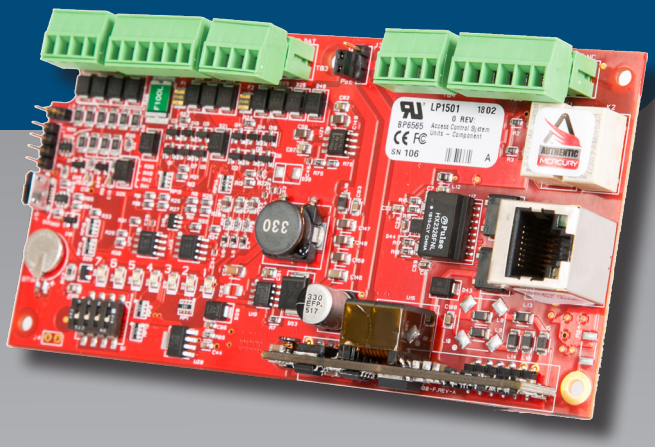
LP Series

1501

PoE+ Edge-capable Intelligent Controller (2 Readers, 2 Inputs, 2 Outputs)



- **Open Architecture:** High performance, reliable solutions
- **Enhanced Security:** Embedded crypto memory chip and data at rest encryption provides secured layer of protection of sensitive data
- **OSDP Protocol:** Secure channel communications for reader connectivity
- **Versatile Interoperability:** Same reliable interface and identical footprint as the EP controllers, enabling seamless upgrades for existing deployments

Highlights:

IP-to-the-Door

- Install at door in 3-gang box
- Provides up to 1.25 A of power at door for reader, lock and more

Security and Network

- IPv4/v6
- Host communications protected by TLS 1.2/1.1 or AES-256/128
- Controller/IO Expansion connection protected by AES
- Generate and load custom peer certific tes for TLS
- Port based network access control using 802.1X
- FIPS 140-2 user of OpenSSL

Card Reader Functions

- Supports multiple card formats, paired and alternate readers, elevator, turnstile and biometric devices
- Anti-passback support (area, reader and time based)
- Programmable keypad user commands
- Threat level and operating modes

The IMRON LP Series Intelligent Controllers are IMRON's next generation advanced access control platform that runs on embedded Linux. The enhanced platform offers an improved processor and increased memory, plus features an embedded crypto memory chip that provides a secured layer of encryption to onboard sensitive data. Built on the Authentic Mercury open platform, LP Series controllers provide many controller configurations.

The LP1501 is an edge-capable intelligent controller that is expandable up to 17 doors/openings. The feature-rich LP1501 has a small footprint and is a cost-effective dual card reader panel for controlling a single opening. Easy installation with Power-over-Ethernet Plus (PoE+) makes the high performance, ethernet ready LP1501 a top choice for a single-door controller.

Once configured, the intelligent controller functions independently of the host and can control access and manage sophisticated device processes (such as anti-passback and point linking) both onboard and downstream of the EP1501. It also supports OSDP Secure Channel, keypads, biometric readers, Wiegand, clock and data, magnetic stripe, F/2F and supervised F/2F reader technologies. System configuration and setup are provided through IMRON's IS2000 solutions.

With a comprehensive and open access control platform, increased user capacity, and a reliable hardware platform running an expanded set of applications, the LP1501 is the clear solution. It delivers a complete security and access control solution as well as innovative application extensions, interoperability and data security.

