

PRODUCT CATALOGUE

I N T E G R A T E D S E C U R I T Y S Y S T E M

Edition 2025

T O W A R D S S U S T A I N A B L E F U T U R E

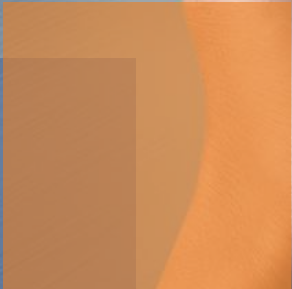












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WE ARE ENTERPRISE SECURITY MANAGEMENT

- | | |
|--|---|
|  Visitor Management |  High Level Lift Integration |
|  Time Attendance |  Alarm Monitoring |
|  Car Park Access |  Door Access |
|  Guard Tour |  CCTV |
|  API |  Lift Access |

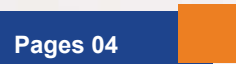
Established in year 2000, MicroEngine is focused on developing and manufacturing Access Control hardware and software. For over 20 years, we have delivered cost-effective and innovative products and solutions to organizations throughout the public and private sector.

Our team has tailored a wide array of solutions ranging from Integrated Security Management System (ISMS), Alarm Monitoring System and Visitor Management System. MicroEngine product line combines flexibility, scalability and ease of deployment while delivering high-powered features and reliability. These solutions have led to a collection of success stories that demonstrate our company's impressive industry domain knowledge and capabilities.

Our line of products can be found securing hospitals, government agencies, financial institutions, campuses, hotels, retail facilities, residential properties, and many more.

SOFTWARE : HIGH SECURITY SYSTEM SOFTWARE

Experience top-of-the-line security with our high-security system software, designed to enable seamless access control management and surveillance across multiple buildings and locations. Our software seamlessly integrates with third-party systems and offers advanced features like MicroEngine's encrypted QR code technology and full-featured DESFire solution with dual ID matching. Our centralised system manages security devices and various subsystems, including visitor management system, smart lobby, CCTV, video management system, building management system, and more. Trust us to safeguard your business with the best security solutions.



xPortal3500

Multi Function Access Control System Software

- Server runs as a windows service
- Client-server architecture
- Reliable database
- High Security Access Card using DESFire DFM
- Lift access
- Built-in time attendance
- Real-time transactions export
- Scheduling Database back up
- Various access token types include card, pin and fingerprint
- Support up to 128 doors
- Support time set & time zone
- Support multi-language



PRODUCT SPECIFICATION

No.	Feature	Free	xPortal3500/S	xPortal3500
1	Max No. of Controllers / Doors	8/16	32/64	64/128
2	Card Holder	1,000	10,000	10,000
3	Card Holder Centric View	No	No	Yes
4	Selective Download	No	No	Yes
5	Software Activation	Required		
6	Server as Window Service	Yes		
7	Time Set & Time Zone	255		
8	Door Access Levels	255		
9	Floor Access Levels	255		
10	Holiday Dates	30		
11	Floor Zone	255 (By Controller)		
12	Anti-Passback	Yes		
13	Database	Firebird		
14	Multi-Workstation	No	Yes	Yes-Max 3
15	Floor Access	No	Yes	Yes
16	Communication Link to PC	Serial RS485 or IP		
17	Wizard-Based Configuration	Quick Start Guide, Add New Controller, Floor Relay Setup, Shift Configuration		
18	Import Card Holder Records	Support .txt, .csv, .xls, .xlsx. Import options include add, update, and delete		
19	Location Tracking	Yes - Card Holders' Last Location Report, Who's Still In Report (Multiple Door Selection)		

No.	Feature	Free	xPortal3500/S	xPortal3500
20	Transaction Records	Limited by Disk Space		
21	Automatic Transaction Retrieval	Yes		
22	Scheduled Backup	No	No	Yes
23	Online Events Viewing	Yes		
24	Language Selection by System User	No	No	Yes
25	Scheduled Attendance Rebuild	No	No	Yes
26	System User Menu Access Setting	No	No	Yes
27	Export Time Attendance	Yes - Configurable Format and Destination		
28	Monthly Attendance Reporting	Yes - Summary of Attendance Status		
29	Dynamic Floor Plan	Yes - Configurable Export Format and Destination		
31	Advanced Floor Plan Icon Setting	No	No	Yes (Can Resize, Rotate & Change Label Position)
32	Daily Attendance Reporting	Yes - Simple Single Day Daily Mode Late-in, Absent, Total work time, OT, Flexi Hour		
33	Operating System	Windows 10, and 11 (Home & Starter Editions Not Supported) Windows Server 2019 and 2022 (requires Microsoft .Net Framework v3.5)		
34	Floor Plan Thumbnail - Easy Navigation	No	No	Yes

xPortalNet HS v2.0

Security Management System Software

- Support door access, lift access, car park access, time attendance, alarm monitoring, guard tour, visitor management, CCTV and QR code
- MicroEngine Encrypted QR Code
- DESFire Solution with dual ID Matching
- Seamless Integration with Third-Party QR Code
- High Availability with Redundancy Module
- Efficient Alarm Handling
- CloudVMS Module
- Microsoft SQL Server as DBMS
- Flexible Interfacing Tools
- Multi-Tenancy Module
- Built-in Multi-Tenancy Module



PRODUCT SPECIFICATION

No.	Feature	v2.0 PS
1	Hardware-Based Alarm Monitoring	Yes
2	Door Monitoring	Yes
3	Access Control	Yes
4	Lift Access	Yes
5	Time Attendance	Yes
6	Online Guard Tour	Yes
7	Door Access Level	255 / 9999*
8	Time Zone	255
9	Time Set (3 intervals)	255
10	Holiday	30
11	Floor Zone	255, by controller
12	Floor Access	255
13	High Level Lift Interfacing	Yes - Using SNET-LID / SGate
14	Global Antipassback	Yes-Using SNET-GAC or QNET-GAC
15	API	Yes(Optional)
16	Connectivity	LAN
17	Max. Connections (Built-In)	200 (Requires Remote Communication Gateway for additional connections)
18	Import Card Holder Records	Support .txt, .csv, .xls, .xlsx. Import options include add, update, and delete
19	Interactive Floor Plan with Auto Switching	Automating Floor Plan Navigation upon Alarm Trigger

No.	Feature	v2.0 PS
20	Push Based Event Upload	Yes
21	Data Download Activity Logging	Yes
22	System Info Summary	Yes
23	Audit Trail (Data Changes Tracking)	Yes
24	Transaction Subscription (TCP Push)	Yes
25	Bulk Download	Yes
26	Encrypted Messaging	Yes
27	Device Discovery	Yes
28	Device Diagnostic	Yes
29	Live Firmware Download	Yes
30	Controller Supported	XP-Q1200/IP, XP-Q2200/IP, XP-QNET/IPC, XP-QNET-GAC/IPC, SNET-LID
31	Remote Communication Gateway	Optional, each instance adds another 128 connections.
32	CCTV Integration	Yes Window live preview, event trigger pop-up (up to 4 cameras), live recording, screenshot, PTZ control, searching, playback, pre and post event playback, PTZ preset activation by event. Brand: Panasonic, Hikvision, Dahua, Uniview, Bosch VMS, Hanwha, Milestone XProtect, exacq Vision, Generic RTSP.
34	Card User Capacity	200,000

xPortalNet v1.7

Integrated Security Management System Software

- Hybrid Connect System Software – Support MicroEngine Q-series and M-series Controller models
- Redundancy via Hot Standby Server
- Multiple Access Token Types
- Efficient Alarm Handling
- Streamlined Visitor Management
- Microsoft SQL Server
- Flexible Interfacing Tools
- Multi-Tenancy Module
- Audit Trail for software activity logging
- Support QR code access, facial recognition access, high-level lift interfacing, CCTV integration, door monitoring, visitor management, guard tour, time attendance



PRODUCT SPECIFICATION

No.	Feature	v1.7 PS
1	Software Based Alarm Monitoring	Yes (Configurable Alarm Definition, Latest Alarm Event List, Real-time Status Statistics, Audio & Visual Notification)
2	Floor Plan Setup	User-Definable Icons and Customisable Icon Selection, Import from AutoCAD (optional)
3	Visitor Management (Sign-in, Sign-out, Blacklist)	Yes
4	Document Reader Integration (MyKad, Passport)	Yes
5	Various Access Token Option for Visitor	Yes, Pre-create visitor badge (MIFARE CSN, MIFARE DESFire, QR Code) or Facial
6	Assignable List of Access Permissions For Visitors (Doors, Floors)	Yes
7	Auto Assignment of Door & Floor Access Level by Tenant	Yes
8	Visitor Movement Tracking	Yes
9	Read/ Write MIFARE Card	Yes
10	Read/ Write DESFire Card	Yes
11	Purge Dormant Staff Records	Yes
12	Wizard	Floor Relay Setup, Floor Zone Setup
13	Interactive Floor Plan with Auto Switching	Yes

