Standalone Access Control System

xPortal

XP-SK32
XP-SR40
XP-SR200K-N

XP-SR40
- Standalone Proximity Access System

XP-SK32
- Standalone PIN Access System

XP-SR200K-N
- Standalone Proximity with Keypad Access System

• SIMPLE • RELIABLE • EFFICIENT

ACCESS PORTAL

MicroEngine®

GLOBAL ISO 9001 : 2000 CERT NO. 44831281647

xPortal

Standalone Access Control System

No	Features	XP-SK32 PinGuard	XP-SR40	XP-SR200K-N CodeProx
1	Standalone Operation	Yes	Yes	Yes
2	Onboard Memory EEPROM	Yes	Yes	Yes
3	Pin Access	Yes (32 sets)	No	Yes (10 sets)
4	Card User Capacity	N.A.	40	200
5	Keypad	Yes	No	Yes
6	Continuous Card Read when door is opened	N.A	Yes	Yes
7	Onboard Buzzer	Yes	Yes	Yes
8	Firmware Flash Memory	Yes	Yes	Yes
9	Polarity Protection for Power Input	Yes	Yes	Yes
10	LED Indication	Yes (Red & Green)	Yes (Red & Green)	Yes (Red & Blue White)
11	Durable Epoxy Coated Keypad	Yes	No	Yes
12	Power-12VDC	Yes (150mA)	Yes (200mA)	Yes (250mA)
13	Dimension (HxWxD)	125mm x 94mm x 30mm	100mm x 53mm x 20mm	125mm x 94mm x 30mm
14	Configurable Lock Release Time	Yes (1-99)	No (Fixed to 10 sec)	Yes (1-99)
15	Configurable Door Open Time	Yes (1-99)	No (Fixed to 20 sec)	Yes (1-99)
16	Controller / Reader Mode	No	No	Yes

** Specifications subject to change without prior notice*

Simple Design

- Easy to Use
- Easy to Program
- Easy to Maintain

Pin Only Access

- Use 4 digits secret code to access
- Multiple sets of code
- Codes Can Be Reprogrammed Easily

Proximity Card Technology

- Easy to Use
- Reliable Technology
- High Durability
- Just Touch the Card to Access

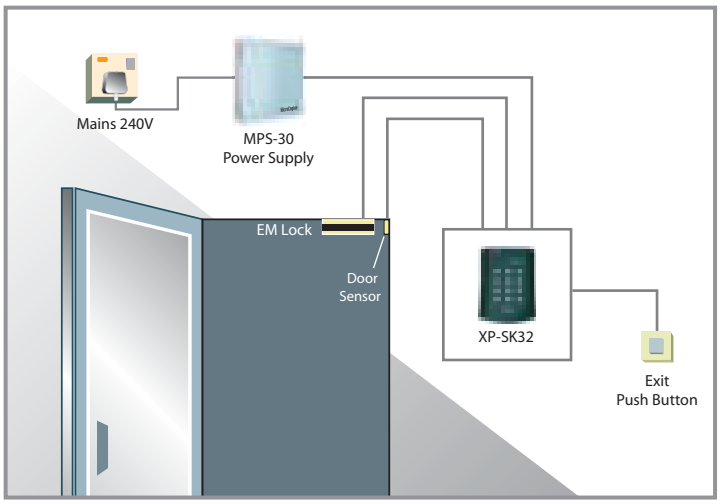
Standalone Architecture

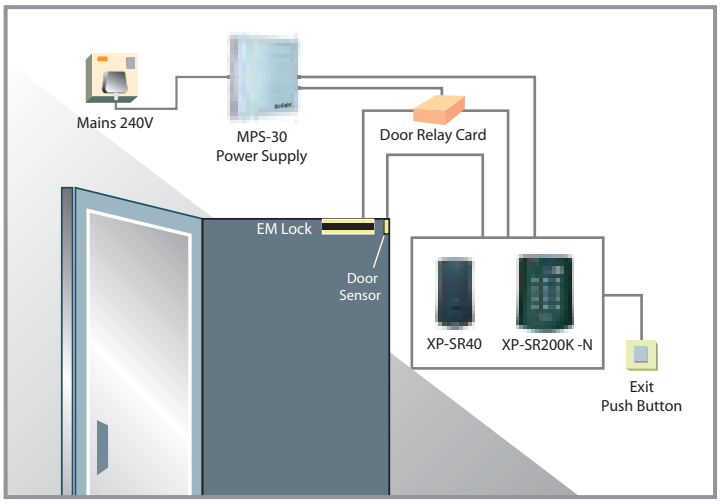
- Easy to Install
- No PC is required to Operate
- LED and Audio Buzzer Indication

Reliable Technology

- Designed with proven and reliable technology
- Built-In System Integrity Monitoring System for maximum reliability

• Configuration Diagram





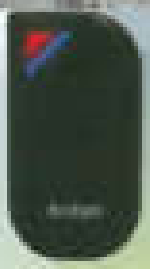
For enquiries, please contact:

MicroEngine®

Integrated Security Systems

Plato Reader

Design for tomorrow
brought to you today



Plato - PBDS/CBDS
Slim Reader
EM/Mifare/Cepas/
Mifare Sector Reading

www.microengine.net

Plato Reader

EM Proximity

No.	Features	Plato-PR05	Plato-PR05S
1	Connectivity	RS485	
2	LED Indicator	Blue and Red	
3	Reader Type	EM Compatible	
4	Card Digits	16	
5	Buzzer	Yes	
6	Dimension (H x W x D)	88 x 45 x 16	90 x 57 x 16
7	Epoxy	Yes	
8	Weather Proof	Yes	
9	Reading Range	Max 7cm	
10	Tamper Sensor	Yes	
11	Material	PC	Body : PC Faceplate : Acrylic
12	Keypad	No	Yes
13	LCD	No	No
14	Input Voltage	12Vdc	
15	Current (Typical)	150mA at 12Vdc	180mA at 12Vdc
16	Operating Temperature	0 - 50°Celcius	

Mifare/CEPAS

No.	Features	Plato-C005	Plato-C005A1	Plato-C005L1
1	Connectivity	RS485		
2	LED Indicator	Blue and Amber		
3	Reader Type	ISO 14443 A/B / Mifare / CEPAS		
4	Card Digits	16		
5	Buzzer	Yes		
6	Card Serial Number Reading (CSN)	Yes		
7	Configurable Sector Reading	Yes		
8	Dimension (H x W x D)	88 x 45 x 16	90 x 57 x 16	90 x 57 x 16
9	Epoxy	Yes		
10	Weather Proof	Yes		
11	Reading Range	Max 5cm		
12	Tamper Sensor	Yes		
13	Material	PC	Body : PC Faceplate : Acrylic	Body : PC Faceplate : Acrylic
14	Keypad	No	Yes	Yes
15	LCD	No	No	Yes
16	Input Voltage	12Vdc		
17	Current (Typical)	150mA at 12Vdc	200mA at 12Vdc	220mA at 12Vdc
18	Operating Temperature	0 - 50°Celcius		

Controllers

SNET
IP 5/10 Door &
Alarm Controller

M2300i
2 Door IP
Access Controller

M1300i
Single Door IP
Access Controller

P1000i
POE
Controller

Softwares

For enquiries, please contact:

Specifications subject to change without prior notice.

CE

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MM-PR-1708

MicroEngine®

Integrated Security Systems

Product Catalogue

Attendance • Access • Security • Integration

Integrated Security

- Door / Lift / Car Park Access • Alarm Monitoring • CCTV Integration
- Visitor Management • Time Attendance • Guard Tour • Photo Badging

Alarm Monitoring

- Supervised Inputs • Relay Outputs • IO Programming

Car Park Management

- Vehicle Count Control • Car Park Payment Management System

Time Attendance

- Dedicated Unit for Attendance Recording

Connectivity

- RS232 • RS485 • Modem • IP LAN • PoE • SMS • WAN

Established since 2000

www.microengine.net

XP-GT3500L / ABX

FingerPrint Access Control

- Door Access / Time Attendance / Alarm application
- Touch sense keypad with dimming backlight
- Up to 3,500 templates, 10,000 event transactions
- Fingerprint verification time < 1 second
- Up to 100 time sets, 100 time zones, 30 holiday settings
- Access Mode - combination of card (EM / Mifare / CEPAS), Pin & fingerprint
- Connectivity - RS485 / LAN
- Graphic LCD to display programming menus and controller status
- Built in Real Time Clock with backup battery

XP-M1000X, XP-SR1000,
XP-GTR1500L / ABX

Single-Door Access Control

- Door Access / Car Park Access / Time Attendance / Alarm application
- Up to 1,500 card users, 10,000 transactions
- Up to 100 time sets, 100 time zones, 30 holiday settings
- Access Mode - combination of card (EM / Mifare / CEPAS) & Pin
- Connectivity - RS485 / LAN
- Easy to configure
- Standalone or PC based operation
- Built in Real Time Clock with backup battery
- Touch Sense keypad (GTR1500L)

Plato Readers

CE

Plato Reader Series

- Slim and stylish design
- Weather proof
- Using RS485 - longer distance (up to 1km away from controller)
- EM / Mifare CSN / CEPAS / Mifare Sector Reading
- Better security with 16-digit card numbers
- Not identification by Card Serial Number for Mifare Sector Reading
- Touch Sense keypad
- Colour LCD
- 2 stylish LED indicators
- Built-in buzzer

