

MicroEngine®

Integrated Security Systems

xPortalNet v1.5

Web-Based Security Management System

Controller with Modem and LAN Enabled
Multi-Workstation Software Management System

Access Control >> Door Access • Lift Access • Car Park Access • Visitor Management

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 • Overnight Shift • CCTV Integration

Connectivity >> RS232 • RS485 • Modem • IP LAN • PoE • SMS • WAN



xPortalNet - Web-Based Security Management System

CCTV Integration

- Tightly integrated to MicroEngine's line of DVRs for viewing and capturing purposes. DVRs and CCTVs will be shown on the floor plan to ease identification and management.

Alarm Monitoring

- Supports up to 512 inputs / 256 outputs / 256 LED Mimic outputs with event programming. User notification can be achieved through client applications, email and SMS for maximum flexibility.

Lift Controller

- Control of up to 96 floors per lift. Support multiple lobby implementation for large scale projects.



Time Attendance

- Comprehensive configurations to allow the maximum flexibility in shift and allowance settings. Supports multiple and overnight shifts. Allow for further customisations to suit customer's requirements.

Visitor Management System (VMS)

- Integrated VMS module to enable tracking, control and recording of visitors.

Floor Plan

- Comprehensive floor plan control to enable easy viewing and control device of status.

Multiple Workstation

- Supports multiple workstation using distributed architecture. Users can login from any workstation on the network via the client application or the web browser.



Web Server Support

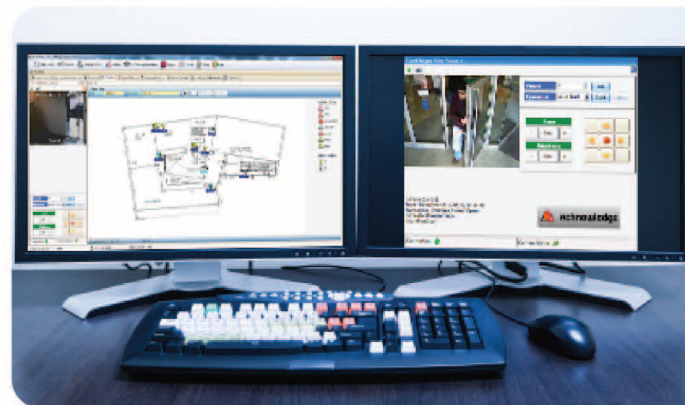
- IIS6 / IIS7 with ASP.NET allows user to login using the web browser from any part of the world.

Multiple Connectivity

- Devices can be connected to the Server via RS232, RS485 or via LAN / WAN. Supports up to 1024 doors.

Mobile Device Support

- Allows user login through mobile devices using the Microsoft .NET Compact Framework.



Event Recording

- You can configure up to 30 event types to associate with a card transaction for a more comprehensive event recording. Events will be associated when the event number is keyed in before flashing the card.

Fingerprint Login

- Supports for fingerprint based login on top of user ID and password for higher level security.

Configurable Security Mode

- Allows settings to be made on a card to card basis for maximum flexibility. Security mode can be any combination of card, pin and fingerprint validation. Also supports dual validation mode for added security.

Configurable Remoting Port

- Configurable Port Number settings to adapt to site firewall configurations.