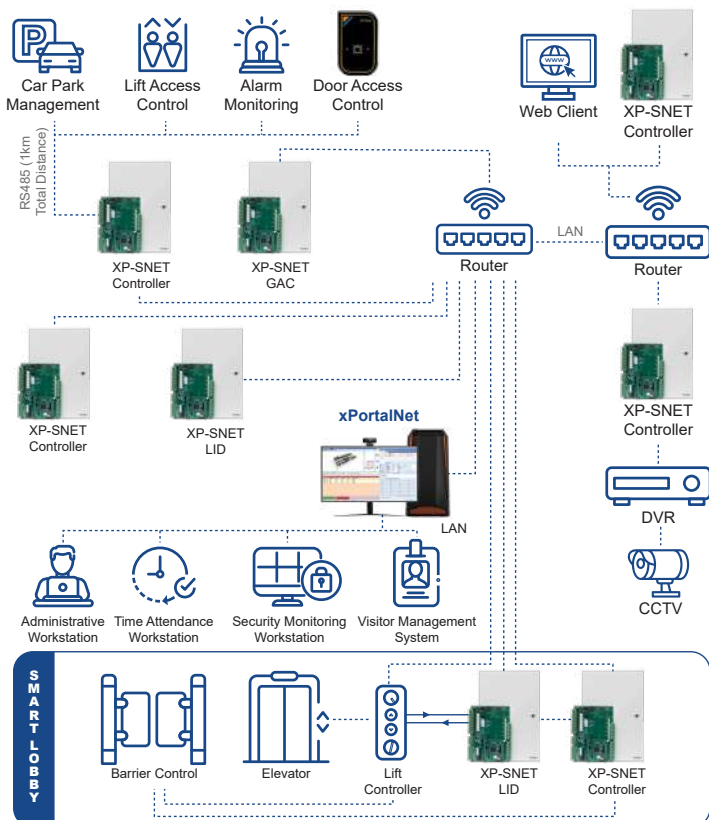
No.	Feature	v1.7 PS
14	Push Based Event Upload	Yes
15	Bulk Download	Yes
16	Encrypted Messaging	Yes
17	Device Discovery	Yes
18	Device Diagnostic	Yes
19	Live Firmware Download	Yes
20	Email and SMS Notification	Yes
21	Event Filter By Monitoring Station	Yes
22	High Level Lift Interfacing	Yes - Using SNET-LID / SGate
23	Global Antipassback	Yes - Using SNET-GAC or QNET-GAC
24	Facial Recognition Event Reporting	Yes, (Facial Screening List, Online Photo, Identification of Stranger/ Blacklisted, Export Report)
25	Action Procedures	Yes, (Run an Executable, Send Output Command, Purge Visitor Record, Purge Dormant Visitor Card, Auto Sign Out Expired Visits)
26	Database	MS SQL Server (Note: Limited database & memory size if using MS SQL Server Express edition and system may not function well for larger installation)
27	Card User Capacity	200,000



INTEGRATED SECURITY SYSTEM

An integrated security system is a comprehensive solution designed to protect your organization from a variety of security threats. It combines multiple security technologies and systems, such as access control, car park management, lift access control and alarm monitoring into a single, unified platform.

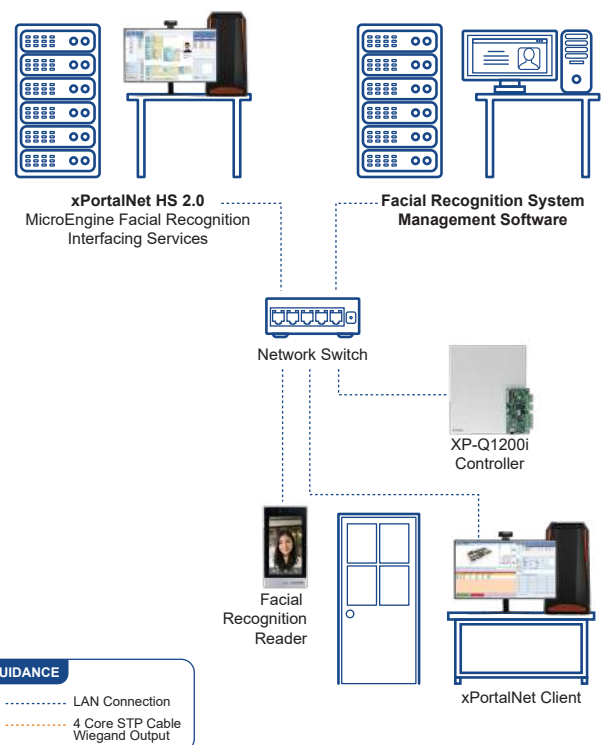
By integrating these systems, an integrated security system can provide real-time monitoring and control of your entire security infrastructure. This allows you to quickly detect and respond to security breaches and provide a safer and more secure environment for your employees, customers, and assets.



FACIAL RECOGNITION INTEGRATION SUPPORT

Facial recognition system is an advanced technology that uses artificial intelligence to identify individuals by their facial features. This cutting-edge technology has revolutionized the way organizations approach security, making it easier to monitor and manage access to sensitive areas, track attendance, and improve customer service.

One of the key benefits of facial recognition system is the speed and accuracy of identification. With facial recognition technology, security personnel can quickly and accurately identify individuals in real-time, reducing the risk of security breaches and unauthorized access. This can help organizations save time and resources, while improving the overall effectiveness of their security protocols.

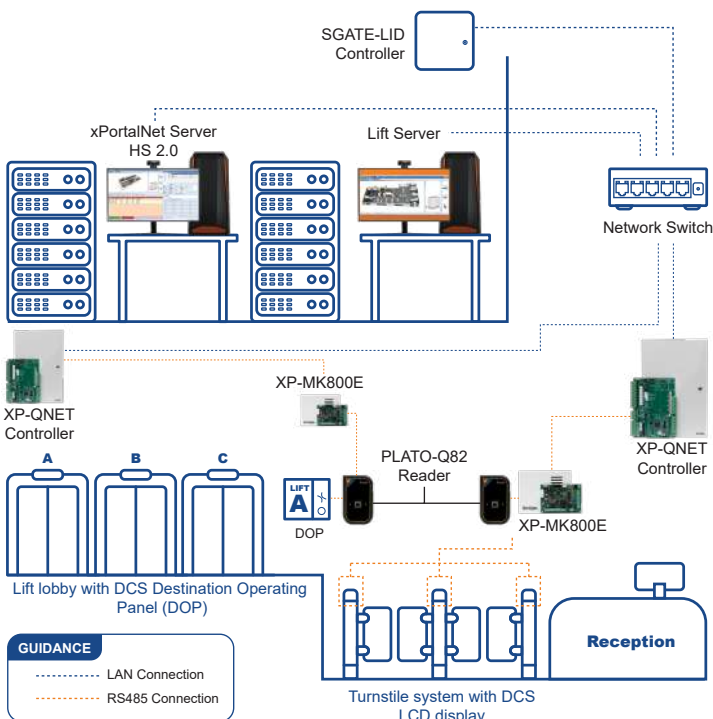




HIGH LEVEL LIFT INTEGRATION

High-level lift integration is an advanced technology that allows organizations to optimize their lift systems for enhanced security, efficiency, and convenience. By integrating lifts with security systems and building automation, organizations can create a seamless, personalized experience for their employees, customers, and visitors.

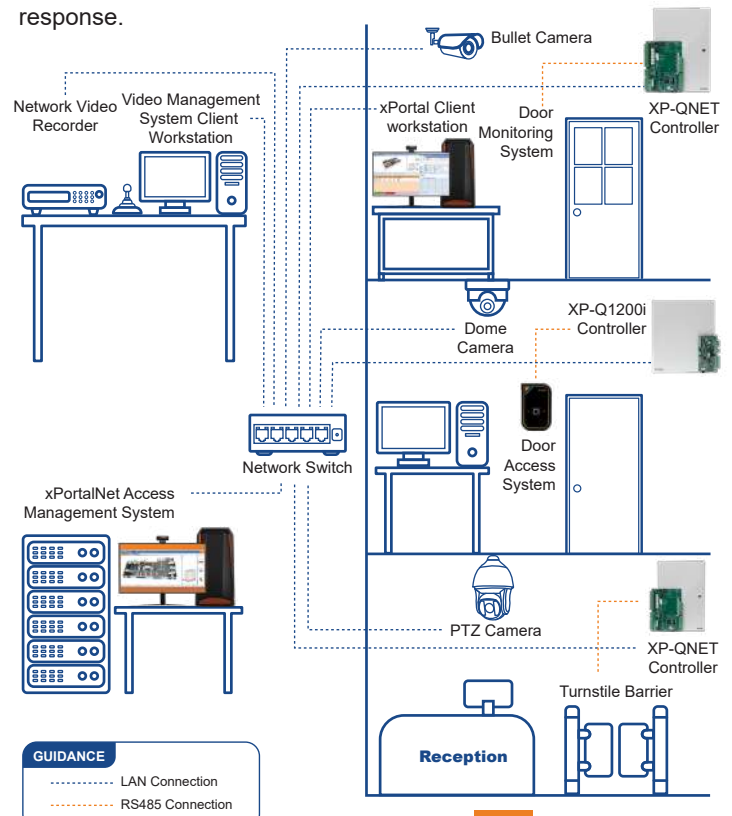
One of the key benefits of high-level lift integration is the ability to manage access controls based on individual identities. By integrating lift systems with access control and authentication systems, building management can create a personalized lift experience, ensuring that only authorized personnel have access to specific floors or areas. This approach helps maintain a higher level of security and prevents unauthorized access.