IMRON CORPORATION

PoE+ Edge-capable Intelligent Controller

LP1501

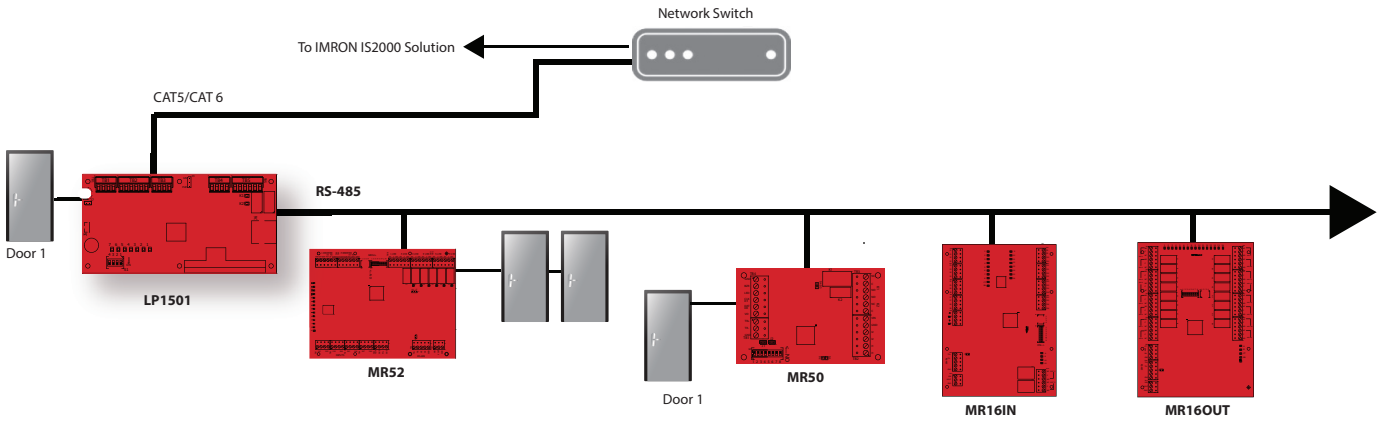
Specifications

Access Control	240,000 cardholder capacity 50,000 transaction buffer Supports total of 1 RS-485 IO protocol 255 access levels per cardholder Cardholder - 19 Digit (64 Bit) User ID with 15 digit PIN MAX Activation/Deactivation If/Then macro capabilities Anti-passback support Nested, area, hard, soft and timed forgiveness Adjustable cardholder capacity Supports up to 130 inputs and 130 outputs
Door Control	Natively supports for up to 2 readers and 1 opening. Using on-board OSDP, device controls 1 door and up to 2 OSDP multi-dropped readers. When not using on-board OSDP reader, device can expand to support up to 17 readers and openings in total
Power Input	PoE (12.95 W), compliant to IEEE 802.3af or PoE+ (25 W), compliant to IEEE 802.3at or 12 Vdc +/- 10 %, 1.8 A maximum
Power Output	PoE: 12 Vdc @ 625 mA including reader and AUX output * PoE+ or external 12 Vdc: 12 Vdc @ 1.25 A including reader and AUX output * * Excluding micro USB port
Micro USB Port	5 Vdc maximum (deduct 270 mA from reader and Auxiliary Power output)
Battery	SRAM Backup Battery, rechargeable
Host Comm.	Ethernet: 10-BaseT/100Base-TX
Inputs	Two unsupervised/supervised, Programmable End-of-Line resistors, 1k/1k ohm, 1 %, ¼ watt standard One unsupervised input dedicated for cabinet tamper
Output Relays	Two relays: Form-C contacts: 2 A @ 30 Vdc, resistive
Reader Interface	
Reader Power	12 Vdc ± 10 %: PoE, PoE+ or local power supply, 300 mA maximum
Data Inputs	Reader port 1: TTL compatible, F/2F or 2-wire RS-485 Reader port 2: TTL compatible or F/2F
LED Output	TTL compatible, high > 3 V, low < 0.5 V, 5 mA source/sink maximum
Buzzer Output	Open collector, 12 Vdc open circuit maximum, 40 mA sink maximum

Specifications

Cable Requirements	
Power and Relays	1 twisted pair, 18 AWG (when using local 12 Vdc power supply)
Ethernet	CAT-5, minimum
Reader TTL	6-conductor, 18 AWG, 500 ft. (152 m) maximum
Reader F/2F	4-conductor, 18 AWG, 500 ft. (152 m) maximum
Reader RS-485	1 twisted pair, shielded. 24 AWG, 120 ohm impedance, 2000 ft. (610 m) maximum
Alarm Input	1 twisted pair per input, 30 ohms maximum
Alarm Output	As required for the load
Environmental	
Temperature	-55 to 85 °C storage, 0 to 70 °C operating
Humidity	5 to 95% RHNC
Mechanical	
Dimensions	5.5 in. (140 mm) W x 2.75 in. (70 mm) L x 0.96 in. (24 mm) H without bracket 5.5 in. (140 mm) W x 3.63 in. (92 mm) L x 1.33 in. (34 mm) H with bracket
Weight	3.6 oz. (103 g) without bracket 4.43 oz. (125.5 g) with bracket
Product Compliance	UL294 Recognized[1], FCC Part 15 Class A, CE Compliant, RoHS, NIST Certified Encryption
Warranty	Mercury Security warrants the product is free from defect in material and workmanship under normal use and service with proper maintenance for one year from the date of factory shipment.

[1] For UL, the Power Sourcing Equipment (PSE) such as a PoE or PoE+ enabled network switch and/or PoE or PoE+ power injectors must be UL Listed under UL294B.



AUTHENTIC MERCURY

The Authentic Mercury open platform delivers quality assurance derived from the most proven and reliable hardware in the industry. Driven by our engineering excellence and technology leadership, Authentic Mercury hardware is designed as an access control platform that easily encompasses emerging technologies, changing industry standards and evolving system environments. Make yours Authentic, Make sure its Merc.