

# Next-Generation Access Control Panel

## ICM-MP2500



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 (MP2500), a powerful intelligent controller with native network support, which is scalable up to 64 doors/openings. It delivers access control, alarm management, and scheduled operations in a single package.

### HIGHLIGHTS

**Open Architecture:** High-performance, reliable platform that integrates seamlessly with Mercury OEM partners' software solutions.

**Enhanced Cybersecurity:** Equipped with ARM TrustZone, secure boot CPU, crypto chip, and data-at-rest encryption for robust protection of sensitive data.

**Edge Processing:** Supports advanced processing, allowing custom applications to run directly on the controller, expanding intelligence at the edge.

**Business Continuity:** Built with a long-life processor, dual footprint circuit designs, and proven LP/EP compatibility for reliable operations.

**Scalable Performance:** A powerful controller with native network support, capable of managing up to 64 doors/openings with advanced access control, alarm management, and scheduled operations.

### FEATURES

IPv4/IPv6 support

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

600,000 cardholder capacity, 500,000 transaction buffer

Controller/IO expansion connections protected by AES

Supports up to 255 access levels per cardholder

19-digit (64-bit) card numbers and 15-digit PIN codes supported

Port-based network access control using 802.1X

Encrypted database with configurable sizing

Anti-pass back support (Area, reader and time based); Programmable keypad user commands; threat level and operating modes

FIPS 140-3 user of OpenSSL

Compatible with wireless locks, power supply alerts, elevator/turnstile control, biometric devices, and intrusion/fire system integration

# TECHNICAL SPECIFICATIONS

## Intelligent Controller

<b>Card Holders Capacity</b>	600,000 cardholder capacity 500,000 transaction buffer
<b>Door Control</b>	Does not natively support any readers or openings. Supports up to 32 RS-485 expansion modules for a maximum of 64 readers and openings

## General

<b>Primary Power</b>	12 to 24 VDC $\pm$ 10 %, 500 mA maximum (reader and USB ports not included)
<b>Micro USB Port</b>	5 VDC, 500 mA maximum (add 270 mA to primary power current)
<b>Battery</b>	Memory/Clock Backup: Super Capacitor (10 hours)
<b>microSD Card</b>	Format: microSD or microSDHC; 2GB to 8GB
<b>Host Communication</b>	Ethernet: 10-BaseT/100Base-TX and Micro USB port (2.0) with optional adapter: pluggable model USB2-OTGE100
<b>Serial I/O Device</b>	Two each: 2-wire RS-485, 2,400 to 115,200 bps, asynchronous, half-duplex, 1 start bit, 8 data bits, and 1 stop bit
<b>Inputs</b>	Two unsupervised dedicated for cabinet tamper and UPS fault monitoring

## Environmental

<b>Temperature</b>	-55 to +85 °C, storage, 0 to +70 °C, operating
<b>Humidity</b>	5 to 95% RHNC

## Mechanical

<b>Dimensions(Board)</b>	5 in.(127 mm) W x 6 in.(152.4 mm) L x 1 in.(25 mm) H
<b>Weight</b>	4.1 oz. (115 gm) nominal, board only
<b>Part Code</b>	ICM-MP2500-EXXXXXX <sup>1</sup> (Mercury Controller Part number: MP2500)

<sup>1</sup> 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

<b>Header</b>	Alarm Input
<b>Data</b>	1 twisted pair, 30 ohms maximum
<b>Power</b>	1 twisted pair, 18 to 16 AWG
<b>Ethernet</b>	CAT-5, minimum
<b>I/O Devices RS-485</b>	1 twisted pair, shield, 120-ohm impedance, 24 AWG. 4,000 ft. (1,219 m) maximum cable length

## 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.

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