CCTV INTEGRATION

CCTV integration is a powerful solution for enhancing the security and surveillance capabilities of your organization. By integrating your CCTV cameras with other security systems, such as access control or alarms, you can create a comprehensive security solution that offers unparalleled visibility and control.

One of the key benefits of CCTV integration is the ability to centralize and automate your security operations. With an integrated CCTV system, you can monitor multiple cameras and locations from a single platform, making it easier to detect and respond to security threats in real-time. This can help you save time and resources and provide a more effective security response.

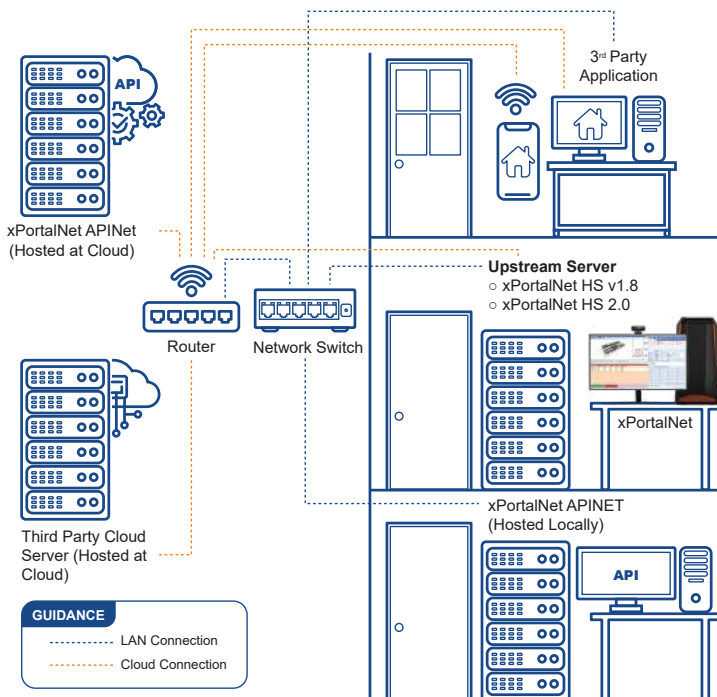




COMMUNITY APPS INTEGRATION

Community Apps Integration is a cutting-edge technology that allows organizations to create a seamless, personalized experience for their customers, employees, or residents. By integrating community apps with various technologies, organizations can provide users with quick access to information and services, enhance engagement, and improve overall satisfaction.

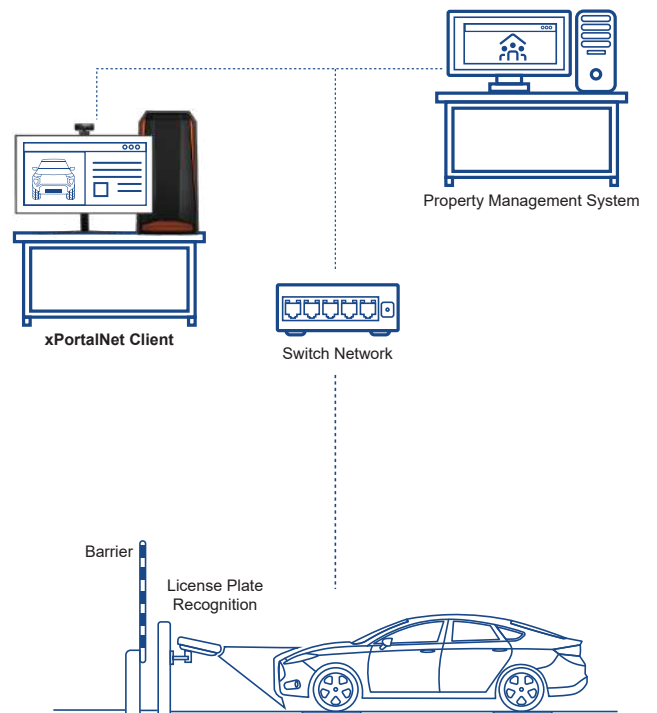
One of the key benefits of Community Apps Integration is the ability to provide users with a one-stop-shop for all their community needs. By integrating various community apps such as social media, transportation, or local businesses, organizations can create a centralized platform for users to access everything they need in one place. This can save time and resources for users, while increasing overall engagement with the community.



LICENSE PLATE RECOGNITION

License Plate Recognition (LPR) is an innovative technology that allows organizations to capture and analyse license plate information for a wide range of applications. By using advanced algorithms and sensors, LPR technology can quickly and accurately identify license plates and provide valuable insights to organizations.

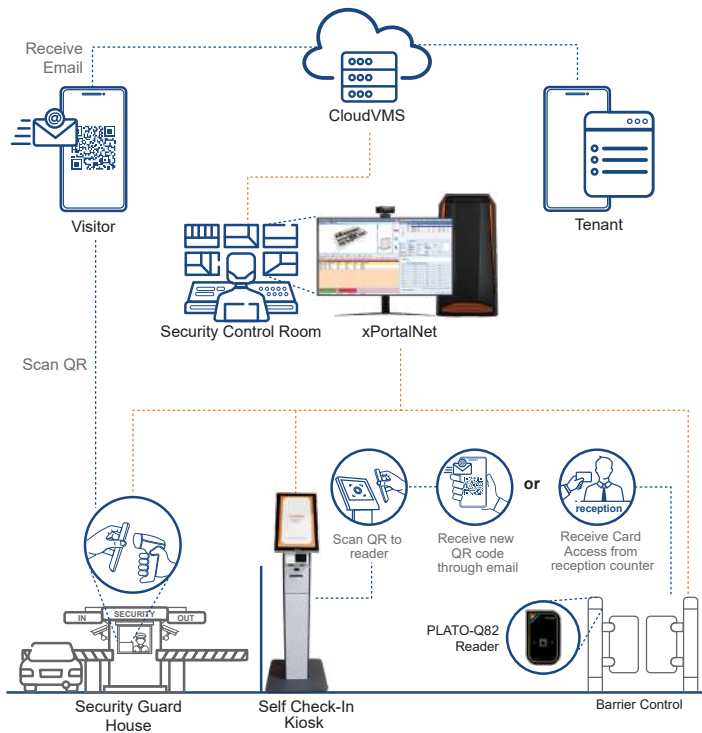
One of the key benefits of LPR is the ability to enhance security and safety. By using LPR technology, organizations can monitor and control access to their premises, track the movement of vehicles, and detect potential security threats. This can help prevent security breaches and unauthorized access to sensitive areas.





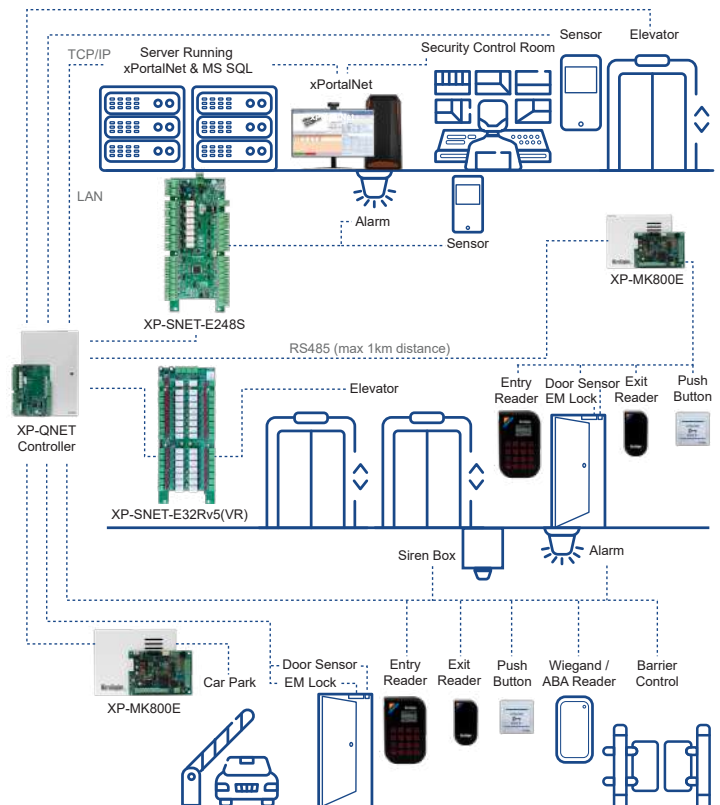
CLOUDVMS (VISITOR MANAGEMENT SYSTEM)

Cloud VMS is designed to streamline and digitize the process of registering, tracking, and managing visitors to a location. It operates on cloud-based servers, which means the data and functionality are accessible over the internet. It offers a modern and efficient approach to visitor registration and access control, replacing traditional manual sign-in processes. They are particularly useful for enhancing security and providing a professional and convenient experience for both visitors and hosts.



