

SPECIFICATION



MAC316M 14+2 Multi-Reader Interface Door Access



MAC316M: 14+2 Multi-Reader Interface Door Access

Description

MAC316M is a professional 16-door IP control panel engineered for large-scale access control architecture. It offers flexible communication through RS-485 or TCP/IP interfaces to form a robust network loop. Optimized for high-traffic environments, the MAC316M supports a massive default capacity of 16,000 cardholders (expandable to 32,000) and features sophisticated multi-door anti-passback functionality to ensure strict security across all entry and exit points.

Seamlessly integrating with MagEtegra software, the MAC316M provides a user-friendly experience for managing complex access permissions, real-time event monitoring, and comprehensive reporting across extensive facility layouts.

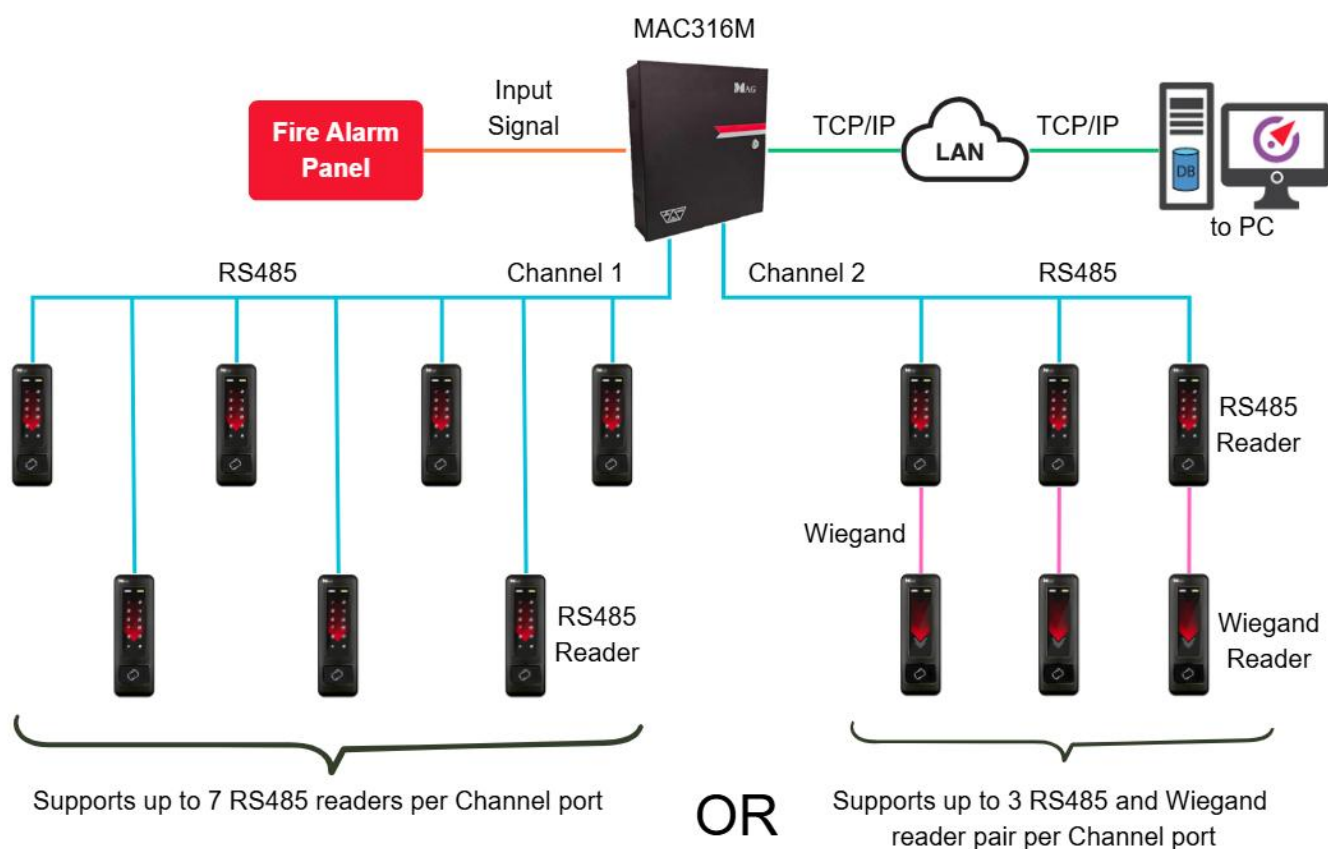
Features

1. **Multi-Door & Large Capacity Control:** Designed to manage up to 16 doors from a single control panel.
2. **Flexible Communication Modules:** Features a built-in RS-485 and TCP/IP interface for software management via network.
3. **Installation-Friendly Design:** Utilizes an industrial-standard locking design and quick-release terminals for easier wiring and maintenance.
4. **Multi-Reader Support:** Connects up to **14 units of RS-485 readers** and **2 units of Wiegand readers**.
5. **Advanced Anti-Passback:** Includes built-in **multi-door anti-passback** logic to prevent one card from being used for multiple entries.
6. **Emergency Integration:** Features a built-in fire alarm input that can automatically **release all door locks** during an emergency.
7. **Reliability & Redundancy:** Equipped with a **watchdog timer** to prevent system hang-ups and a **Real Time Clock (RTC)** for precise event logging.
8. **Continuous Operation:** Supports rechargeable battery integration to keep the system running during power outages.