Software User Level Control

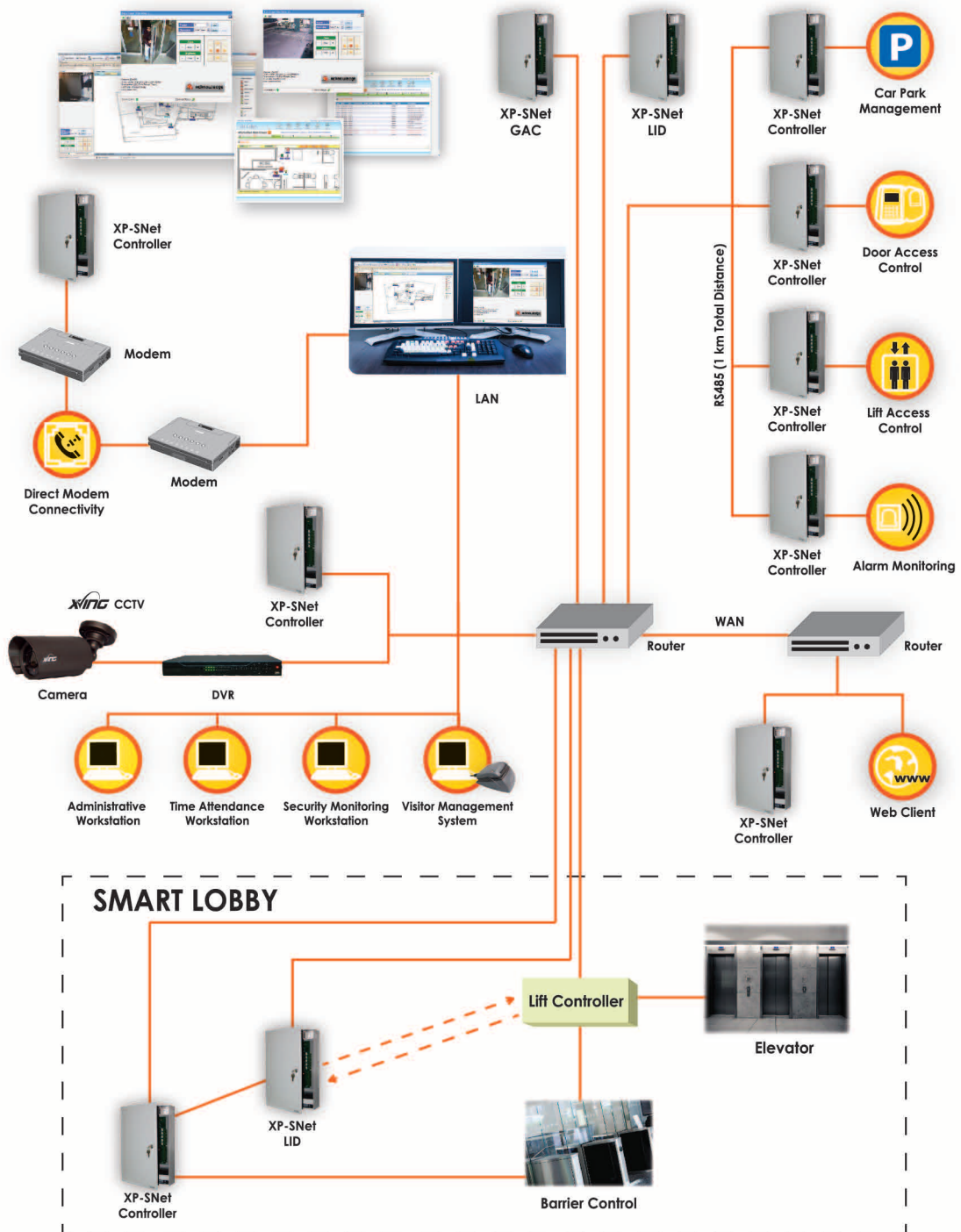
- Each user can be assigned with a particular software access level to ease the management of user access rights. Access level can be configured in terms of menu access as well as actions allowed.

Better System User Control

- Built in features including password expiry checking, wrong password lockout and temporary suspension for better user control.