Plato DesFire Readers

CE

Plato DesFire Reader Series

- Slim and stylish design
- Weather proof
- Using RS485 - longer distance (up to 1km away from controller)
- DesFire
- 20-digit Card ID and CSN for DesFire Cards
- Not identification by Card Serial Number for DesFire
- Touch Sense keypad
- DesFire Reader with Enhanced Antenna for high power DesFire reading
- Built-in buzzer

Product Catalogue

Client-Server Based Security Software

- Door Access / Car Park Access / Lift Access / Time Attendance / Alarm application
- Integrated visitor management system
- CCTV integration - event triggered viewing
- Multiple connectivity options - RS485 / LAN / WAN / modem dial up
- Built on Microsoft.NET Framework & supports different Database i.e. SQL, Oracle
- Flexible deployment - web client + application client
- Customisable to cater for non-standard requirements
- Cross platform compatibility - only web browser required to operate
- No special configuration or changes are need on user's PCs
- Easier support and maintenance
- Online event on web page & online interactive floor plan on web page
- xPortalNet HS - DesFire

xPortalNet HS

Encrypted IP Controllers

- 1/2/5/10 encrypted IP based controller
- Large capacity - up to 100,000 card users, 200,000 event transactions, 1024 doors
- Encrypted IP communication (Push Based)
- 16-digit card numbers for better security
- Built-in supervised inputs
- Supports Door Access, Lift Access, Car Park Access, Alarm Monitoring, Guard Tour & Facility integration
- Hardware controlled global anti-passback or Peer to Peer Mode
- Multiple door interlocking
- Emergency / fire alarm activated door release
- Web based diagnostic
- On-site firmware upgradable

M1300i

P1000i

M2300i

SNet

GLS130/GLS300

- High Security Controller
- Supports DesFire Plato Readers
- 64 bit Card ID (20-digit)
- Not identification by Serial Number
- Records both Card ID and Card Serial Number in event log
- 10,000 card users and 50,000 transactions
- Software configurable credential setting
- 10/100 Base LAN

GLS130/GLS300

Other Applications

- Alarm Monitoring System
  - Up to 2048 supervised inputs, 1024 relay outputs
  - Alarm instruction programming
  - Software / hardware arm/disarm
  - Scheduled arm / disarm

- High Level Lift/Elevator Interface
  - Smart lobby with high level interfacing to selected elevator brands
  - Integrated access control with traffic management to provide better user satisfaction
  - Configurable mapping for access setting to lift controller

SNET-LID

SNET-E24I

SNET-E32R

xPortal3000

Access Control with Time Attendance Software

- Mifare Sector Reading
- Door Access / Lift Access / Time Attendance application
- Supports common office attendance requirements
- New User Interface with built in diagnostic
- Real time / scheduled data export
- Scheduled backup
- User configurable export format to payroll systems
- Configurable software menu access level
- Client Server design, up to 3 clients
- Built on Microsoft.NET Framework
- Multi-Database for ease of managing branches
- Operates on Firebird database engine

XP-SK32 /
XP-SR200K

Standalone Access Control

- Wide product range
  - Pin only : XP-SK32 (32 users)
  - Card + Pin : XP-SR200K (200 users)
- Easy to use, easy to program, easy to maintain
- High quality ABS casing with epoxy coated keypad
- Built in polarity protection
- Internal system integrity monitoring
- Reliable and robust design

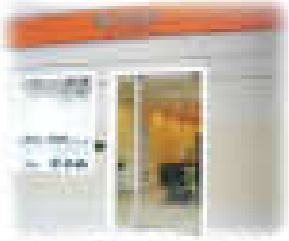
About MicroEngine

- Established since 2000
- With in-house R&D
- Focused in Integrated Security Solution
- Provide technical support
- Provide customisation / tailor made solutions

Quality Management System

- ISO 9001 certified since 2004

Management & R&D Centre



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Sales & Service Office
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Factory

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Email : enquiry@microengine.net Website : www.microengine.net

Specifications subject to change without prior notice.

MicroEngine®

Integrated Security Systems

Mifare DesFire

GLS130 / GLS300

Encrypted IP DesFire 1 Door Controller

IP High Security DesFire Controller
IP + Door + Lift + Car Park

- DesFire Encryption
- Card ID Not by Serial Number
- Support Door, Lift and Car Park
- Encrypted IP Messaging
- 32-bit RISC Processor

www.microengine.net

DesFire Support

- The controller supports the latest high security card for bringing your system to a higher level of security. Many systems in the market runs on older generation of card technology with or without encryption and can be easily cloned. The DesFire card encryption is the latest from Mifare and the encryption is hardened for up to date protection level to your premises.

Card ID Not by Serial Number

- The Card ID is created using the advanced encryption algorithms built in to the Mifare DesFire card. To read the Card ID, the reader needs to perform a few levels of encrypted security exchange. The Card ID obtained by this method is very safe and secured. Some systems in the market only read the Serial Number of the card, which is unprotected or open information. This is not the correct and secured way to use the Mifare DesFire feature.
- The Card ID of our system is 64 bit or 20 digits. This provides the highest security level to your system. As the security algorithms is very complicated, our readers use 32 bit processor to provide a much faster response time.

Encrypted Messaging

- The messaging between the controller and the computer is encrypted with dynamic keys using the AES128 industrial strength algorithm. This is to ensure that the controller does not subject to attack from network easily as the networking environment is very open and sometimes difficult to police.
- The messaging between the readers and the controller is also encrypted to ensure that the communication is secured.
- The card reading is done by encrypted exchanges with the implementation of advanced DesFire encryption algorithms.

Supports Door & Lift

- The controller has been built for high-end integrated security applications. It can supports door access control, car park access control and lift access control.
- You can configure the capacity of the system by adding extension boards.

32-bit Processor

- The controller uses the 32-bit RISC processor at 80MHz. This is a powerful processor for industrial applications and it enables the system to process complex applications such as modern security encryption features in real-time manner.

Housed in Strong ABS Casing

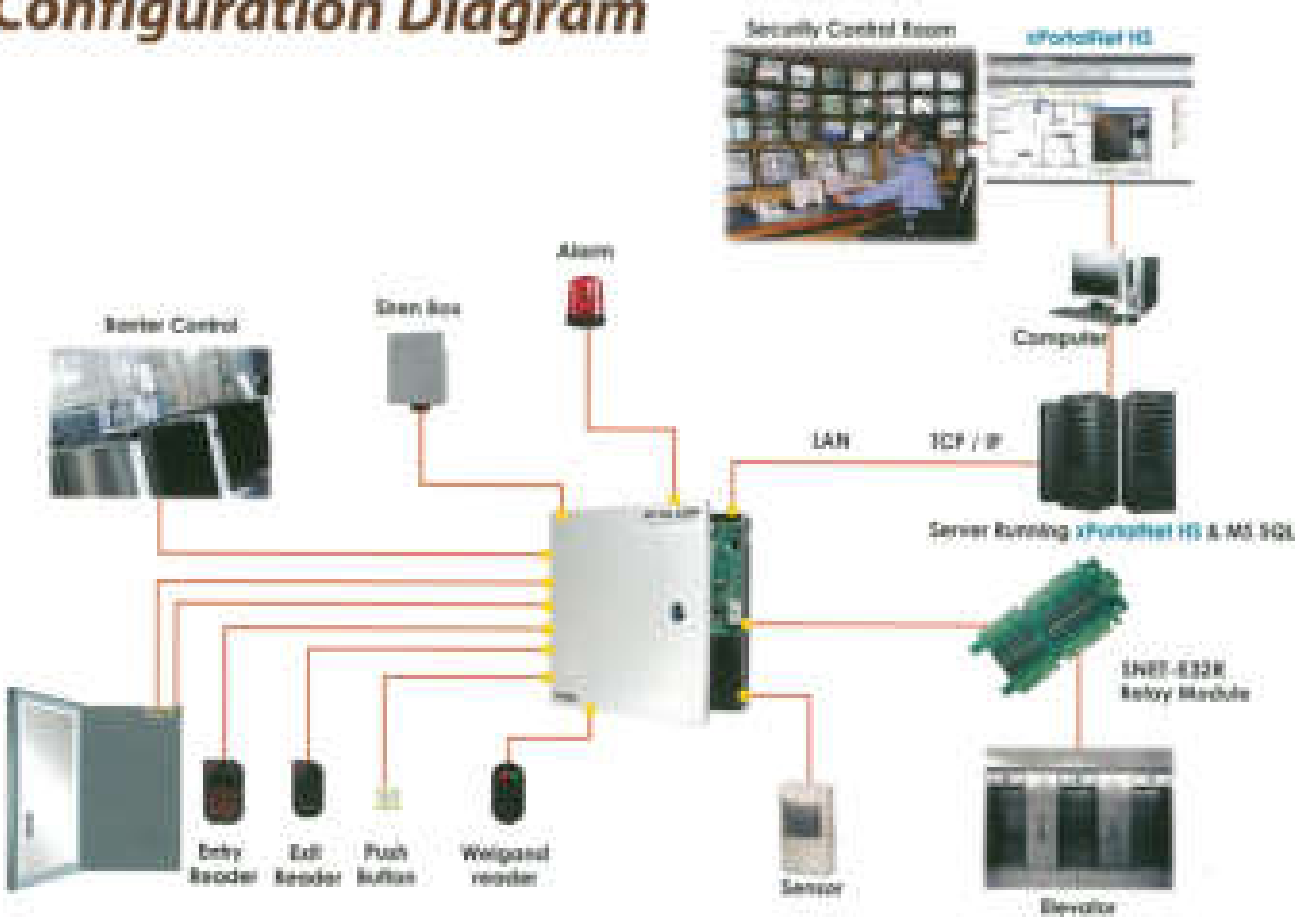
- The controller is housed in a strong ABS casing. This casing is wall mount ready by using the screws to mount it directly on the wall.
- It is also DIN rail mount ready if you wish to mount it this way together with your industrial equipments.