Technical Parameters

Specification	
CPU	32bit / ARM32 72MHz / Flash 512KB
Memory	2048KB (2MB)
Power Supply	12 ~ 24VDC
Power Consumption	< 3W
Interface / Baud Rate	RS-485 : 9600 bps (N, 8, 1)
	Ethernet : 10/100M Base T
External Readers	2 RS-485 + 2 WG
Temperature	-20°C ~ +70°C
Digital Input	2 Door Open Button/ 2 Door Sensor/ 1 Fire-alarm
Relay Output	2 Door Relay / 1 Alarm Relay
Door Relay Time	Toggle, 0.1 ~ 600 Seconds
Alarm Relay Time	Toggle, 0.1 ~ 600 Seconds
User Capacity	16,000 (Default value) / 32,000 (Upgraded)
Event log	32,000
Aux. WG Port	WG 26 / WG 34
Anti-pass-back	16 Doors
Lift Control	Yes
Door Group	255
Time Zone	63 (stand-alone / networking)
Real-time Clock	YES
DIP_SW	8 (Node ID: 1~254)

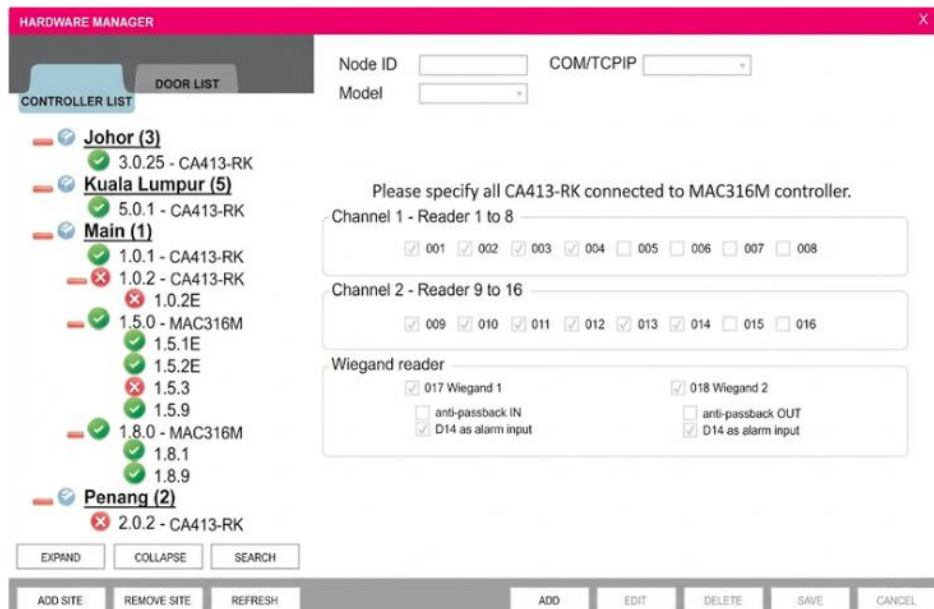
Connection Architecture



This diagram illustrates the connection architecture for MAC316M for multi-door access functionality. TCP/IP network is utilized to connect MAC316M to the network server via LAN. The architecture supports global anti-pass back on selected readers, essential for securing access and tracking user movements accurately across multiple doors.

In the event of a fire emergency, the MAC316M receives a trigger signal from the fire alarm control panel, which triggers a global selected door release on all interconnected doors to allow for a safe and unobstructed evacuation.

What other features can you achieve when integrated with MagEtegra Access Control Software (ME-ACS)?



HARDWARE MANAGER

CONTROLLER LIST

- Johor (3)**
 - 3.0.25 - CA413-RK
- Kuala Lumpur (5)**
 - 5.0.1 - CA413-RK
- Main (1)**
 - 1.0.1 - CA413-RK
 - 1.0.2 - CA413-RK
 - 1.0.2E
 - 1.5.0 - MAC316M
 - 1.5.1E
 - 1.5.2E
 - 1.5.3
 - 1.5.9
 - 1.8.0 - MAC316M
 - 1.8.1
 - 1.8.9
- Penang (2)**
 - 2.0.2 - CA413-RK

Node ID COM/TCPIP

Model

Please specify all CA413-RK connected to MAC316M controller.