ALARM MONITORING

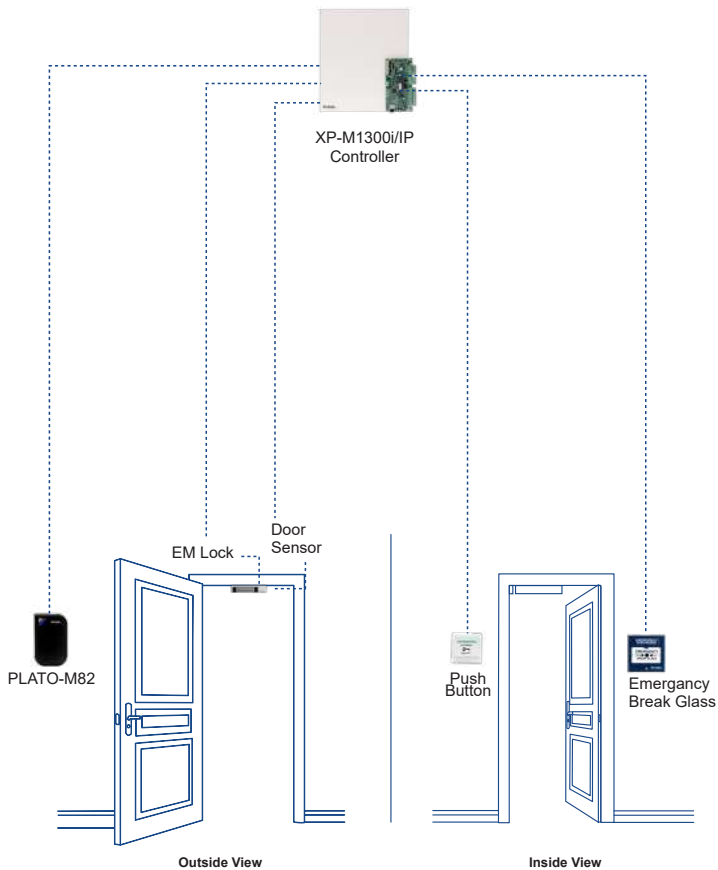
Alarm monitoring is a crucial component of any comprehensive security system. It is an innovative technology that allows organizations to monitor their premises for potential security breaches and respond quickly to any alarms triggered by the system. One of the key benefits of alarm monitoring is the ability to enhance security and safety. By monitoring alarms and alerts in real-time, organizations can respond quickly to any security breaches and take appropriate action to minimize damage or loss. This can help prevent security incidents and ensure the safety of employees, customers, and visitors.





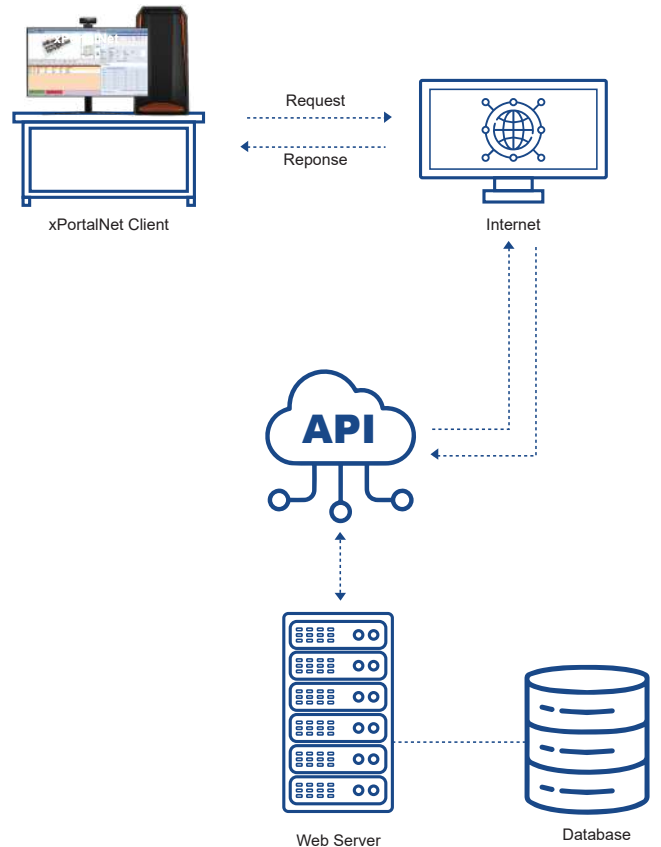
DESFire FOR M-SERIES (DFM)

DFM is designed to help organizations improve credentialbased security. DFM products meet the new requirements of MIFARE DESFire card technology. Suitable for adding MIFARE DESFire card applications to existing MicroEngine access control systems to cover and provide compatibility with existing systems.



APPLICATION PROGRAMMING INTERFACE (API)

API (Application Programming Interface) is a powerful tool that enables seamless integration and collaboration between different software applications and security systems. It acts as a bridge between the security access system and external applications, allowing them to communicate and share information securely and efficiently. By leveraging an API in a security access system, businesses can enhance their overall security infrastructure while improving operational efficiency and user experience.





**PLATO-Q82
SECURE READER**
 with OnReader Dynamic
 QR Decryption

PLATO SERIES READER

Discover our sleek and stylish PLATO Readers designed with cutting-edge technology. These readers offer better security with various encrypted ID options, supporting MIFARE Classis, MIFARE DESFire, QR Code, and EM Proximity. With an RS485 connection, these readers offer seamless integration and unrivaled performance for your access control needs.



AES 128 Bit
 Encryption



Anti-Cloning with
 Dynamic QR



OnReader
 Dynamic QR
 Decryption

MicroEngine Mobile Access



ME Mobile Access



STILL THE GOLD STANDARD **SECURE READER** with OnReader Dynamic QR Decryption

ANTI-CLONING USING DYNAMIC QR

New QR code is created every 3 seconds for the same ID using time sensitive formula and industry leading AES encryption technology.

HIGH SECURITY DESFIRE DATA CARD READER

MIFARE DESFire provides the most secure, practically unbreakable 128 bit encryptions. PLATO-Q82 is capable of reading the secure data file in the DESFire Card to utilize the card security feature correctly.

ONREADER DYNAMIC QR DECRYPTION

Decryption of the QR code is done in the reader. You do not need to have network connections or the cloud to operate this. Giving you maximum security availability.



QR CODE CHANGES EVERY 3 SECONDS

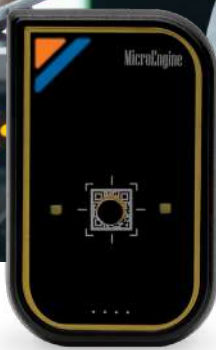
- High Security DESFire Data Card Reader
- Anti-Clone using Dynamic QR
- OnReader Dynamic QR Decryption





PLATO-Q82
Build on turnstile

xPortalNet HS v2.0



PLATO-Q82

QR Code / MIFARE DESFire Reader

- RS485 Connectivity for data communication
- 13.56MHz RFID Frequency
- Support multiple credential compatibility – QR Code, MIFARE DESFire, MIFARE Classis / CEPAS
- Support Dynamic and Static QR Code (Encrypted)
- Support multiple Card ID type – MIFARE DESFire EV1, EV2, EV3, MIFARE Sector Reading, MIFARE CSN and CEPAS (CAN)
- Anti-Cloning using Dynamic QR
- Support MicroEngine Mobile Access Apps
- Dimension: 9cm (H) x 5.7cm (W) x 1.6cm (D)
- Power requirement: 160mA @ 12VDC
- Certified by MCMC

PLATO-M82

MIFARE Classic / MIFARE DESFire EV1, EV2, EV3

- RS485 Connectivity for data communication
- 13.56Mhz RFID Frequency.
- Multi-credential support - ISO14443A / ISO14443B / MIFARE DESFire (EV1, EV2, EV3), MIFARE Classis / CEPAS (CAN)
- Support MIFARE Sector Reading
- Weather proof design
- Dimension: 9cm (H) x 5.7cm (W) x 1.6cm (D)
- Power requirement: 80mA @ 12VDC
- Certified by MCMC



