

Next-Generation

Access Control Panel

ICM-MP1502


Reference image only*

IDCUBE's ICM-MP Series Access Control Panel is a future-ready, open-architecture platform built on embedded Linux and natively integrated with IDCUBE's Access360 software suite. At its core, the platform leverages the Authentic Mercury MP Series Intelligent Controller (MP1502), offering robust performance, scalable architecture, and enhanced security.

The MP1502 supports 2-4 card readers for controlling two connected doors, which can expand to up to 64 doors/openings. It also supports keypads, biometric readers, OSDP, Wiegand, clock and data, magnetic stripe, F/2F and supervised F/2F reader technologies.

HIGHLIGHTS

Open Architecture: High performance, reliable platform enables use of hardware with Mercury OEM partners' software solutions.

Enhanced Cybersecurity: ARM TrustZone, secure boot CPU, crypto chip and data at rest encryption provide a layered security approach to protect sensitive data.

Edge Processing: Advanced processing capabilities enable custom applications to run on the controller, significantly expanding the platform's processing capabilities at the edge.

Business Continuity: New processor part of multi-year longevity program, dual footprint circuit designs and the same reliable LP/EP interface and footprint.

FEATURES

IPv4/v6

Host communications protected by TLS 1.2/1.3 or AES-256/128

240,000 cardholder capacity, 500,000 transaction buffer
Controller/IO Expansion connection
protected by AES

Generate and load custom device and peer certificates in
support of mTLS

Port based network access control using 802.1X

FIPS 140-3 user of OpenSSL (in process)

Local Access Control Processing

- 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 mode
- Ability to power cycle each reader port individually

Third Party Integration Supported

- Wireless locks
- Power supply alerts and events

TECHNICAL SPECIFICATIONS

Intelligent Controller	
Access Control	240,000 cardholder capacity 500,000 transaction buffer Supports total of 1 RS-485 IO protocols 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 520 inputs or 516 outputs
Door Control	Natively supports up to 4 readers and 2 openings and can support up to 32 additional RS-485 expansion modules for a maximum of 64 readers and openings.

General	
Primary Power	12 to 24 VDC ± 10 %, 500 mA maximum (reader and USB ports not included)
Reader Port	600 mA maximum (add 600 mA to primary power current)
Power and Relays	5 VDC, 500 mA maximum (add 270 mA to primary power current)
Battery	Memory/Clock Backup: Super Capacitor (10 hours). 3 Volt Lithium, type BR/CR2032, slot available for additional capacity. Battery not included.
microSD Card	microSD or microSDHC; 2GB to 8GB
Host Communication	Ethernet: 10-BaseT/100Base-TX and USB port (2.0) with optional adapter: pluggable model USB2- OTGE100
Serial I/O Device	2-wire RS-485, 2,400 to 115,200 bps, asynchronous, half-duplex, 1 start bit, 8 data bits, and 1 stop bit
Inputs	Eight unsupervised/supervised, standard EOL: 1k/1k ohm, 1%, ¼ watt. Two unsupervised dedicated for cabinet tamper and UPS fault monitoring.
Output Relays	Four relays, Form C, NO 5 A @ 30 VDC resistive, NC 3 A @ 30 VDC resistive

Mechanical	
Dimensions(Board)	8 in. (203.2 mm) W x 6 in. (152.4 mm) L x 1 in. (25 mm) H
Weight	9 oz. (255 g) nominal, board only
Part Code	ICM-MP1502-EXXXXXX ¹ (Mercury Controller Part number: MP1502)

¹ EXXXXXX refers to enclosure type along with accessories such as power supply, charging circuit, battery, and tamper switch; Please refer to the enclosure datasheet for details.

Cable Requirements	
Power and Relays	1 twisted pair, 18 to 16 AWG
Ethernet	CAT-5, minimum
Reader TTL	6-conductor, 18 AWG, 500 feet (150 m) max.
Reader F/2F	4-conductor, 18 AWG, 500 feet (150 m) max.
Reader RS-485	1 twisted pair, shielded, 120-ohm impedance, 24 AWG, 2,000 ft. (610 m) max.
I/O Devices RS-485	1 twisted pair with drain wire and shield, 120 ohm impedance, 24 AWG, 4,000 ft. (1,219 m) max.
Alarm Input	1 twisted pair, 30 ohms maximum typically 22 AWG @ 1000 ft. (304.8 m) maximum

Environmental	
Temperature	-55 to +85 °C, storage, 0 to +70 °C, operating
Humidity	5 to 95% RHNC

Reader Interface	
Reader Power	12-24 VDC +/- 10% regulated, 600 mA maximum.
Data Inputs	TTL compatible, F/2F or 2-wire RS-485
RS-485 Mode	9,600 to 115,200 bps, asynchronous, half-duplex,1 start bit, 8 data bits, and 1 stop bit. Maximum cable length: 2000 ft. (609.6 m)
LED Output	TTL levels, 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

Compliance and Warranty	
Product Compliance	UL 294 Recognized, FCC Part 15 Class A, CE Compliant, RoHS (2011/65/EU & 2015/863), EU REACH (1907/2006), California Proposition 65, NIST Certified Encryption (in process)
Warranty	The product is warranted free from defects in material and workmanship under normal use and service with proper maintenance for one year from the date of factory shipment.

1 EXXXXXX refers to enclosure type along with accessories such as power supply, charging circuit, battery, and tamper switch; Please refer to the enclosure datasheet for details.

Scan to visit the website



USA

IDCUBE Corporation

20, Corporate Place South, 2nd Floor,

Piscataway, New Jersey – 08854,

Tel: +1 (833) 703-1765

IDCUBE Inc

691 S Milpitas Blvd Ste 217

Milpitas CA 95035

Tel: +1 (833) 703-1765

UAE

IDCUBE - FZE

Techno Hub 1 – Office G 042,

Dubai Silicon Oasis, Dubai,

Tel: +971 43 887900

INDIA

IDCUBE Identification Systems Pvt. Ltd.

B-19, Sector-2, NOIDA 201301,

Uttar Pradesh

Tel: +91 120 4130715