Channel 1 - Reader 1 to 8

☒ 001 ☒ 002 ☒ 003 ☒ 004 ☐ 005 ☐ 006 ☐ 007 ☐ 008

Channel 2 - Reader 9 to 16

☒ 009 ☒ 010 ☒ 011 ☒ 012 ☒ 013 ☒ 014 ☐ 015 ☐ 016

Wiegand reader

☒ 017 Wiegand 1 ☒ 018 Wiegand 2

☐ anti-passback IN ☐ anti-passback OUT

☒ D14 as alarm input ☒ D14 as alarm input

EXPAND COLLAPSE SEARCH

ADD SITE REMOVE SITE REFRESH

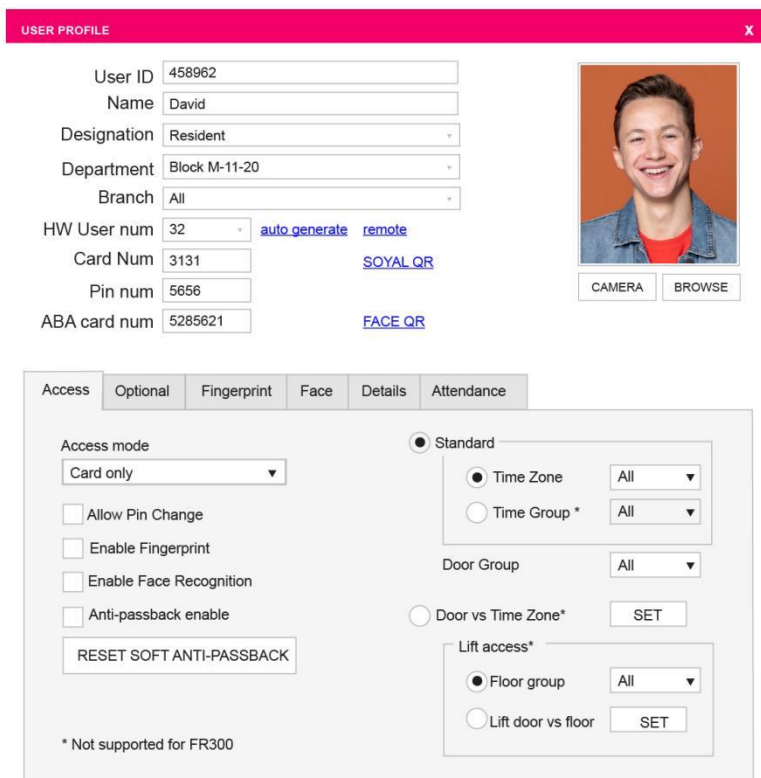
ADD EDIT DELETE SAVE CANCEL

Centralized Hardware Management

Hardware Manager centralizes the configuration and monitoring of your security hardware in one intuitive interface. Administrators can easily manage controllers, readers, and sites, adjust device settings, and bring devices online or offline for maintenance. Clear status visibility ensures your security infrastructure remains organized, reliable, and secure at all times.

Central Account & Permission Management

User Profile simplifies identity and access management by allowing administrators to enroll users, assign cards, PINs, and biometric credentials, and define access permissions with ease. Flexible controls for doors, time zones, and lift access ensure the right people have the right access at the right time, all from a single, intuitive interface.



USER PROFILE

User ID 458962

Name David

Designation Resident

Department Block M-11-20

Branch All

HW User num 32 [auto generate](#) [remote](#)

Card Num 3131 [SOYAL QR](#)

Pin num 5656

ABA card num 5285621 [FACE QR](#)



[CAMERA](#) [BROWSE](#)

Access Optional Fingerprint Face Details Attendance

Access mode Card only

☐ Allow Pin Change

☐ Enable Fingerprint

☐ Enable Face Recognition

☐ Anti-passback enable

☒ Standard

☒ Time Zone All

☐ Time Group * All

Door Group All

☐ Door vs Time Zone*

Lift access*

☒ Floor group All

☐ Lift door vs floor

* Not supported for FR300

ME-ACS MagClient

System Configuration User Management Access Control Time Attendance Monitoring Reporting Housekeeping Help About