Live Remote Firmware Download

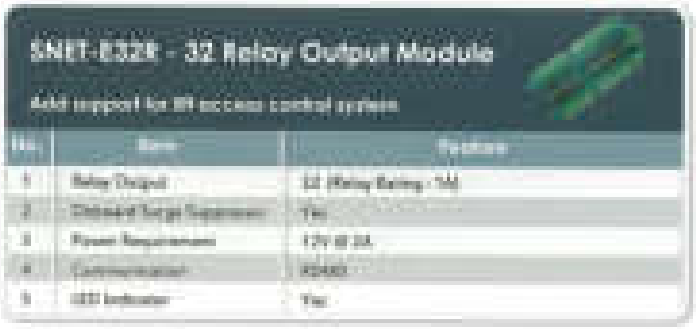
- Firmware can be downloaded live from the application software via the IP interface.
- This helps to improve the maintainability of the controller at site. You can update or upgrade the firmware from the computer at site without needing to open the controller box or bring the controller back for service.

GLS300 - DesFire Access Controller

Configuration Diagram

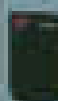


SNET-E32R



No.	Item	Feature
1	Relay Output	32 (Relay Rating - 1A)
2	Onboard Surge Suppressor	Yes
3	Power Requirement	12V @ 2A
4	Communication	RS485
5	LED Indicator	Yes

Plato DesFire Readers

No.	Feature	Plato DesFire Readers Model	
			
1	Card Type	Mifare DesFire / DesFire Ev1/ Mifare Sector	
2	Encrypted Card ID	The first encrypted File Selectable (Created in the Card)	
3	Encrypted Reading	Yes	
4	Card ID by Serial Number	Yes	
5	RS485 to Controller	Yes (Encrypted)	
6	Protocol	OSDP RS485 for Faster Response Time	
7	Tamper Switch	Yes (High Sensitivity Optical Type)	
8	LED & Beeper Indicator	Yes	
9	Keypad	No	Yes High Sensitivity Touch Sensor
10	LCD	No	Yes (Graphic)
11	Dimension	90mm x 37mm x 16mm	

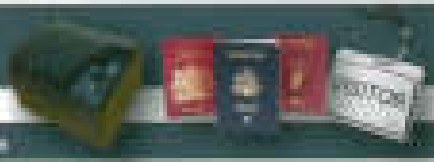
GLS High Security DesFire Access Controller

GLS130v4 / GLS300v4 Controller

No.	Features	GP-GLS130v4	GP-GLS300v4
1	No. of Doors	1 Door	
2	No. of Readers	Max 2 Readers (Plain DesFire Reader)	
3	Wiegand Reader	Max 2 Wiegand (4-bit Reader) - for Low Security	
4	Connection to PC	TCP/IP Encrypted IP with AES 128	
5	Connection to Readers	RS485 - Plain 64 Reader (fast speed)	
6	Card Holder	30,000 (64 bits/26 digits)	100,000 (64 bits/26 digits)
7	Card ID	Secured and Encrypted with DesFire Algorithms	
8	Card Serial Number	Recorded together with the Card ID	
9	Transactions	50,000	
10	Time Setting	255 Time Sets / 255 Time Zone (for Access Level control)	
11	Holiday	30 (1 week)	
12	Inputs	9 Supervised/Digital (Switchable) - 1 Door Sensor + 1 Exit Button - 1 Dedicated Fire Alarm Input 3 Configurable as Reader Tamper, Emergency Breakglass Monitor or General Purpose	
13	Built-in Relay Output	4	
14	Real Time Clock	Yes - with onboard battery	
15	WAN Support	Yes - Support Dynamic IP	
16	Power Fail Monitor	Yes	
17	Global Anti-Passback	Yes - Using Triton GAC (Global Access Controller, up to 128 doors per cluster)	
18	Live Firmware Upgrade	Yes - Download Live from Software	
19	Diagnostic	Yes - using built-in Web based system	
20	Onboard LED Indicators	Yes	
21	Onboard Beeper	Yes	
22	Processor	32bit ARC MCU at 80MHz	ARM 8bit Dual Core at 72MHz
23	Casing Dimension (mm)	235(H) x 227 (W) x 75(D)	235(H) x 227 (W) x 75(D)
24	Power Consumption (Controller Board only)	12VDC at 400mA	12VDC at 600mA
25	External IO Support	3Nos. ESIB for I/O Access	

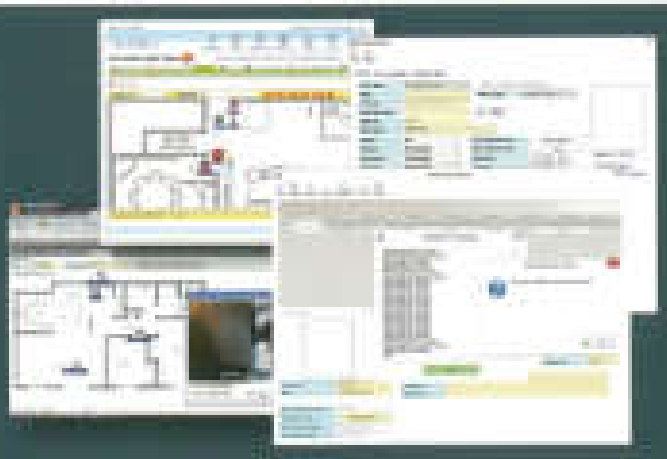
iParaNet HS High Security Management Software

No.	Item	Features
1	Client Server	Yes - Up to 20 Clients
2	System	Door Access / I/O Access / Car Park / Alarm Monitoring / Guard Tour / Visitor Management / CCTV Integration / Time Attendance
3	Card Holder	100,000 (20 Digits)
4	Card Serial Number Record	Yes. The system records the card serial number together with the Card ID.
5	DesFire Card Programming	Yes. By using HID OMNIKEY 5421 desktop programming kit
6	Configurable DesFire Security Setting	Yes. User can configurable their own security setting. The setting data are encrypted in the computer.
7	DesFire Card	Mifare Classic, Mifare DesFire, Mifare DesFire EV1
8	User Security Card Support	Yes, for 3rd party system. Connect through the Controller Wiegand port.
9	No. of Door / Readers	1024 Doors / 2048 Readers
10	No. of Inputs / Outputs	1024 Inputs / 1024 Outputs
11	Time Set / Time Zone	1024
12	System User	Unlimited
13	Software Access Control	Yes - User Configurable Command Level Access Control
14	Floor Plan System	Yes - Flexible & with Cursive Icon
15	Database Supported	MS SQL Server / Oracle
16	OS	• Client: Windows 7 Professional (32/64 bits) • Server: Windows Server 2008 / 2012 (64 bits)
17	Communication Supported	UDP / TCP / HTTP
18	Controller Supported	IP DesFire 1 Door Controller • GLS100 (10,000 Users) • GLS130 (30,000 Users) • GLS300 (100,000 Users) IP DesFire 4 Door Controller • GLS400 (100,000 Users)
19	Model	• iParaNet HS v1.8 Lite • iParaNet HS v1.8 Standard • iParaNet HS v1.8 PS



Ordering Information

No.	Items	Features
1	GP-GLS130v4	IP DesFire 1 Door Controller (10,000 Card Holder)
2	GP-GLS130v4	IP DesFire 1 Door Controller (30,000 Card Holder)
3	GP-GLS300v4	IP DesFire 1 Door Controller (100,000 Card Holder)
4	GPIan-8308	32 Relay Output Extension Board
5	Plain-RMR005	Mifare / Mifare DesFire Reader
6	Plain-RMR003	Mifare / Mifare DesFire Reader with Colour LCD and Touch Sense Keypad
7	MFC-0138v1	Mifare DesFire Card (v1)
8	HID-OMNIKEY 5421	Mifare DesFire Desktop Programming Unit
9	MPS-320	Power Supply Unit with Charger & Low Power Cutoff
10	MAG-600M6	Bracket EM Lock 600lbs
11	MAG-1200M6	Bracket EM Lock 1200lbs
12	MAG-PB03	Bracket Wide Exit Button
13	MAG-M1	Bracket Door Sensor
14	USB-HPNET HS V1.8/Lite	iParaNet HS V1.8 Lite Software c/w 1 USB Key - 1 Client Version, Up to 200 connections
15	USB-HPNET HS V1.8/STD	iParaNet HS V1.8 Standard Software c/w 1 Key - 1 Client & Up to 200 connections - Data Partitioning
16	USB-HPNET HS V1.8/PS	iParaNet HS V1.8 PS-Integration Software c/w 1 Key - 1 Client Version, Up to 200 connections - Data partitioning & API & CCTV Integration



For enquiries, please contact:

Configuring the System

The system is powerful and highly configurable, kindly contact our representatives to assist you to configure a system that suits your requirements.