PLATO-M82

MAS-EBG

MIFARE DESFire EV3



PLATO-K82

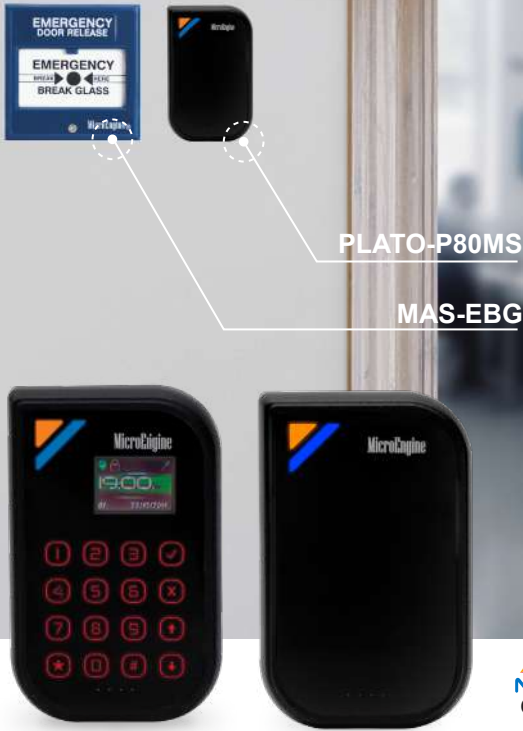
MIFARE / CEPAS, MIFARE Sector Reading

- RS485 Connectivity for data communication
- 13.56Mhz RFID Frequency
- Touch sense keypad and colour graphic LCD
- Multiple Verification Mode – Card /ID
- Multiple Card ID type support – MIFARE DESFire EV1, EV2, EV3, MIFARE Sector Reading, MIFARE CSN and CEPAS (CAN)
- Weather proof design
- Dimension: 9cm (H) x 5.7cm (W) x 1.6cm (D)
- Power requirement: 220mA @ 12VDC
- Certified by MCMC.

PLATO-S82

MIFARE / CEPAS, MIFARE Sector Reading

- RS485 Connectivity for data communication
- 13.56Mhz RFID Frequency
- Slim and compact design
- Support ISO 14443A / ISO14443B
- Support MIFARE Sector Reading, MIFARE CSN
- Dimension: 8.0cm (H) x 4.3cm (W) x 1.6cm (D)
- Power requirement: 45mA @ 12VDC
- Weatherproof design
- Certified by MCMC



SINGLE DOOR & FINGER PRINT ACCESS CONTROL

PLATO-P80KLS & PLATO-P80MS

EM Proximity Reader

- Connectivity via RS485 for data communication
- 125KHz EM Proximity compatible
- Max. 7cm EM Card Reading range
- Better Security with 16-digit card number
- Dimension 9cm (H) x 5.7cm (W) x 1.6cm (D)
- Power requirement (PLATO-P80KLS): 180mA @ 12VDC
- Power requirement (PLATO-P80MS): 150mA @ 12VDC
- Touch sense keypad and colour graphics LCD (PLATO-P80KLS)
- Weatherproof design
- Certified by MCMC

A tightly integrated controller with built in reader that enables and stylish design with touch sense keypad, it to become a totally independent solution. It has the ability to be configured through the built in user interfaces or through the software application . When operating in the controller mode, the unit can be programmed to operate in different modes to suit different applications like door access, time attendance.



XP-GTR1500L



XP-GTR1500L

Single Door Access Control Reader with Keypad, LCD and Built-In Controller

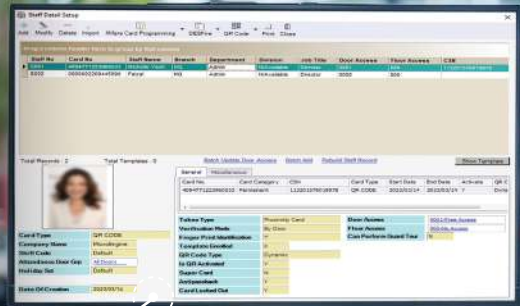
- RS485 or LAN Connectivity for communication port
- MAS-RBU supported interface
- 125KHz EM Proximity compatible
- Support Card or PIN access token
- Touch Sense Keypad with backlight
- Door access mode and time attendance mode
- 1,500 User for card holder size
- Dimension: 152 mm (H) x 122 mm (W) x 32 mm (D)
- Certified by MCMC

XP-GTR1500LABX

Single Door Access Control Reader with Keypad, LCD and Built-In Controller

- RS485 or LAN Connectivity for communication port
- 128 x 64 graphic display with backlight
- Support MIFARE Sector Reading and MIFARE CSN
- ABA Track 2, and Wiegand 26 bit for reader input
- Dimension: 152 mm (H) x 122 mm (W) x 32 mm (D)
- Power requirement: 250mA @ 12VDC
- Certified by MCMC

XP-GT3500LABX



xPortalNet v1.7



XP-GT3500L

IP / RS485 based Fingerprint Access Control System

- Fingerprint Template Capacity : 3,500 templates (1:3500)
- RS485 or LAN Connectivity for communication port
- 128 x 64 graphic display with backlight
- 125KHz EM Proximity compatible
- Touch Sense Keypad with Backlight
- Supported Interface with MAS-RBM
- Multiple Access Operation Mode :
 - 1) Card Only, Card + PIN, Fingerprint
 - 2) Card + Fingerprint, PIN + Fingerprint
 - 3) Card + PIN + Fingerprint
- Support door access mode and time attendance mode
- Enrolment Time : < 1sec
- Verification Time : < 1 sec (1:1)
- Dimension: 131 mm (H) x 158 mm (W) x 65 mm (D)
- Certified by MCMC

XP-GT3500LABX

IP / RS485 based Fingerprint Access Control System

- RS485 or LAN Connectivity for communication port
- 50,000 transaction record
- Support MIFARE Sector Reading & MIFARE CSN
- Supported Interface with MAS-RBM
- Touch Sense Keypad with backlight
- Supported Interface with MAS-RBM
- 128 x 64 graphic display with backlight
- Dimension: 131 mm (H) x 158 mm (W) x 65 mm (D)
- Power requirement: 300mA @ 12VDC
- Certified by MCMC

INTEGRATED SECURITY CONTROLLER

Introducing our Multi-door Integrated Security Controller, the ultimate solution for managing all your access control needs. This controller is designed with proven high capacity and better security, ensuring top-tier protection for your assets and property. Built with Encrypted IP, it contains all the intelligence and necessary inputs and outputs to manage an integrated security system. The controller supports various access control types, such as door access, car park access, lift access, and alarm monitoring, providing a seamless and comprehensive security solution. Upgrade your security system with our Multi-door Integrated Security Controller and experience unparalleled convenience, flexibility, and security.

- Modular System - Extension Board Base
- Centralised Connection
- Configurable to Distributed Architecture
- Supports Door, Lift, Alarm Monitoring
- 32-bit ARM Processor
- Onboard IP with Encryption
- Multi-Controller Support
- Remote Firmware Download
- Multi-Controller Support



XP-SNET Multi-door Integrated Security Controller



PLATO-M82
Build on lift

MIFARE DESFire EV3

XP-SNET-GAC/IP

XP-SNET5

IP Based Multi-Door Integrated Security Controller

- Connect to software via TCP/IP or RS485 communication
- Communication to Readers / Extension boards vis RS485
- 10 Door Encrypted IP based controller
- Large capacity up to 40,000 card users, 100,000 event transactions
- 16-digit card number for better security
- Built-in onboard 16 Supervised Sensor inputs and 8 Relay output
- Support door access, car park access, lift access and alarm monitoring
- Hardware controlled Global Anti-Passback
- Multiple door interlocking
- Maximum extension capacity: 5 Doors / 128 Inputs / 128 Outputs.
- Emergency / Fire alarm activated door release
- On-site firmware upgradable
- Power requirement for base board 12V @ 500mA
- Dimension: 50cm (H) x 35cm (W) x 15cm (D)

XP-SNET-GAC/IPC

IP Based Global Anti-Passback Controller

- Connection to software via TCP/IP
- Master Controller for Global Anti-Passback. Prevent the same card from being used to gain access in the same direction twice
- Multi-Controller support and programmed to support up to 16 controllers
- Support 128 doors per-cluster
- Power requirement for base board 12V @ 180mA
- Dimension: 31cm (H) x 27cm (W) x 72cm (D)



XP-SNET/IPC

IP Based Multi-Door Integrated Security Controller

- Connection to software via TCP/IP with optional RS485 via XP-MK-UL10S
- Connection to reader via Reader Interface Module XP-MK800E
- Large capacity up to 50,000 card users, 100,000 event transactions
- Support MIFARE and Proximity Contactless card technology
- Support 16-digit card number for better security
- Support Door Access, Carpark Access, Turnstile Access, Lift Access and Alarm Monitoring
- Hardware controlled Global Anti-Passback
- Built-in onboard 16 Supervised Sensor inputs and 8 Relay Output
- Maximum extension capacity: 10 Doors / 128 Inputs / 128 Outputs
- Emergency / Fire alarm activated door release
- On-site firmware upgradable
- Power requirement for base board 12V @ 180mA
- Dimension: 31cm (H) x 27cm (W) x 72cm (D)

MULTI-FUNCTION IP DESFIRE AND QR ACCESS CONTROLLER

Introducing our Multi-function QR Access Controller, the ultimate solution for secure access control. This controller is designed with proven high capacity and better security, ensuring top-tier protection for your assets and property. Built with encrypted IP, it contains all the intelligence and necessary inputs and outputs to manage integrated system applications. The controller supports various access control types, such as door access, car park access, lift access, and alarm monitoring, providing a seamless and comprehensive security solution. Upgrade your security system with our Multi-function QR Access Controller and experience unparalleled convenience, flexibility, and security.