Configuration Diagram



PoE



No.	Feature	Function			
		xPortalNet Life	xPortalNet Standard	xPortalNet Pro	xPortalNet IS
1	CCTV Integration - Panasonic (live preview, event trigger, live recording, screenshot, searching, playback, devices' status monitoring, CCTV alarm integration, PTZ Control, pre and post event playback, PTZ preset activation by event/ manual) - Hikvision (live preview, event trigger) - Dahua	No	No	Yes 4 4 4	Yes 4 4
2	Data Partitioning (configurable door/ staff that can be viewed and managed, hiding unauthorised data for selection and control)	No	Yes	Yes	Yes
3	API	No	No	No	Yes
4	No. Of Concurrent Client Access	3	3	5	5
5	Max. No. Of Concurrent Client Access (Optional)	-	10	20	20
6	Visitor Management	No	Yes	Yes	Yes
7	Badging	Optional			
8	Guard Tour	Yes			
9	Remote Communication Gateway	Optional - Required after 200 connections created at the server. Each Remote Communication Gateway adds another 100 connections.			
10	Multi-Tiered/ Multi-Threaded Design"	Yes			
11	Database	MS SQL Server (Note: Limited database & memory size if using MS SQL Server Express and system may not function well for larger installation)			
12	Oracle	No	No	Optional	Optional
13	Access Control	Yes			
14	Car Park Access	Yes			
15	Lift Access	Yes			
16	Alarm Monitoring	Yes			
17	Door Monitoring	Yes			
18	Time Attendance	Yes			
19	Card User Capacity	100,000	100,000	200,000	200,000
20	Controller Supported	XP-SNet5, XP-SNet10, XP-P1000i, XP-M1000i, XP-M2000i, XP-GTR1200L/CPX, XP-GT3200L/CP			
21	Connectivity	LAN/ RS485			
22	Data Change Audit Trail	Yes			
23	Data Download Activity Logging	Yes			
24	Software User Command Control	Yes			
25	Interactive Floor Plan with Auto-Swithing	Yes			
26	Fixed Shift Attendance System	Yes			
27	Who's Still In Reporting Configurable by Door Group	Yes			
28	Door Access Level	255			
29	Time Zone	255			
30	Time Set (3 intervals)	255			
31	Holiday	30			
32	Floor Zone	255			
33	Floor Access	255			
34	Live Firmware Download	Yes			
35	Spot Monitor Support	No	3	3	3
36	System User Password (min. 8 characters, expiry date control)	Yes			
37	High Level Lift Interfacing	Yes - Using SNET-LID			
38	Global Antipassback	Yes - Using SNET-GAC			
39	Server runs as Windows Service	Yes			
40	Fire Alarm Door Release by Door Group	No	No	Yes	Yes
41	Configurable Card Number	6 to 16 digits			
42	Email and sms notification	Yes			
43	Configurable transaction export (Real Time or manual)	Yes			
44	Selective Download to speed up download time	Yes			
45	Push Based Event Upload	Yes			
46	Bulk Download	Yes			
47	Encrypted Messaging	Yes			
48	Device Discovery	Yes			
49	System Info Summary	Yes			
50	Device Diagnostic	Yes			



SNet - Encrypted IP Based Multi-Door Integrated Security Controller

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.

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.

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.

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.

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.

SNet Controller

SNet 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 (As Door Status or General Purpose)
4	IP	Yes - LAN 100 Base-T
5	Reader	<ul style="list-style-type: none"> • MicroEngine Plato Readers : Max 10 (5 Entry + 5 Exit) • Wiegand / ABA Readers : Max 5
6	Comm Port	Yes <ul style="list-style-type: none"> • RS485 to Remote Interface Module • RS485 to Extension Boards with Output Mirroring
7	Card Number Length	Up to 16 Digits
8	Max Card DB	40,000 / 100,000 / 200,000 *
9	Max Transaction DB	100,000 / 200,000 / 200,000 *
10	Time Zone	255
11	Time Set	255
12	Floor Zone	255
13	Global Anti-Passback	Yes
14	Interlocking	Yes
15	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
16	IP Messaging Encryption	Yes - AES128
17	Alarm Monitoring Support	Yes
18	Extension	Up to 3 Extension Boards : SNet-E5D : 5 Door Extension Board SNet-E32R : 32 Relay Output Board SNet-E248S : 24 Supervised Input & 8 Relay Output Board <u>Max Extension Capacity :</u> 5 Doors / 128 Inputs / 128 Outputs
19	Support Remote Interface Module	Yes - Use RS485 <u>Door Interface Unit (Max 10) :</u> MK801 Reader Interface <u>I/O Controller (Max 10) :</u> MiO-S168 – 16 Supervised Inputs / 8 Outputs MiO-R16 – 16 Relay Outputs MiO-L32 – 32 LED Driver for Mimic Panel Use <u>Max Remote Capacity :</u> 10 Doors / 160 Inputs / 160 Outputs
20	Processor	ARM RISC Dual-Core Processor at 72MHz
21	Power Requirement	12V @ 500mA (Base Board Only)
22	Onboard LED / Buzzer	Yes
23	Remote Firmware Update	Yes - can be done through application software at site.
24	Controller Package PSU	12VDC @ 5A with 12AH Battery

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-GAC - Live Global Antipassback

Add support Global Antipassback by cluster



No.	Item	Feature
1	Connectivity to Controller	TCP/IP (Max 128 doors per cluster)
2	Real Time Location Update	Yes. GAC as centralized look up device with immediate location info update. Readers at other doors immediately obtained the latest location info of the card user. No waiting time required for data synchronization between controller.
3	Power Requirement	12V @ 2A

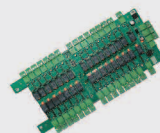
SNet-LID - Lift Interfacing Device

Add support for High Level Interfacing to Selected Lift Brand

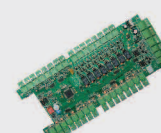


No.	Item	Feature
1	Communication to Lift Controller	By TCP/IP
2	Default/Auto Floor	Yes
3	Manual Floor	Yes
4	Multi Lift Controller	Up to 4
5	Power Requirement	12V @ 2A