HEG No. 14992138B

MicroEngine®

Integrated Security Systems

SNet V4 Controller

IP . High Capacity . Better Security

IP Based Multi-Door Integrated Security Controller
IP + Multi-Door + Lift + Alarm + Car Park

- Modular System - Extension Board Based
- Centralised / Distributed Architecture
- Multi Access Group
- Supports Door, Lift, Alarm Monitoring
- 32-bit **ARM** RISC Processor
- Alarm Monitoring

IP | Door Access | 32-bit **ARM** Processor | Lift | Distributed Architecture | Guard Tour | Alarm

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Modular System - Extension Board Based

- The system is designed to allow you to extend the capacity by simply adding extension boards onto it. This gives you the cost advantage when you are implementing minor capacity upgrades. Moreover, the extension board based design provides a consistent architecture in the system and this promotes better maintenance quality by reducing the system learning time.

Centralised Connection

- The cables are terminated in the controller. This allows faster data processing as transfer of data are all done onboard and the readers are directly connected to the controller.
- Centralised connection also promotes better deployment and maintenance quality. The engineers can perform the inspection and service all at one place and this can help to reduce the cost of maintenance operations.

Configurable to Distributed Architecture

- Where remote interfacing of door / reader or I/O are required, the controller supports these remote interfacing modules (RIM) that connect to the controller using RS485.
- This is a flexible and powerful controller capability that gives you the benefit of both useful centralised and distributed architecture in one box.

Supports Door, Lift, Alarm Monitoring

- The controller has been built for high-end integrated security applications. It can supports door access control, car park access control, lift access control and alarm monitoring.
- You can configure the capacity of the system by adding extension boards or remote interfacing modules.

32-bit ARM Processor

- The controller uses the 32-bit **ARM** RISC dual-core processor at 72MHz. This is a powerful processor for industrial applications and it enables the system to process the complex applications in real-time manner.

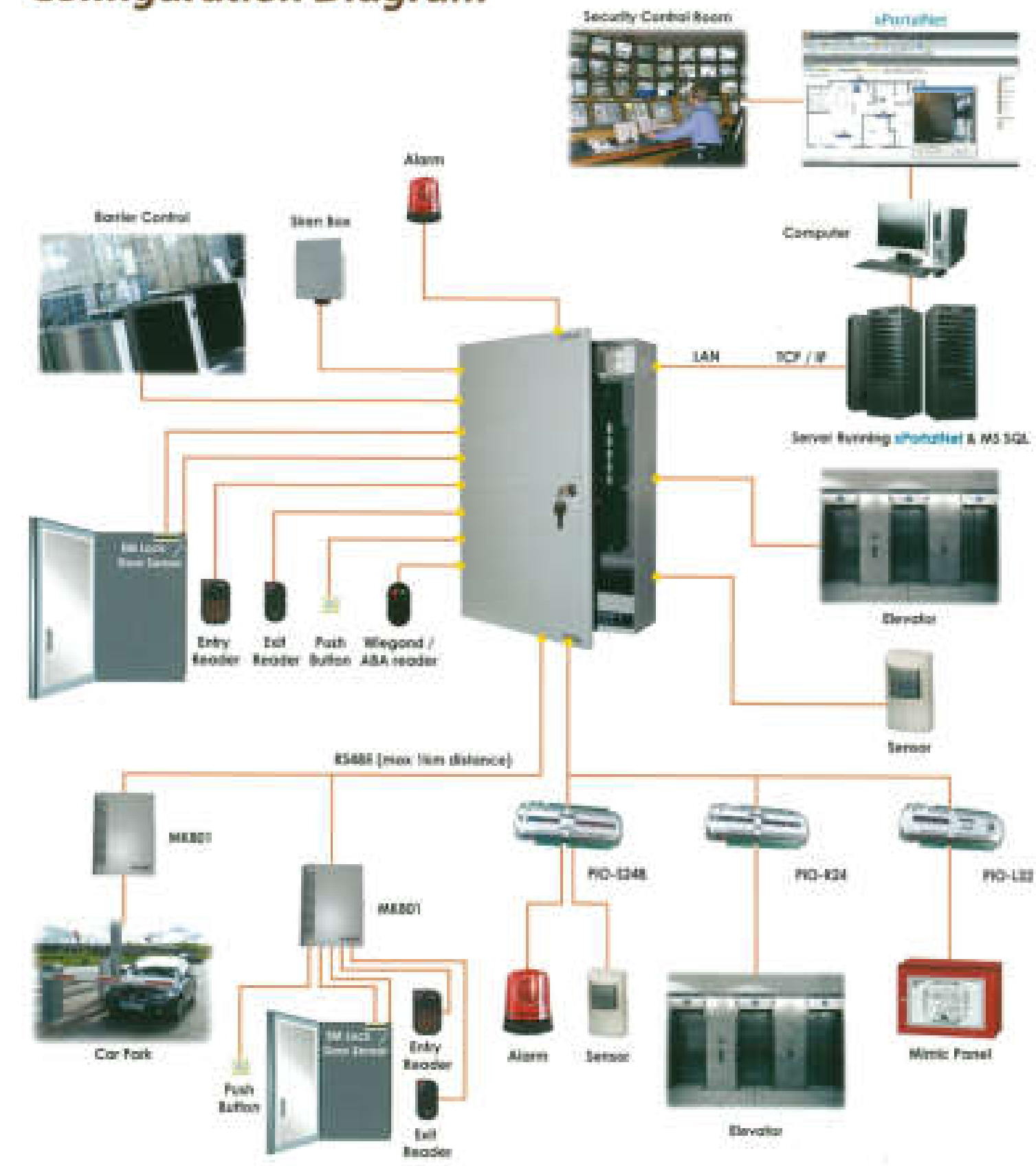
Onboard IP with Encryption

- The controller is equipped with LAN connectivity at 10/100 Base-T using TCP/IP protocol.
- It supports push based communication to computer for faster data transfer speed.
- The IP communication is encrypted using industrial standard AES128 for secured communication.

Remote Firmware Download

- Firmware can be downloaded from the application software via the IP interface.
- This helps to improve the maintainability of the controller at site. You can update or upgrade the firmware from the computer at site without needing to open the controller box or bring the controller back for service.

Configuration Diagram



SNet V4 Features

SNet 5 Base Controller

No.	Item	Feature
1	Max Door	5
2	Relay Output	8 (5 for Door Relay + 3 General Purpose) Relay Rating - 1A
3	Sensor Input	16 Supervised (4x Door Status or General Purpose)
4	IP	Yes - UNV 100 Base-T
5	Reader	• Bandwidth Plus Readers (Max 10 (5 Entry + 5 Exit) • Wiegand / ABA Readers (Max 5)
6	Comm Port	Yes • RS485 to Remote Interface Module • RS485 to Extension Boards with Output Mirroring
7	Card Number Length	Up to 16 Digits
8	Max Card DB	25,000 / 50,000 / 100,000 *
9	Max Transaction DB	100,000 / 150,000 / 200,000 *
10	Time Zone	255
11	Time Set	255
12	Multi Access Group	Yes (5 Access Group per Card Holder)
13	Time Zone	255
14	Global Anti-Passback	Yes
15	Interlocking	Yes
16	Access Mode	1. Card + Pin 2. Card Only 3. Pin Only 4. Facility Code 5. Fingerprint Only 6. Card + Fingerprint 7. Pin + Fingerprint 8. Automatic Lock Release 9. Inhibit Access
17	IP Messaging Encryption	Yes - AES128
18	Alarm Monitoring Support	Yes
19	Extension	Up to 9 Extension Boards : SNet-E5D : 5 Door Extension Board SNet-E32R : 32 Relay Output Board SNet-E24BS : 24 Supervised Input & 8 Relay Output Board Max Extension Capacity : 5 Doors / 120 Inputs / 128 Outputs
20	Support Remote Interface Module	Yes - Use RS485 Door Interface Unit (Max 10) : AMBOX Reader Interface I/O Controller (Max 10) : PIO-S24B – 24 Supervised Input / 8 Output PIO-R24 – 24 Relay Output PIO-LED – 32 LED Driver for Mimic Panel Use Max Remote Capacity : 10 Doors / 160 Inputs / 160 Outputs
21	Processor	ARM RISC Dual-Core Processor at 1.5MHz
22	Power Requirement	12V @ 500mA (Base Board Only)
23	Onboard LED / Buzzer	Yes
24	Remote Firmware Update	Yes - can be done through application software on site
25	Controller Package PSU	12VDC @ 5A with 12V4H Battery

* Depending on Model

SNet-E5D - 5 Door Extension Board

Add another 5 door support to the controller system becomes a 10 door controller

No.	Item	Feature
1	Max Door	5
2	Relay Output	8 (5 for Door Relay + 3 General Purpose) Relay Rating - 1A
3	Sensor Input	16
4	Onboard Surge Suppressor	Yes
5	Power Requirement	12V @ 5A
6	Communication to Base Board	RS485
7	LED Indicator	Yes