LOGOUT ADMIN

MAG Etegra
Access Control

Current Event Log Alarm Event Log E-Map Monitoring

Date	Time	User ID	Name	Branch	Mobile	Site Code	Card Code	Door	Event
17/01/2025	12:29:48							1.0.2-Main Door	Reader Offline
02/12/2015	21:41	JA00856	Sarah	KL	012563282	00218	33222	1.0.1-Entrance	Normal access by face
02/12/2018	21:42	JA54456	Amir	Selangor	016565585	00218	56445	1.0.1-Entrance	Normal access by card only
03/12/2018	21:43	JA97832	Bedul	Johor	019255555	00218	78787	1.0.1-Entrance	Normal access by card only
03/12/2018	22:40	JA95123	Siti	Johor	013288878	00218	64545	1.0.1-Entrance	Normal access by card only
04/12/2018	22:44	JA02253	Mary	Selangor	016214785	00217	53453	1.0.1-Entrance	Normal access by face
04/12/2018	23:40	JA54456	Jackson	Perak	019365484	00218	30166	1.0.1-Entrance	Normal access by card only
04/12/2018	16:41	JA97852	Sarah	KL	013789995	00111	53453	1.0.1-Entrance	Normal access by face
05/12/2018	15:30	JA93123	Amir	Selangor	012385595	00218	78787	1.0.1-Entrance	Normal access by face
05/12/2018	20:20	JA02233	Bedul	Selangor	019587475	00212	53453	1.0.1-Entrance	Normal access by card only
06/12/2018	22:43	JA00028	Siti	KL	013898555	00218	53453	1.0.1-Entrance	Normal access by card only
06/12/2018	21:40	JA00856	Mary	Johor	018154885	00445	78787	1.0.1-Entrance	Normal access by face
06/12/2018	15:40	JA54456	Jackson	Perak	019878524	00334	53453	1.0.1-Entrance	Normal access by face
06/12/2018	21:40	JA97852	Sarah	KL	012566498	00132	78787	1.0.1-Entrance	Normal access by card only
06/12/2018	13:40	JA02253	Amir	Selangor	014598548	00218	53453	1.0.1-Entrance	Normal access by face
06/12/2018	21:40	JA97852	Sarah	Selangor	014597889	00132	78787	1.0.1-Entrance	Normal access by face
06/12/2018	13:40	JA02253	Amir	Perak	012549859	00218	53453	1.0.1-Entrance	Normal access by face

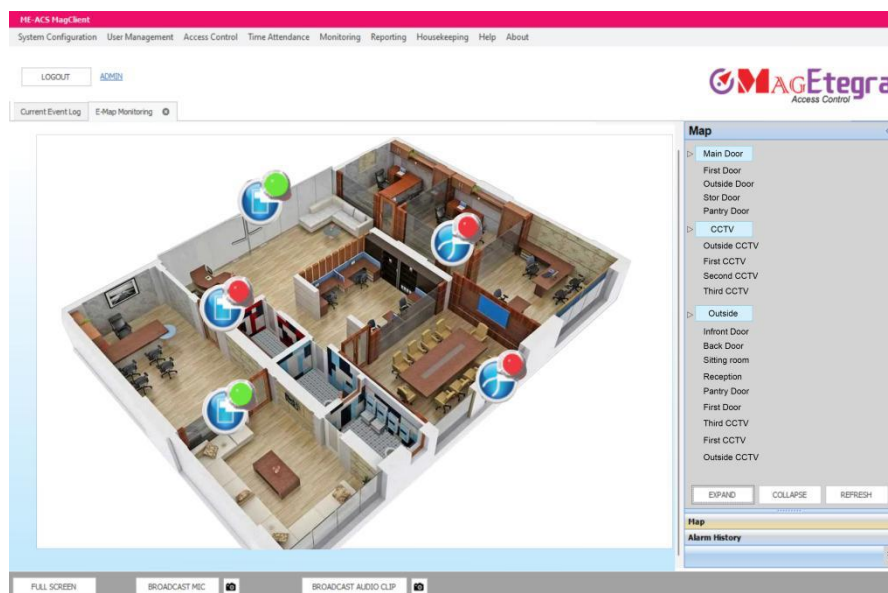
FILTER RESET FULL SCREEN EXPORT

Real Time Security Event Log

The Event Log provides a clear, chronological record of all access activities and system events across your site. With powerful filtering and export options, administrators can quickly trace user actions, investigate incidents, and generate reports for audits or review, ensuring full visibility and accountability at all times.

Interactive E-Map

The Interactive E-Map provides a real-time visual overview of doors, devices, and cameras on a digital floor plan. Alarms are instantly highlighted on the map with direct access to live CCTV feeds, enabling rapid verification, faster response, and improved situational awareness without relying on text-based logs.



***Product performances is based on testing in a controlled environment. Your result may vary due to several external and environment factors.**

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