I/O Extension Board



SNet-E32R
32 Relay Output
Extension Board



SNet-E248S
24 Supervised Input
& 8 Relay Output
Extension Board

* Depending on Model

Plato Readers



Slim Card Reader

Model	Description
Plato-P80S	Proximity Reader
Plato-C80S	Mifare / CEPAS Reader



Slim Card Reader with Touch Sense Keypad & Colour Graphic LCD

Model	Description
Plato-P80KLS	Proximity Reader
Plato-C80KLS	Mifare / CEPAS Reader



Encrypted IP Controllers



P1000i
Single Door IP PoE
Access Controller



M1000i
Single Door IP
Access Controller



M2000i
Two Door IP
Access Controller

Computer Requirements

Server

No.	System	Software Model	
		Minimum	Recommended
1	CPU (Minimum)	Pentium IV 2.4Ghz	Xeon E5506 2.13Ghz
2	RAM (Minimum)	8 GB	16GB
3	OS	Microsoft Windows 2008 Server 64 bit	Microsoft Windows 2008 / 2012 Server 64 bit
4	Microsoft.Net Framework v2.0	Yes	
5	Microsoft SQL Server 2008	Yes - at least Standard Edition	
6	Ethernet	Yes	
7	Serial Port	Yes	
8	Display (1024 x 768 x 16 bit colours)	Yes	
9	Mouse/Keyboard	Yes	
10	UPS (Recommended)	Yes	
11	Hard Disk (Minimum Free Space)	300 GB	500 GB
12	USB Port	Required for Software Key	

PC Client

No.	System	Requirement
1	CPU (Recommended)	Intel Core 2 Duo E8400, 3.0 GHz or higher
2	RAM (Minimum)	2 GB (3 GB Recommended)
3	OS	Microsoft Win7/Win8 Pro, 2003/2008 Server
	Microsoft.Net Framework v2.0	Yes
4	Ethernet	Yes
5	USB Port / Serial Port	Optional (Required for USB desktop reader / serial port card reader)
6	Display (1024 x 768 x 16 bit colours)	Yes
7	Mouse / Keyboard	Yes
8	Hard Disk (Free Space)	50 GB

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.

Order Information

No.	Product Code	Requirement
1	XP-SNet5	IP 5 Door SNet Controller
2	XP-SNet10	IP 10 Door SNet Controller
3	XP-SNet-E5D	5 Door Extension Board
4	XP-SNet-E32R	32 Relay Output Extension Board
5	XP-SNet-E248S	24 Supervised Input / 8 Relay Output Extension Board
6	XP-M2000i	Encrypted IP 2 Door Controller
7	XP-M1000i	Encrypted IP 1 Door Controller
8	XP-P1000i	Encrypted IP PoE 1 Door Controller
9	MiO-S168	16 Supervised Input / 8 Relay Output Alarm Controller
10	MiO-R16	16 Relay Output Controller
11	MiO-L32	32 LED Driver Controller (for Mimic Panel)
12	MK801	Door Interface Unit
13	Plato-P80S	Proximity Reader
14	Plato-P80KLS	Proximity Reader with Touch Sense Keypad & Colour LCD
15	Plato-C80S	Mifare / CEPAS Reader
16	Plato-C80KLS	Mifare / CEPAS Reader with Touch Sense Keypad & Colour LCD
17	xPortalNet Lite	xPortalNet Lite Software c/w 1 USB Key (Special Edition) 3 Client Version, Upto 200 connections Runs on Microsoft SQL Server Database
18	xPortalNet Std	xPortalNet Standard Software c/w 1 USB Key 3 Client Version, Upto 200 connections With Data Partitioning
19	xPortalNet /RC	xPortalNet Remote Communication Gateway Add 100 connections capacity to xPortalNet Load balancing for more robust operation Runs on Windows Server 2008/2012 64 bit
20	XP-GTR1200L	IP Proximity Reader with Touch Sense Keypad
21	XP-GT3200L	IP FingerPrint + Prox Reader with Touch Sense Keypad
22	XP-GTR3200LCPX	IP Mifare + CEPAS Reader with Touch Sense Keypad
23	XP-GT1200LCPX	IP FingerPrint + Mifare + CEPAS Reader with Touch Sense Keypad

For enquiries, please contact:

Specifications subject to change without prior notice.