SNet-E32R - 32 Relay Output Extension Board

Add support for 16 access control and alarm output system

No.	Item	Feature
1	Relay Output	32 Relay Rating - 1A
2	Onboard Surge Suppressor	Yes
3	Power Requirement	12V @ 2A
4	Communication to Base Board	RS485
5	LED Indicator	Yes

SNet-E24BS - 24 Supervised Input & 8 Relay Output Extension Board

Add support for supervised alarm inputs and Output system

No.	Item	Feature
1	Supervised Input	24 Able to detect the being bypassed, cut or triggered
2	Relay Output	8 Relay Rating - 1A
3	Onboard Surge Suppressor	Yes
4	Power Requirement	12V @ 2A
5	Communication to Base Board	RS485
6	LED Indicator	Yes

Plato Readers

Stylish and high quality card reader that provide flexible connectivity

Slim Card Reader

Model	Description
Plato PR05	Proximity Reader
Dimension	[illegible]

Slim Card Reader

Model	Description
Plato CR05	Mifare / CEPAS / Mifare Sector Reading Reader
Dimension	[illegible]

Slim Card Reader with Touch Sense Keypad & Colour Graphic LCD

Model	Description
Plato PR04LS	Proximity Reader
Plato CR05LS	Mifare / CEPAS / Mifare Sector Reading Reader
Dimension	[illegible]

Remote Interface Module

Flexibly allows you to extend the capacity and distance

Door Interface Unit

MK801

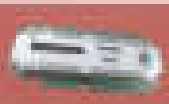
Audit remote door interfacing capacity

No.	Item	Feature
1	Comm Port	2 RS485 1 to Controller 1 to MicroCache Readers
2	Relay Output	1 (Relay Rating : 1A)
3	Readers	2 (1 Entry / 1 Exit) Onboard RS485 Port for Connecting to MicroCache Readers & Wiegand / ABA Port for Connecting to 3rd Party Readers
4	Onboard Surge Suppressor	Yes
5	LED Indicator	Yes
6	Power Requirement	12V @ 0.5A

I/O Controller

PIO-L32

32 Mimic Panel LED Driver Module



No.	Item	Feature
1	Comm Port	1 RS485 (to Controller)
2	LED Driver Outputs	32 (30 mA)
3	Digital Input	2 (for Interfacing with Key Switches)
4	Onboard Surge Suppressor	Yes
5	LED Indicator	Yes
6	Power Requirement	12V @ 0.5A

PIO-S248

Multi Purpose Alarm Panel
24 In & 8 Out Module

No.	Item	Feature
1	Comm Port	1 RS485 (to Controller)
2	Supervised Input	24 Able to detect line being Supervised, cut or triggered
3	Relay Output	8 (Relay Rating : 1A)
4	Onboard Surge Suppressor	Yes
5	LED Indicator	Yes
6	Power Requirement	12V @ 0.5A

PIO-R24

24 Relay Output Module

No.	Item	Feature
1	Comm Port	1 RS485 (to Controller)
2	Relay Output	24 (Relay Rating : 1A)
3	Onboard Surge Suppressor	Yes
4	LED Indicator	Yes
5	Power Requirement	12V @ 0.5A

xPortalNet v1.7 Security Management Software System

Main Features

No.	Item	Features
1	Client Server	Yes - Up to 20 Clients
2	System	Door Access / Lift Access / Car Park / Alarm Monitoring / Guard Tour
3	Card Holder	200,000 (16 Digits)
4	No. of Door / Readers	1024 Doors / 2048 Readers
5	No. of Inputs / Outputs	1024 Inputs / 1024 Outputs
6	Time Set / Time Zone	1024
7	System Users	Unlimited
8	Software Access Control	Yes - User Configurable Command Level Access Control
9	Floor Plan System	Yes - Dynamic & with Camera Icon
10	Database Supported	MS SQL Server / Oracle
11	OS	• Microsoft Windows 7 / Windows 8 Pro • Windows Server 2008 / 2008 / 2012 (64-bits)
12	Microsoft .Net	Yes
13	Communication Supported	RS232 / RS485 / Modem / UDP / TCP / HTTP
14	Controller Supported	• Other - IP 5/10 Door with Alarm Monitoring Flexible Architecture Controller • P1000i - Encrypted IP PoE 1 Door Controller • M1000i - Encrypted IP 1 Door Controller • M2000i - Encrypted IP 2 Door Controller • GTR1000i - IP Single Door Card Reader Controller • GT3000i - IP Single Door Fingerprint + Card Reader Controller
15	Time Attendance	Yes - Non-Overnight
16	Real Time Export	Yes - User Configurable
17	Model	xPortalNet V1.6 Lite, xPortalNet V1.6 Standard, xPortalNet V1.6 Pro, xPortalNet V.16.5
18	Web Based	User xPortalWEB with Full Web Based UI and Online Monitoring Screen

Add On Modules Features

No.	Item	Features
1	CCTV Integration	With Major Brand DVR / NVR • Transaction Based Live Video Pop-Up • Active Recording Trigger of DVR / NVR Based on Configurable Transactions • Video Live on Floor Plan • Search Video through System Transaction Log
2	Guard Tour	Online Guard Tour System • 128 Routes Using Reader / Input Point • Alarm Generation
3	Visitor Management System	Visitor Tracking • Multi-Client Software for Visitor Registration and Tracking • Online Visitor Screen / Online Blacklist / Alarm • Interfacing to IC Reader / Passport Reader • Camera / Scanner Capture Support • Visitor Pass • Badge Card from Card Database with Auto Sign Out • Transaction Report
4	Photo Badging System	• Photo Badge Design / Template Creation • Automatic Photo Badge Image Creation by Card Holder Info
5	Multi Server System	• Server Application at Different Computers • Sync DB & Event Log with a Master Server
6	User Partitioning	OB / View Partition Assignment by System User
7	Web Time Attendance	• Web Browser Interface • Leave Management / through Web Browser

* The feature listed here are for the software only. It depends on the choice of the hardware system such as controller, I/O board, readers and computer system for it to work. Kindly contact our representatives for further specifications.

Ordering Information

No.	Item	Features
1	XP-SNet5-v4	IP 5 Door Sitter Controller
2	XP-SNet10-v4	IP 10 Door Sitter Controller
3	XP-SNet-ESD	5 Door Extension Board
4	XP-SNet-ESDR	32 Relay Output Extension Board
5	XP-SNet-ESDRI	24 Supervised Input / 8 Relay Output Extension Board
6	PIO-I24R	24 Supervised Input / 8 Relay Output Module for Alarm Monitoring
7	PIO-R24	24 Relay Output Module
8	PIO-LED	32 LED Driver Output Module (for Mimic Panel)
9	MR803	Door Interface Unit
10	Plaso-PR05	Proximity Reader
11	Plaso-PR0KLS	Proximity Reader with Touch Sense Keypad and Colour LCD
12	Plaso-C30MS	Mifare / CEPAS / Mifare Sector Reading Reader
13	Plaso-C30KLS	Mifare / CEPAS / Mifare Sector Reading Reader with Touch Sense Keypad and Colour LCD

No.	Item	Features
14	MPS-320	Power Supply Unit with Charger and Low Power Cutoff
15	MAG-400SMS	[illegible] EM Lock 400lbs
16	MAG-1000SMS	[illegible] EM Lock 1000lbs
17	MAG-PB15	[illegible] Wide Exit Button
18	MAG-MC	[illegible] Door Sensor
19	MPC-100	Proximity Card
20	MPC-576	Mifare Card 1KB
21	MCI-XPNETV1T6	xPortalNet v1.7 Security Management Software • Multi-Client • Based on .Net Technology
22	MCI-XPWEB	xPortalWEB Web Based Security Management Software • Web Based • Based on .Net Technology • Full Web Based Interface for System Management

For enquiries, please contact:

Configuring the System

The system is powerful and highly configurable, kindly contact our representatives to assist you to configure a system that suits your requirements.

Specifications subject to change without prior notice.