- MIFARE DESFire EV2, EV3 and QR Code Support
- 64 bit Card ID and Dual ID Matching
- Configurable to Distributed Architecture
- Supports Door, Lift, Alarm Monitoring
- 32-bit ARM Processor
- Onboard IP with Encryption
- Multi-Controller Support
- Remote Firmware Download



XP-QNET

Encrypted IP DESFire 5 Door Multi-Function QR Access Controller

- Connection to software via TCP/IP
- Connection to reader via RS485 or Reader Interface Module XP-MK820
- Large capacity up to 50,000 card users, 100,000 event transactions
- MIFARE DESFire EV1/EV2/EV3 and QR Code support
- Support Dynamic and Static QR code (Encrypted)
- Support 64-bit Card ID and Dual ID Matching
- Support Door Access, Carpark Access, Lift Access and Alarm Monitoring
- Hardware controlled Global Anti-Passback.
- Built-in onboard 16 Supervised Sensor inputs and 8 Relay Output
- On-site firmware upgradable
- Power requirement for base board 12V @ 500mA
- Dimension: 50cm (H) x 35cm (W) x 15cm (D)

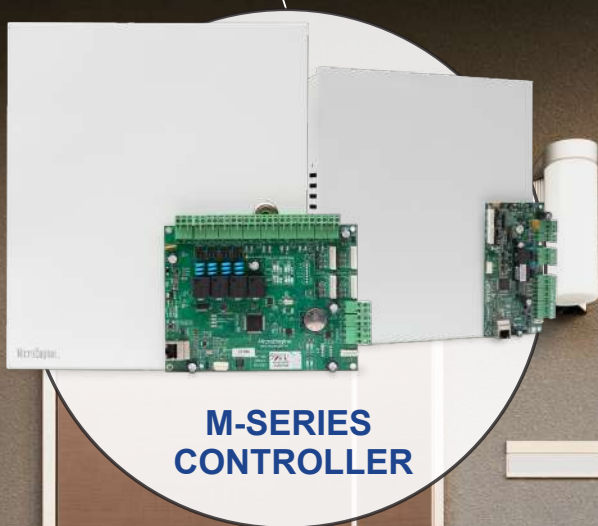
XP-QNET/IPC

Encrypted IP DESFire/QR Access Multi Function Controller

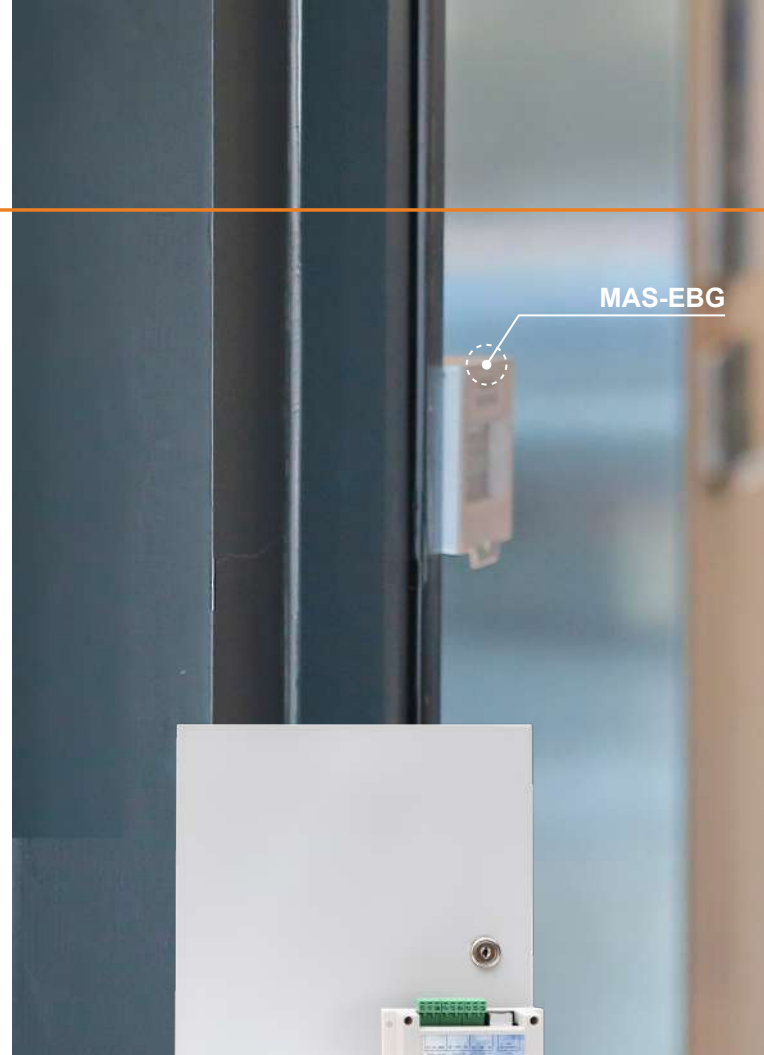
- Connection to software via TCP/IP
- Connection to reader via Reader Interface Module XP-MK820
- Large capacity up to 50,000 card users, 100,000 event transactions
- Support MIFARE DESFire EV1, EV2, EV3 and QR Code
- Support Dynamic and Static QR code (Encrypted)
- Support 64-bit Card ID and Dual ID Matching
- Support Door Access, Carpark Access, Turnstile Access, Lift Access and Alarm Monitoring
- Hardware controlled Global Anti-Passback
- On-site firmware upgradable
- Power requirement for base board 12V @ 180mA
- Dimension: 31cm (H) x 27cm (W) x 72cm (D)

DOOR IP ACCESS CONTROLLER

Introducing MicroEngine Door IP Access Controller, a reliable and intelligent solution for secure access control. Built with encrypted IP technology, this controller ensures maximum security and configurability. With a high-capacity design, it can support up to 16 digits of card number format, providing enhanced flexibility for your access control needs. This proven technology offers a range of advanced features, including reliable performance, seamless integration with existing systems, and easy installation. Upgrade your access control system with MicroEngine Door IP Access Controller and experience top-tier security and convenience



**M-SERIES
CONTROLLER**



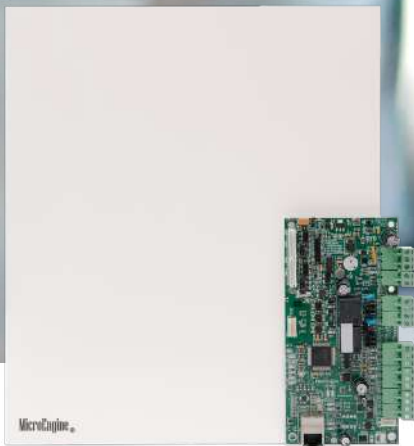
MAS-EBG



XP-M1000i-SE21

1 Door IP Access Controller

- Connection to reader via RS485 with maximum 2 Plato Reader 1 for entry and 1 for exit
- Connection to software via TCP/IP
- Capacity 10,000 card users, 50,000 event transactions.
- 16-digits card number for better security
- 4 inputs 1 door sensor, 1 exit button, 1 dedicated fire alarm, tamper input
- 1 dedicated door relay
- Hardware controlled Global Anti-Passback
- On-site firmware upgradable
- Power requirement for base board 12VDC @ 150mA
- Dimension: 31cm (H) x 26.5cm (W) x 7.2cm (D)

PLATO-M82
MIFARE DESFire EV3


XP-M1300i/IP

1 Door IP Access Controller

- Connect to Plato Reader via RS485
- Connect to a third-party Wiegand reader via the TTL/Wiegand reader port.
- Connection to software via TCP/IP with optional RS485 via XP-MK-UL10S
- Large capacity up to 30,000 card users, 50,000 event transactions
- 16-digit card number for better security.
- Support 6 inputs includes 1 door sensor, 1 exit button, 1 dedicated fire alarm, tamper input and 2 general sensor inputs
- Support 2 configurable relay outputs – 1 dedicated for door relay and 1 for general purpose relay output
- Hardware controlled Global Anti-Passback
- On-site firmware upgradable
- Power requirement for base board 12VDC @ 150mA
- Dimension: 31cm (H) x 26.5cm (W) x 7.2cm (D)

