. The LP-4502 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-4502 can support up to 8 card format/facility code combinations. The LP-4502 is UL 294 recognized, CE (RoHS) compliant, HSPD-12/FIPS 201 compliant, and uses AES 256-bit NIST Certified Encryption.



The LP-4502 provides the greatest system capacity within RS2's family of System Control Processors.



The LP-4502 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
- Card Capacity up to 600,000 cards
- Support for up to 8 unique card format/facility code combinations
- Dual RS-485 busses for extended flexibility in system design
- Expandable up to 31 downstream SIO subpanels and controls up to a maximum of 64 doors
- Identical footprint and interface as the EP-4502 model allowing for seamless upgrade transitions for existing deployments
- Host communication over 10/100 Ethernet with support for IPV4 and IPV6
- 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
- Support for Destination Dispatch Elevator Control, BACnet, and Embedded pivCLASS integrations
- 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-4502

Technical Specifications

Access Configurations

Access Control

2,000,000 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
Elevator Destination Dispatch
BACnet Building Control
Embedded pivCLASS Authentication

LP-4502 Configuration

Supports 2 Doors, 4 Readers(Paired IN/OUT)
2 Downstream RS-485 Supports up to 31 Additional SIOs
Counts against SCP Count
Expandable up to 64 doors total

Power

Primary Power

12 to 24 Vdc +/- 10%
550 mA maximum

Reader Power

12 to 24 Vdc +/- 10%, regulated
300 mA maximum per reader

Technical Specifications

Communication

Host Communication

10/100 Ethernet
IP Server or IP Client Communication
TLS 1.1/1.2 or AES-128/256 Encryption

SIO Communication

100-BaseT/100Base-TX Ethernet
2 RS-485
TLS 1.1/1.2 or AES-128/256 Encryption

Readers

OSDP with Secure Channel, Wiegand, keypads, biometric readers, clock and data, magnetic stripe, and F/2F

Inputs

4 Unsupervised/Supervised Auxiliary
2 Unsupervised/Supervised Door Contact
2 Unsupervised/Supervised Request to Exit
1 Unsupervised Cabinet Tamper
1 Unsupervised Power Monitor
Programmable Supervised End-of-Line Resistance Values

Outputs

2 Door Strike Form-C Contact
NC 3 A @ 30 Vdc, resistive
NO 5 A @ 30 Vdc, resistive
2 Auxiliary Form-C Contact
NC 3 A @ 30 Vdc, resistive
NO 5 A @ 30 Vdc, resistive

Readers

2 Reader Ports
4 Readers Maximum using OSDP IN/OUT mode
OSDP with Secure Channel, Wiegand, Keypads, Biometric Readers, Clock and Data, Magnetic Stripe, F/2F

Cabling

Power & Relays

1 Twisted Pair - 18 to 16 AWG

Ethernet

CAT-5 Minimum

F/2F

4-Conductor, 18 AWG, 500 Foot Maximum

Magstripe and Wiegand(TTL)

6-Conductor, 18 AWG, 500 Foot Maximum

OSDP RS-485

1 Twisted Pair, Shielded, 120 Ohm Impedance, 24 AWG, 2,000 Foot Maximum

SIO RS-485

1 Twisted Pair with Drain Wire and Shield, 120 Ohm Impedance, 24 AWG, 4,000 Foot Maximum

Physical Specifications

Dimensions

8 in. (203 mm) W x 6 in. (152 mm) L x 1 in. (25 mm) H

Humidity

5 to 95% RHNC

Temperature

-55 to +85 °C Storage
0 to +70 °C Operating

Weight

10.65 oz