Plato Readers

Stylish and high quality card reader that provide flexible connectivity

Slim Card Reader

Model	Description
Plato PR01	Proximity Reader
Dimension	86mm (H) x 45mm (W) x 19mm (D)

Slim Card Reader

Model	Description
Plato CR01	Mifare / CEPAS / Mifare Sector Reading Reader
Dimension	86mm (H) x 37mm (W) x 19mm (D)

Slim Card Reader with Touch Sense Keypad & Colour Graphic LCD

Model	Description
Plato PR01LK	Proximity Reader
Plato CR01LK	Mifare / CEPAS / Mifare Sector Reading Reader
Dimension	95mm (H) x 57mm (W) x 19mm (D)

Remote Interface Module

Flexibly allows you to extend the capacity and distance

Door Interface Unit

MK801

Adds remote door interfacing capacity

No.	Item	Feature
1	Comm Port	2 RS485 1 to Controller 1 to Keyscan Readers
2	Relay Output	1 (Relay Rating : 1A)
3	Readers	2 (1 Entry / 1 Exit) Onboard RS485 Port For Connecting to Keyscan Readers & Wiegand / ABA Port For Connecting to 3rd Party Readers
4	Onboard Surge Suppressor	Yes
5	LED Indicator	Yes
6	Power Requirement	12V @ 0.5A

I/O Controller

PIO-L32

32 Mifare Panel LED Driver Module

No.	Item	Feature
1	Comm Port	1 RS485 (to Controller)
2	LED Driver Outputs	32 (20 mA)
3	Digital Input	2 (for interfacing with Key Switches)
4	Onboard Surge Suppressor	Yes
5	LED Indicator	Yes
6	Power Requirement	12V @ 0.5A

PIO-5248

Multi Purpose Alarm Panel - 24 In & Out Module

No.	Item	Feature
1	Comm Port	1 RS485 (to Controller)
2	Supervised Input	24 Able to detect line being bypassed, cut or triggered
3	Relay Output	8 (Relay Rating : 1A)
4	Onboard Surge Suppressor	Yes
5	LED Indicator	Yes
6	Power Requirement	12V @ 0.5A

PIO-R24

24 Relay Output Module

No.	Item	Feature
1	Comm Port	1 RS485 (to Controller)
2	Relay Output	24 (Relay Rating : 1A)
3	Onboard Surge Suppressor	Yes
4	LED Indicator	Yes
5	Power Requirement	12V @ 0.5A

MicroEngine®

Integrated Security Systems

M-Series IP Controllers

Better Configurability & Security

Encrypted IP . High Capacity . 16 Digits

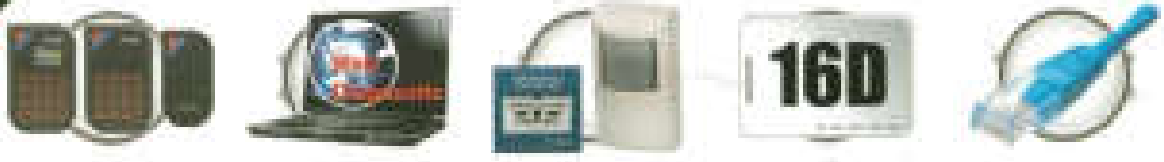
M2000i

2 Door IP Access Controller

- Direct IP LAN
- Encrypted IP
- High Capacity
- Supports Up to 16 Digits

M1000i

1 Door IP Access Controller

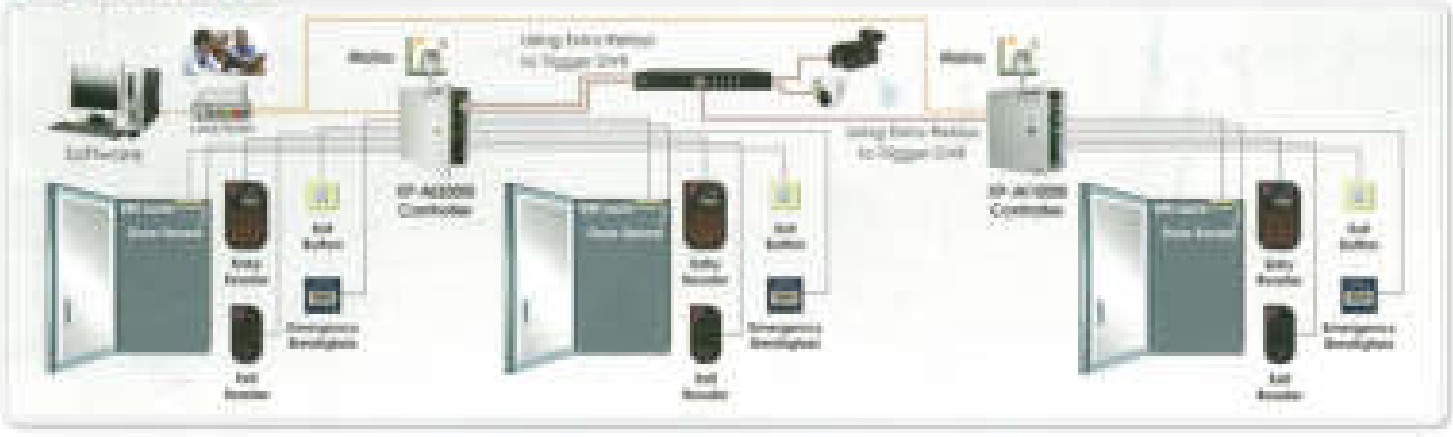


www.microengine.net

M-Series
IP Controllers

No.	Feature	XF-M1000	XF-M2000
1	No. of Door	1 Door	2 Doors
2	No. of Readers	Max 2 Readers (Proto Readers) - 1 Entry / 1 Exit	Max 4 Readers (Proto Readers) - 2 Entries / 2 Exits
3	Wiegand / ABA Reader	Yes - Max 2	
4	Connection to PC	IP LAN (10/100 Base-T) / RS485	
5	Connection to Reader	RS485 - Proto Reader Series / Wiegand/ABA	
6	Card Holders	10,000 (16 digits)	
7	Transactions	50,000	
8	Time Setting	NTP Time set & DST Time Zone (Net Access Level Limits)	
9	Holiday	32 (2 Sets)	
10	Inputs	9 Supervised/Digital (Switchable) - 1 Door Sensor + 1 Exit Button, 1 Dedicated Fire Alarm Input, 2 Configurable as Reader Tamper, Emergency Breakglass Monitor or General Purpose	10 Supervised/Digital (Switchable) - 2 Door Sensors + 2 Exit Buttons, 1 Dedicated Fire Alarm Input, 3 Configurable as Reader Tamper, Emergency Breakglass Monitor or General Purpose
11	Door Relay Output(s)	1	2
12	Form Relay Output(s)	Yes (1) - Configurable	Yes (2) - Configurable
13	Encrypted IP	Yes - 448 bit	
14	Global Anti-Passback	Yes - Use Door GAC	
15	Real Time Clock	Yes - with On Board Battery	
16	WAN Support	Yes - Support Dynamic IP	
17	Power Fail Monitor	Yes - with Power Level Monitoring	
18	Firmware Upgrade	Download from Software	
19	Diagnostic	Yes - Using Built-in Web Browser	
20	Onboard LED Indicators	Yes - Input, Output, Run, Diagnostic, Error	
21	Onboard Buzzer	Yes	
22	Use with other Vanderbilt controllers	Yes	
23	Processor	Microchip PIC32 - 32 bit RISC MCU at 80 MHz	
24	Memory	Program (FLASH): 512KB; DATA (SDRAM): 128KB; FLASH: 64MB	
25	PCB Board Dimension	160mm (L) x 80mm (W)	190mm (L) x 150mm (W)
26	Casing Dimension	235mm (H) x 223mm (W) x 75mm (D)	295mm (H) x 285mm (W) x 80mm (D)
27	Power Consumption	Typically 800 mA (Controller Board Only)	Typically 850 mA (Controller Board Only)

Configuration Diagram



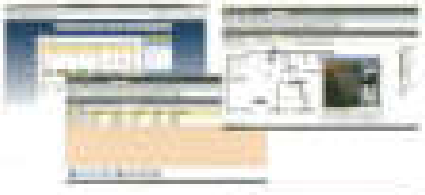
For enquiries, please contact:

Specifications subject to change without prior notice.

Proto Readers

Softwares

xPortalPro	Simple Time Attendance
xPortalPro/T	Datasnap Time Attendance
xPortalNet	Client/Server with SQL Server
xPortalWeb	Web based



MicroEngine®

Integrated Security Systems

xPortal3000

Multi Function Access Control System

Flexible • Efficient • Useful

- Mifare Sector Reading
- Standalone or Multi-Workstation
- Build-In Attendance System
- Car Park Access
- Reader with Keypad & Colour LCD
- Upgradable to be Used in Multi-Door Network System

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System Supporting Features

Plato - P80KLS / C80KLS
Slim Reader with Touch Sense Keypad, Colour Graphic LCD

Plato - P80S / C80S / C80MS
Slim Reader

XP-GT3500L / GT3500ABL
Reader with Touch Sense Keypad, Fingerprint, LCD & Built-in Controller & LAN

XP-GTR1500L / GTR1500ABL
Reader with Touch Sense Keypad, LCD & Built-in Controller & LAN

XP-M1000X / M1000ABX
Reader with Keypad, LCD & Built-in Controller

Hardware

- Proximity / Mifare / Mifare Sector ReadingTechnology
- Reader Unit with LCD & Keypad (Colour LCD Keypad Available - Plato)
- Built-in Controller Function for Memory & Time Control
- Supports Exit Reader Unit
- Support External I/O for Interfacing with CCTV / Sirens
- Keep Transactions Data even Power fails
- Encrypted IP Controller
- Can Program Directly at the Reader Keypad (or from PC Software)
- Can be Linked to PC through LAN / Direct Serial / RS485

Software

- Supports Time Set & Time Zones
- Supports Transaction Recording
- Supports Transaction Memory Retention
- Can Program Directly at the PC Software (or the Reader Keypad)
- aPortal3000 Software with Access Management Automatic Data Collection,Time Attendance Function, Client-Server Version Available
- Server Runs as a Windows Service
- Multi-Language

Time Attendance

- Designate Specific Reader for Attendance
- Support Attendance Door Group by Staff
- Configurable Export for Integration with Payroll System
- Configurable Shift Setting
- Supports Flexi Hour