XP-M2300i/IP

2 Door IP Access Controller

- Connect to Plato Reader via RS485
- Connect to a third-party Wiegand reader via the TTL/Wiegand reader port.
- Connection to software via TCP/IP with optional RS485 via XP-MK-UL10S
- Large capacity up to 30,000 card users, 50,000 event transactions
- 16-digit card number for better security
- Support 11 inputs includes 2 door sensors, 2 exit buttons, 1 dedicated fire alarm, tamper input and 5 general sensor inputs
- Support 4 configurable relay outputs – 2 dedicated for door relays and 2 for general purpose relay outputs
- Hardware controlled Global Anti-Passback
- Door Interlocking
- On-site firmware upgradable
- Power requirement for base board 12VDC @ 180mA
- Dimension: 31cm (H) x 26.5cm (W) x 7.2cm (D)

IP DESFIRE AND QR ACCESS CONTROLLER

Introducing our cutting-edge Controller, the perfect solution for secure access control. This controller supports the latest contactless access control technologies, MIFARE DESFire EV3, EV3 and Dynamic QR Code, ensuring seamless and secure access. With encrypted data communication from start to finish, using the very secure algorithms of Triple DES (3DES), 3KDES & AES, this controller provides unparalleled security. The controller can also support RFID chips with UID up to 64 bits, making it highly versatile. Backward compatible with MIFARE DESFire EV1 and EV2, our Controller offers unbeatable flexibility, security, and performance for all your access control needs.

Q-SERIES CONTROLLER



XP-Q1200i-SE

1 Door IP Access Controller

- Connect to reader via RS485 with maximum 2 Plato Readers - 1 for entry and 1 for exit
- Connection to software via TCP/IP
- Capacity up to 20,000 card users, 50,000 event transactions
- Support Dynamic and Static QR code (Encrypted) with 20 digits QR badge ID
- Support MIFARE DESFire Card with 64-bits / 20 digits card ID
- Support Dual ID Matching
- 4 inputs - 1 door sensor, 1 exit button, 1 dedicated fire alarm, tamper input
- 1 Dedicated door relay
- Hardware controlled Global Anti-Passback
- DIN-Rail Form Factor
- On-site firmware upgradable
- Power requirement for base board 12VDC @ 150mA
- Dimension: 31cm (H) x 26.5cm (W) x 7.2cm (D)

MAS-PB 3X3

MAS-EBG





XP-Q1200/IP

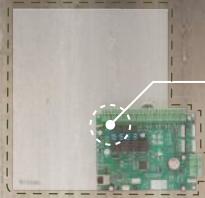
Encrypted IP DESFire / QR Access Single Door Controller

- Connect to Plato Reader via RS485
- Connect to a third-party Wiegand reader via the TTL/Wiegand reader port.
- Connection to software via TCP/IP
- Capacity up to 20,000 card users, 50,000 event transactions
- Support Dynamic and Static QR code (Encrypted) with 20 digits QR badge ID
- Support MIFARE DESFire Card with 64-bits / 20 digits card ID.
- Support Dual ID Matching
- 6 inputs 1 door sensor, 1 exit button, 1 dedicated fire alarm, tamper input and 2 general purpose sensor inputs
- 2 configurable relay outputs - 1 dedicated door relay and 1 general purpose output relay
- Hardware controlled Global Anti-Passback
- On-site firmware upgradable
- Power requirement for base board 12VDC @ 150mA
- Dimension: 31cm (H) x 26.5cm (W) x 7.2cm (D)

XP-Q2200/IP

Encrypted IP DESFire/QR Access Dual Door Controller

- Connect to Plato Reader via RS485
- Connect to a third-party Wiegand reader via the TTL/Wiegand reader port.
- Connection to software via TCP/IP
- Capacity up to 20,000 card users, 50,000 event transactions.
- Support Dynamic and Static QR code (Encrypted) with 20 digits QR badge ID
- Support MIFARE DESFire Card with 64-bits / 20 digits card ID
- Support Dual ID Matching
- 11 inputs 2 door sensors, 2 exit buttons, 1 dedicated fire alarm, tamper input and 5 general purpose sensor inputs
- 4 configurable relay outputs - 2 dedicated door relays and 2 general purpose output relays
- Hardware controlled Global Anti-Passback.
- On-site firmware upgradable
- Power requirement for base board 12VDC @ 150mA
- Dimension: 31cm (H) x 26.5cm (W) x 7.2cm (D)



XP-M4L/IP



ELEVATOR ACCESS CONTROLLER

Introducing XP-M4L, the advanced Elevator IP access controller that can handle up to 4 elevator cars and control up to 128 floor relays. With support for up to 16 digits of card number format, it seamlessly integrates with XP-M800E remote interface Module and XP-SNET-E32R 32-relay output board to create a comprehensive Elevator Control System.



XP-M4L-SE

IP Based Lift Access Controller

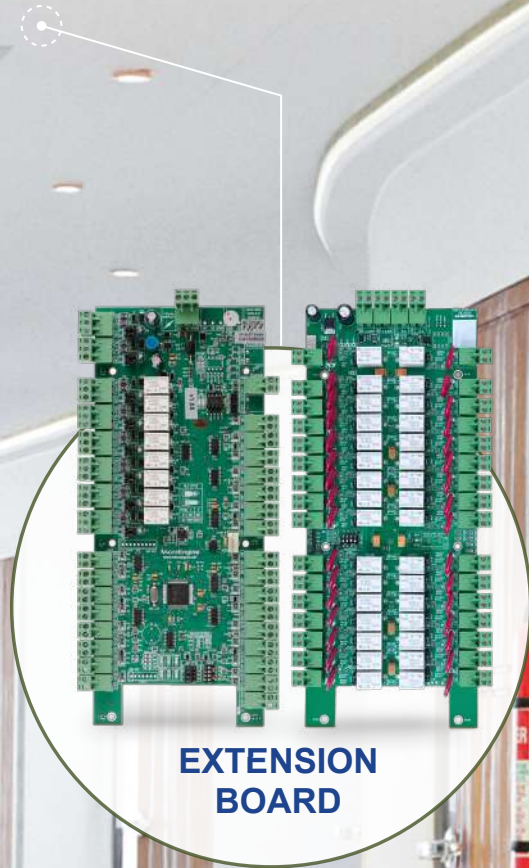
- Support up to 4 lift panel
- Plato Reader with XP-MK800E
- Connection to the software via TCP/IP
- Connection to reader via RS485
- DIN-Rail Form Factor
- Incorporate encrypted IP addresses using 128-bit AES encryption for enhanced security
- Capacity up to 10,000 card users, 50,000 event transactions
- Support 255 floor zone in floor setting
- On-site firmware upgradable
- Power requirement for base board 12VDC @ 150mA
- Dimension: 31cm (H) x 26.5cm (W) x 7.2cm (D)



XP-M4L-IP

IP Based Lift Access Controller

- Support up to 4 lift panel
- Support 8 Plato Readers with XP-MK800E
- Connection to server via TCP/IP
- Connection to reader via RS485
- Incorporate encrypted IP addresses using 128-bit AES encryption for enhanced security
- Capacity up to 10,000 card users, 50,000 event transactions
- Support 255 floor zone in floor setting
- Support max. 128 floor relays via XP-SNET-E32R
- On-site firmware upgradable
- Power requirement for base board 12VDC @ 150mA
- Dimension: 31cm (H) x 26.5cm (W) x 7.2cm (D)



**EXTENSION
BOARD**

INPUT & RELAY OUTPUT BOARD

Our versatile Extension Board offers an all-in-one solution for your elevator access control system, alarm output system, and reader interface needs. With compatibility for XP-SNET5, XP-QNET, and M4L-SE, M4L/IP, SNET/IPC, QNET/IPC main controllers, our extension board can be tailored to suit any application.