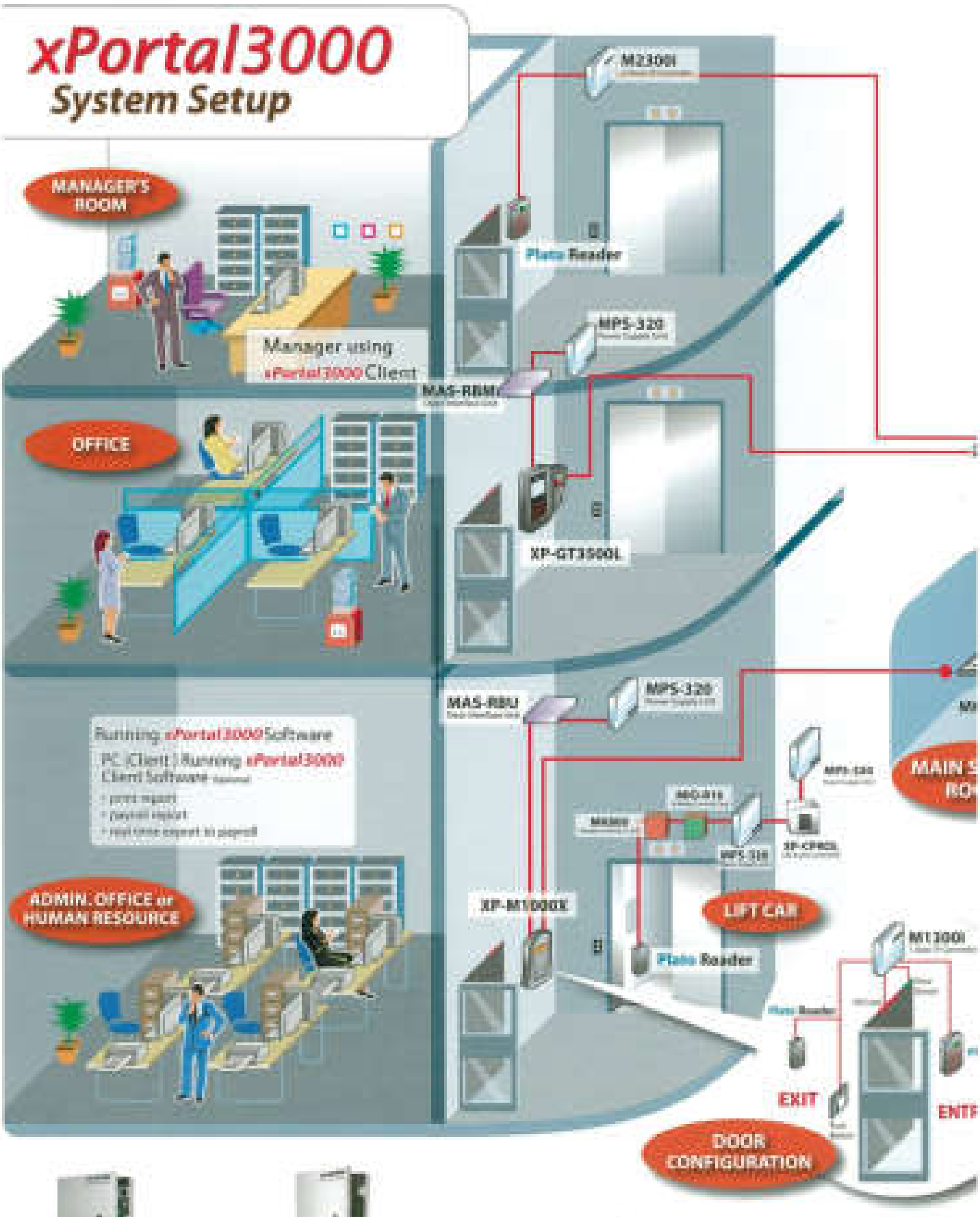
Car Park

- Supports 1 IN and 1 OUT Reader
- Supports Car Park Vehicle Counting and Control
- Supports Car Park Full Sign Activation

Fingerprint

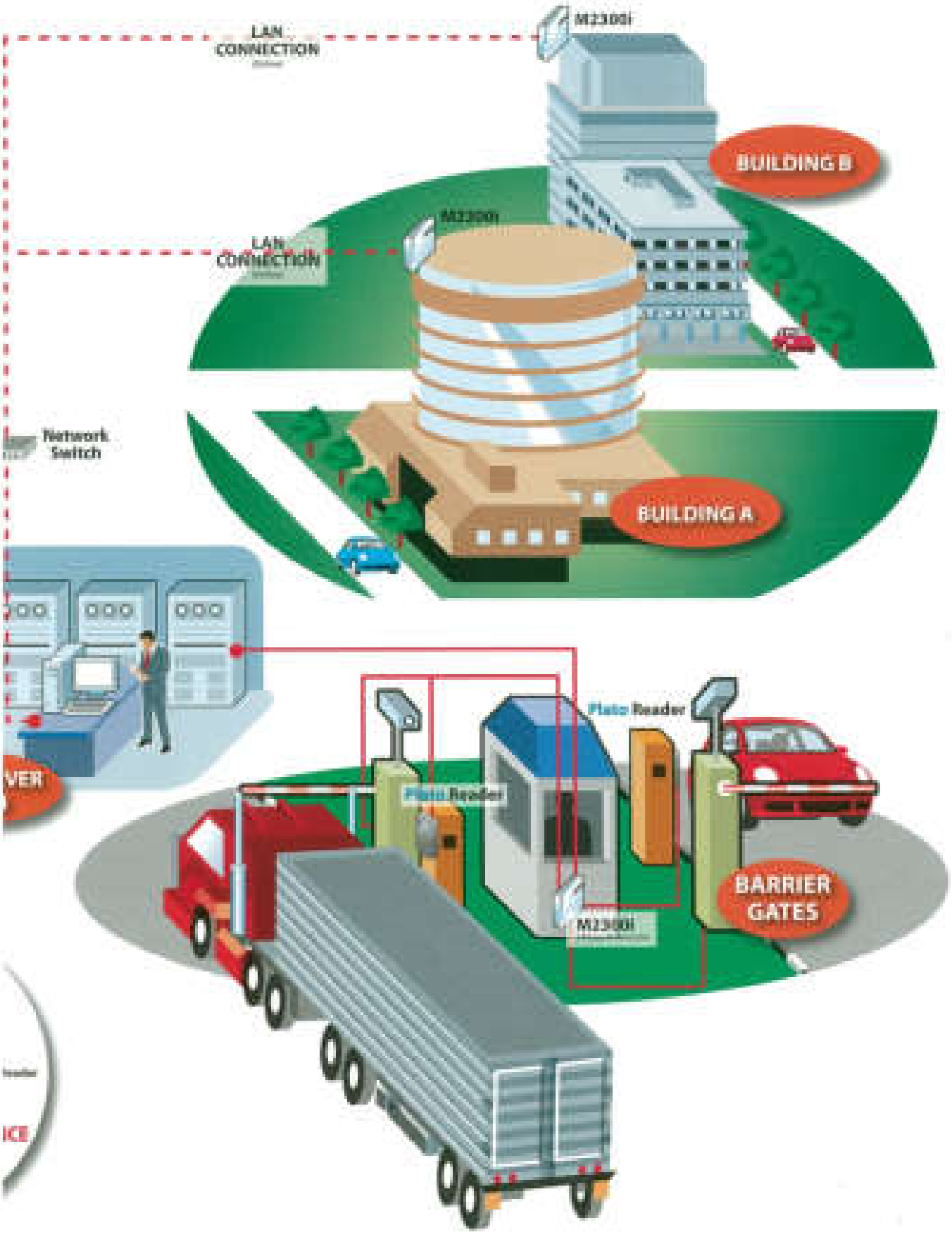
- Reliable Optical Fingerprint Sensor
- Supports Up to 3500 Templates
- Can be Used Together with Card Access System with Same Software
- Multiple Operating Modes - Fingerprint + Card + Pin Codes

xPortal3000
System Setup



M1300i
Encrypted IP 1 Door Access Controller

M2300i
Encrypted IP 2 Door Access Controller


LAN CONNECTION
M230SI
BUILDING B
M230SI
LAN CONNECTION
Network Switch
BUILDING A
Plate Reader
Plate Reader
M230SI
BARRIER GATES

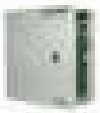
No.	Item	Feature	
		XP-GTR1500L / ABX Reader	XP-GT3500L / ABX Reader
1	Card User Memory	1,500	3,500
2	Transaction Records	10,000	20,000
3	Single Unit Reader, Keypad & Controller	Yes	
4	Built-in Card Reader	Yes - RM Card (Mifare Card / CEPAS Model Available)	
5	Access Operation Mode	Card Only, PIN Only, Card + PIN	Card Only, Card + PIN, Fingerprint, Card + Fingerprint, PIN + Fingerprint, Card + PIN + Fingerprint
6	Fingerprint Template Capacity 1:N	Yes	3000 1,2000
7	Display	128 x 64 Graphic Display with Back Light	128 x 64 Graphic Display with Back Light
8	Keypad	Touch Sense Keypad with Back Light	Touch Sense Keypad with Back Light
9	Time Set & Time Zone	Yes	Yes
10	Holiday Dates	50	
11	Door PIN	10 Sets	
12	Built-in Real Time Clock with Battery	Yes	
13	Car Park Mode External Entry Reader	Yes	No
14	Exit Reader	Yes	Yes - Use MAS-RBM to connect the Entry and Exit Unit
15	Exit Push Button	Yes - with Time Zone Control	
16	Support Wiegand 26 bit Reader	Yes	
17	Anti Passback	Yes	
18	Controller Operation Mode	Access Control Mode	
19	Supports Programming Through Keypad & LCD at the Reader	Yes	
20	Lock Control, Door Sensor & Exit Button Input	Yes - Through MAS-RBM / MAS-RBU Located Inside the Door	
21	Configurable Lock Release Time	Yes - 0-99 secs	
22	Configurable Door Open Time	Yes - 0-99 secs	
23	Auto Lock Release Time Zone	Yes	
24	Sensor & Output	No	No
25	Data Flash Memory	128Mbit	64Mbit
26	Onboard Buzzer	Yes	
27	Communication Ports	RS485 / LAN	RS485 / LAN
28	Can be Linked to PC for Software Control	Yes	
29	Power	12VDC	
30	Dimension	152mm (H) x 123mm (W) x 32mm (D)	171mm (H) x 158mm (W) x 45mm (D)

Ordering Information

No.	Item	Feature
1	XP-GT1500L	Fingerprint Proximity Reader with LCD & Keypad + ABX Built-in Controller Functions, 1,500 Users, 20,000 Transactions, TimeKeeping
2	XP-GT1500L/ABX	Fingerprint, Mifare / CEPAS Reader with LCD & Keypad + ABX Built-in Controller Functions, 1,500 Users, 20,000 Transactions, TimeKeeping
3	XP-GTR1500L	Proximity Reader with LCD & Touch Sense Keypad + LAN 1,500 Card Users, 10,000 Transactions
4	XP-GTR1500L/ABX	Mifare / CEPAS Reader with LCD & Touch Sense Keypad + LAN 1,500 Card Users, 10,000 Transactions
5	XP-R2000	Proximity Reader
6	XP-R2MF1	13.56MHZ R/W Serial No. Reader with ABX Casing
7	MAS-RBU	Lock Relay Unit for M1300I & G1R
8	MAS-RBM(T)	Door Interface Unit for XP-GT2500 Fingerprint Reader
9	MO-XPC3000/S	Standalone Software License for Controlling Up to 64 Doors of XP-M1000N, XP-G1T1000L, XP-G1R1500L, XP-1PR0 Controller
10	MO-XPC3000	ePortal3000 Client / Server Software License Max 3 Client Max 128 Doors Max 64 Controllers per Software
11	MPS-300	3A Power Supply Unit with Low Power Cut-off
12	MPC-100	Proximity Card
13	MPC-318	Mifare Standard 1K Card
14	XP-M1000	Encrypted IP 1 Door Access Controller (10,000 Card User)
15	XP-M1500	Encrypted IP 1 Door Access Controller (50,000 Card User)
16	XP-M2000	Encrypted IP 2 Door Access Controller (10,000 Card User)
17	XP-M2500	Encrypted IP 2 Door Access Controller (50,000 Card User)
18	Plato-P800	Proximity Reader (Serial)
19	Plato-P800LD	Proximity Reader with Touch Sense Keypad & Colour LCD (Serial)
20	Plato-C800	Mifare / CEPAS Reader (Serial)
21	Plato-C800AS	Mifare / CEPAS Reader with Enhanced Antenna (Better Performance)
22	Plato-C800LD	Mifare / CEPAS Reader with Touch Sense Keypad & Colour LCD

Computer Requirements

No.	System	Requirement
1	CPU (Recommended)	Intel Core i5-3330, 3.0 GHz or Higher
2	RAM (Minimum)	4 GB
3	OS	Microsoft Win7/8/10 Pro, 2003/2008 Server (Home/Starter/Single Language Edition) Not Supported)
4	Microsoft.Net Framework	Yes (Version 3.5)
5	Ethernet & Serial Port	Yes
6	USB Port	Yes
7	Display (1024 x 768 x 16 bit colours)	Yes
8	Mouse / Keyboard	Yes
9	Hard Disk Drive Space	50 GB



M1300I
Encrypted IP 1 Door Access Controller

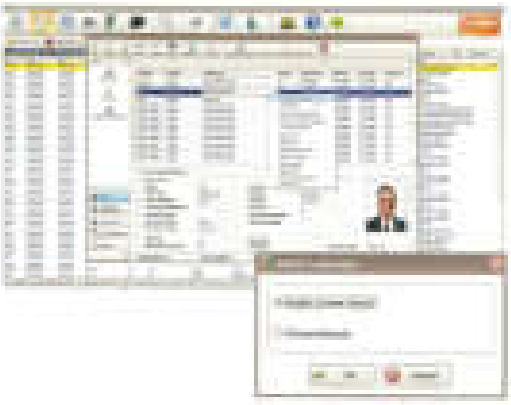
M2300I
Encrypted IP 2 Door Access Controller

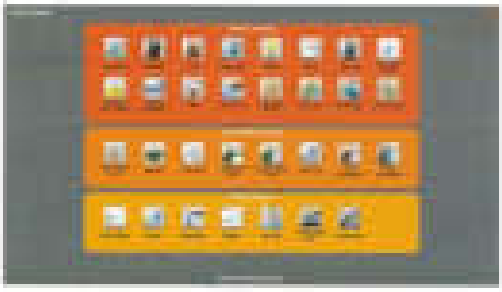
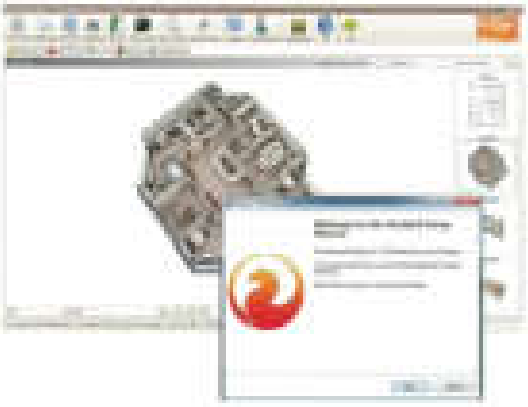
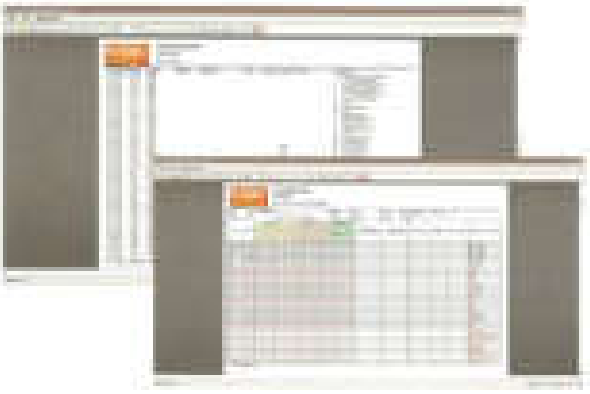
Plato Reader Series

ePortal3000 is a highly configurable software. You are advised to contact our authorised representatives to configure the system that meet your requirements.

For enquiries, please contact:

Specifications subject to change without prior notice.



xPortal3000 Features

No.	Item	xPortal3000 Feature		
		Free	xPortal3000/3	xPortal3000
1	Operating System	Windows XP Pro, Vista, Win 7, Windows Server 2003/2008 or Compatible (Microsoft .Net Framework v3.5 Required)		
2	Max No of Controllers / Doors	8 / 16	32 / 64	64 / 128
3	Controller Supported	Bridge, XP-EX1000, XP-MY4000, XP-GT2200, XP-GT1200, XP-C2000, XP-C1901 Multi-Door Controllers, XP-EX1000 & XP-EX2000 Encrypted IP Controller		
4	Card Holder	1,000	10,000	10,000
5	Transaction Records	Limited by Disk Space		
6	Server as Windows Service	Yes		
7	Time Set & Time Zone	255		
8	Holiday Zones	90		
9	Access Levels	255		
10	Anti-Passback	Yes		
11	Automatic Transaction Retrieval	Yes		
12	Password Controlled Software User	Yes		
13	User Defined PIN Selection	Yes		
14	Daily Attendance Reporting	Yes - Simple Single Day Daily Mode, Late-In, Absent, Total Work Time, OT, Fixed Hour		
15	Monthly Attendance Reporting	Yes - Summary of Attendance Status		
16	Who's Still In Report	Yes - Multiple Door Selection		
17	Add Controller Wizard	Yes		
18	Dynamic Floor Plan	Yes		
19	Online Events Viewing	Yes		
20	Online Help	Yes		
21	Database	FireBird		
22	Communication Link to PC	Serial RS485 or IP		
23	Multi-Workstation	No	No	Yes - Max 5
24	Multi-Language by System User	No	Yes	Yes
25	System User	Use Default only	Can Add New System User	Can Add New System User
26				
27	System User Menu Access Setting	No	Yes	Yes
28	Scheduled Backup	No	No	Yes
29	Scheduled Attendance Rebuild	No	No	Yes
30	Lift Access	No	Yes	Yes
31	Floor Plan Thumbnail	No	No	Yes
32	Advanced Floor Plan Icon Setting	No	No	Yes (Can Resize, Rotate & Change Label Position)
33	Multi-Database	No	No	Yes