XP-SNET-E32Rv5(VR)

32 Relay Output Extension Board

- Communication to the baseboard via RS485
- 32 durable relays with LED indicator for each of the relay
- 1A relay output rating per channel (Dry contact)
- On board surge suppressor
- Designed for alarm output system and elevator access control system
- Power requirement for base board 12V @ 2A
- Board Dimension: 27cm (H) x 13cm (W) x 25cm (D)

XP-SNET-E248

24 Supervised Input & 8 Relay Output Extension Board

- Communication to the baseboard via RS485
- 24 supervised inputs and 8 relay outputs
- With 24 Supervised input and being able to detect line being bypassed, cut or triggered
- 1A relay output rating per channel
- Power requirement for base board 12V @ 2A
- Board Dimension: 27cm (H) x 13cm (W) x 15cm (D)


MAS-PB 3X3

MAS-EBG


XP-MK800E

Reader Interface Unit

- Act as an interface unit between multidoor controller (XP-SNET, XP-SNETIPC, XP-M4L/IP, XP-M4L-SE) and reader.
- Supports contactless access control technology – Proximity and MIFARE CSN
- Suitable for applications such as Door Access Control System, Carpark Barrier Control and Elevator Access Control System
- Communication to the baseboard via RS485
- Sensor input with 1 Exit button and 1 Door sensor
- Equipped with on board buzzer, fuse protection for power, 1 dedicated door relay, and mains fail detection
- Board dimension: 11.5cm x 8cm x 1.7cm
- Casing dimension: 14.2cm x 11.7cm x 3cm

XP-MK820

Reader Interface Module for XP-QNET

- Act as an interface unit between XP-QNET / XP-QNET/IPC and PLATO-Q82 / PLATO-M82 reader
- Supports the latest contactless access control technology – MIFARE DESFire EV2 / EV3 and Dynamic QR Code
- Suitable for applications such as Door Access Control System, Carpark Barrier Control and Elevator Access Control System
- Communication to the baseboard via RS485
- Sensor input with 1 Exit button and 1 Door sensor
- Equipped with on board buzzer, fuse protection for power, 1 dedicated door relay, and mains fail detection
- Board dimension: 11.5cm x 8cm x 1.7cm
- Casing dimension: 14.2cm x 11.7cm x 3cm

MAS-600EMS-R2



ACCESSORIES : COMPLEMENTARY PRODUCTS

Enhance your security with MicroEngine's range of accessories that are designed to complement our products for maximum protection. Our accessories are built to work seamlessly with our security solutions, offering increased reliability and peace of mind. From magnetic locks to power supplies, our range of accessories ensures that you have everything you need to safeguard your business.



MAS-BAT7



MAS-BAT7

12V 7AH Battery

- 12V nominal voltage.
- Nominal capacity of 7Ah at 20-hour rate
- Long life span and strong reliability rechargeable backup power unit
- Maintenance free
- Sealed lead acid
- Low self-discharge rate
- Dimension: 10.1cm (H) x 15.1cm (W) x 6.5cm (D)

MAS-EBG

MAS-PB 3X3


MAS-EBG

Emergency Break Glass

- Designed to meet BS 5839: PT2 and EN54: PT 11
- Each contact provided double terminal for independent input and output connections especially for looping to ensures perfect continuity
- Variety of colours available
- Special tool operating test facility
- Simple but secure and comply with health and safety requirement.
- Protective film on glass thus protecting the operator from glass fragments
- Dimension: 8.8cm (H) x 8.8cm (W) x 5.9cm (D)

MAS-PB 3X3

Exit Push Button

- Switch function type is SPST
- Non-Latching key type
- Normally Open Contact
- Easy wiring termination
- Big buttons and easy to press
- Illuminated Effect Buttons
- Dimension: 8.6cm (H) x 8.6cm (W) x 1cm (D)



MAS-600EMS-R2

MAS-MC



MAS-600EMS-R2

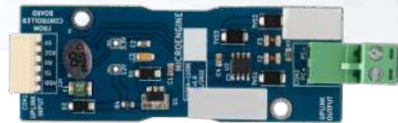
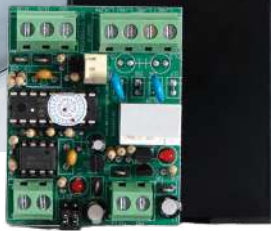
12VDC, 600lbs Electrical Magnetic Lock

- Holding force up to 600lbs
- Dual voltage with field selectable voltage 12VDC / 24VDC.
- Low energy consumption around 12 Volt
- Low Maintenance
- Life safety application will unlocks when power is removed.
- Magnet dimension: 4.2cm (H) x 25cm (W) x 2.6cm (D)
- Armature Dimension: 3.8cm (H) x 18cm (W) x 1.1cm (D)

MAS-MC

MicroEngine Surface Mount Magnetic Contact

- Maximum operating voltage at 100VDC
- Maximum contact rating at 10W
- Cable type with AWG24 standard lead.
- Cable length 26cm
- When magnet and switch together, the switch output is NC
- On/Off Alarm signal when Magnetic Door contact switches open/closed
- Dimension: 2.75cm (H) x 1.35cm (W) x 0.75 (D)



MAS-RBU

High Level Relay Board (RS485)

- Communication ports via RS485
- Low power consumption
- Multifaceted input locking system
- 1 relay output with NO and NC connections rated at 12V, 1A with indicator
- 2 dedicated inputs for door sensor and push button signals.
- 1 auxiliary relay driver output
- 1 general purpose logic input
- 1 communication status LED
- Input voltage at 12VDC
- Dimension: 9.5cm (L) x 5.5cm (W) x 2.6cm (H)

XP-MK-UL10S

Uplink RS485 Adaptor

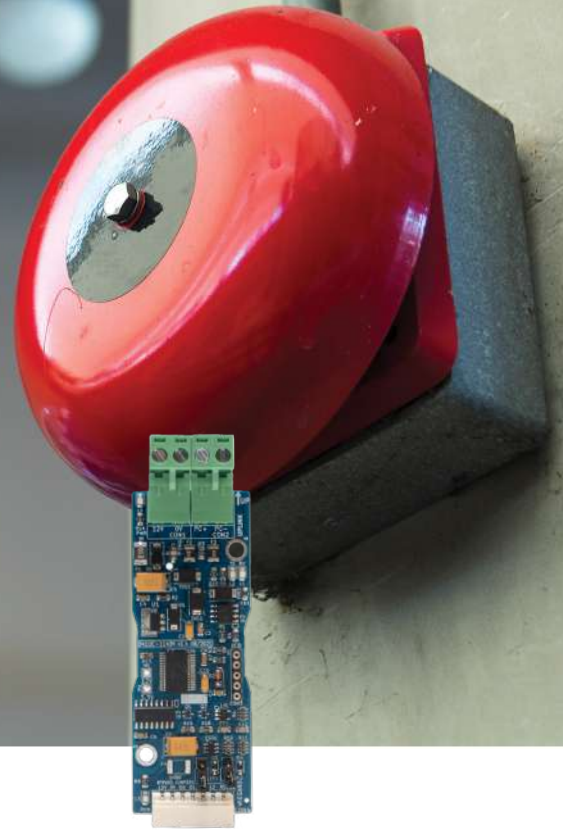
- Facilitates RS485 data communication between controller and software.
- Support various speed of serial communication
- ESD proof and handy packaging
- Easy to use
- Low power consumption
- Dimension: 9.6cm (H) x 3.1cm (W) x 1.8cm (H)



XP-MK-WG22

Wiegand Format Interface Module

- Dual Wiegand reader connections
- Supports wide range of Wiegand format
- Low power consumption
- Built-in data protection
- Input voltage at 12VDC
- Dimension: 9.5cm (L) x 5.5cm (W) x 2.6cm (H)



XP-MK-WG10S

Wiegand to Plato RS485 Adaptor

- Convert Wiegand format to Plato RS485 format
- Communication with Controller through RS485
- 2 LEDs for RS485 communication status
- ESD proof and handy packaging
- Low power consumption
- Input voltage at 12VDC
- Dimension: 9.6cm (H) x 3.1cm (W) x 1.8cm (H)

OUR SERVICE AND SUPPORT

In our continuous dedication to promoting sustainability, we have a team of in-house solution consultants possessing technical expertise, fully committed to providing a total computerized solution and superior services as well as technological enhancement for our range of security access control system products and time attendance management systems through the innovative provision of integrated systems.

This ensures the delivery of optimal and efficient product solutions with accurate costing. Our clients can be confident that their projects are prioritized with the highest importance.



Equipped with Professional Sales & Solution Teams to assist in recommending the best selection of products to be used according to your needs.



Providing product price quotations and solution proposals for cost budgeting



Technical Support to assist remotely or attend the project site in an emergency.

TECHNICAL SHARING AND SEMINAR

We consistently engage in technical sharing sessions and seminars to disseminate up-to-date product knowledge and information. We extend a warm invitation to everyone to actively participate in these events.

Persidangan Pegawai Kanan JKR Malaysia (SOC 2024)

Date : 27-29 May 2024

Time : 9.00am - 5.00pm

Venue : KSL Esplanade Hotel, Klang Selangor.



Technical Seminar MicroEngine Technology Sdn. Bhd. (Enterprise Security Management)

Jabatan Kerja Raya Sabah Cawangan Kejuruteraan Elektrik

Date : 13 June 2024

Venue : Hilton Hotel, Kota Kinabalu, Sabah



Integrated Security System



Facial Recognition Integration Support



High Level Lift Integration



CCTV Integration



License Plate Recognition



CloudVMS (Visitor Management System)

Kindly contact our sales representative for additional information regarding the scheduling of seminars at a time convenient for you. We aim to provide a rewarding experience for all participants who join us!



MicroEngine®

Integrated Security Systems

TOWARDS SUSTAINABLE FUTURE



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Service Center, USJ



**Production & Quality
Control, USJ**



**Overseas Office,
Singapore**

Specification subject to change without prior notice

For enquiries, please contact :

