

MicroEngine®

Integrated Security Systems

xPortalNet

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

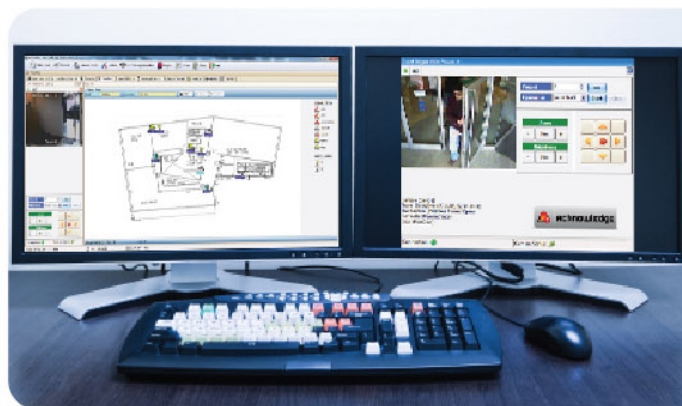
- IIS6 / IIS7 with ASP.NET allows user to login using the web browser from any part of the world.

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

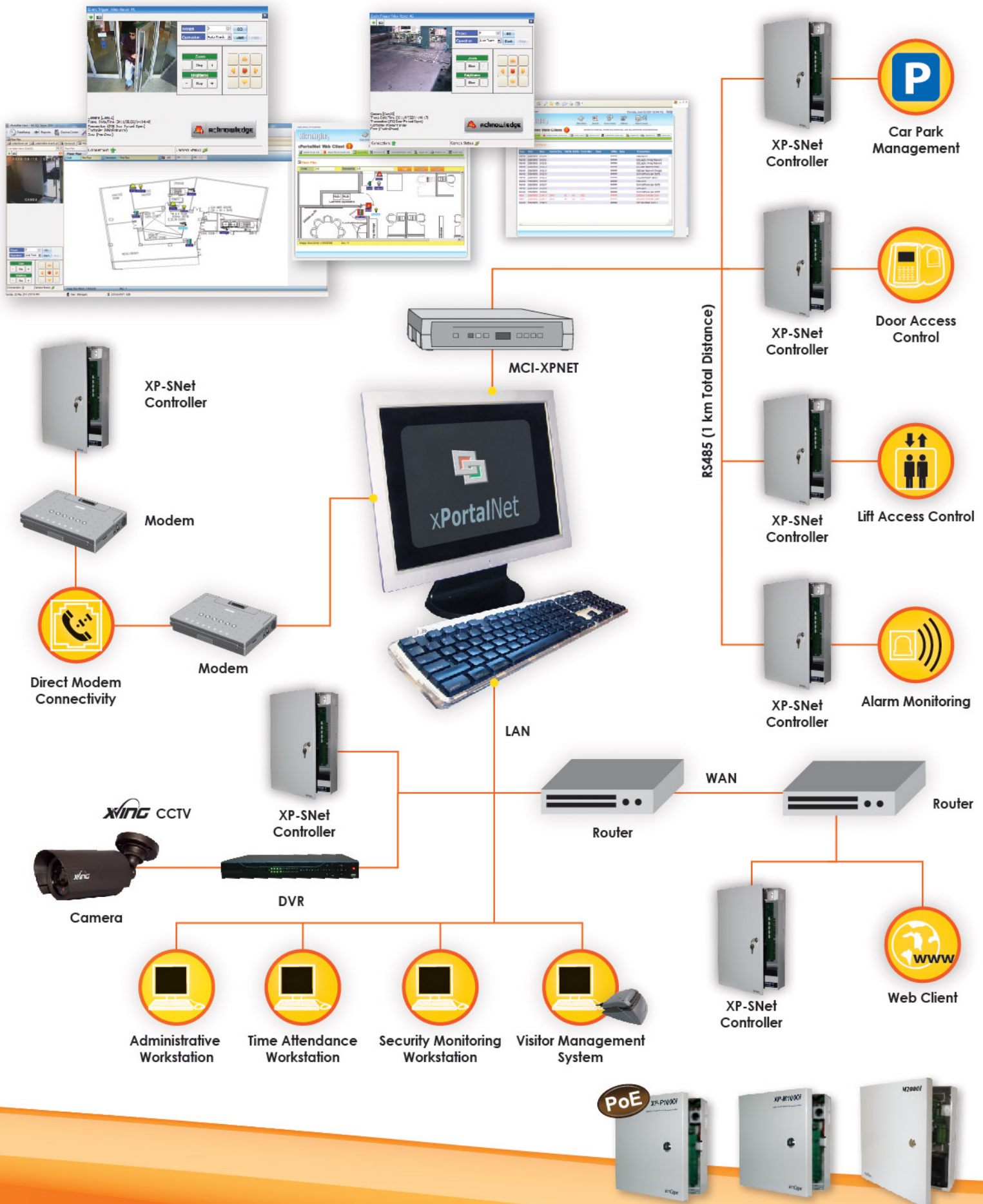
- Each user can be assigned with a particular software access level to ease the management of user access rights. Access level can be configured in terms of menu access as well as actions allowed.

Better System User Control

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



Configuration Diagram



No.	Feature	Function			
		xPortalNet/3SE	xPortalNet/3S	xPortalNet/5	xPortalNet/7
1	Architecture - Multi-Workstation with xPortalNet, Application Server, Multi-Tiered / Multi-Threaded Design	Yes			
2	No. Concurrent Client Access in the standard package	3 - Winforms Only	3 - Winforms Only	5 - Winforms & ASP.NET	10 - Winforms & ASP.NET
3	Maximum No. of Concurrent Client Access through Upgrade	3	10	20	100
4	Server Computer - Windows 7 / 8 Pro - Windows 2003 / 2008 Server	Yes	Yes	No	No
5	Client Computer - Windows XP / 7 / 8 / Vista Pro	Yes			
6	IIS Web Server	No	No	Yes	Yes
7	xPortalNet Multi-Site Server Support	No	No	No	Yes - Max. 16 Sites
8	Database Oracle Database Support	Microsoft SQL Express No	Microsoft SQL Server 2008 Optional	Microsoft SQL Server 2008 Optional	Microsoft SQL Enterprise Server Optional
9	Relational Database Design	Yes			
10	Access Control	Yes			
11	Car Park Access	Yes			
12	Lift Access	Yes			
13	Alarm Monitoring	No	Yes	Yes	Yes
14	Time Attendance	Yes			
15	Guard Tour	No	Yes	Yes	Yes
16	Visitor Management	No	Yes	Yes	Yes
17	Car Park Management	No	Yes	Yes	Yes
18	CCTV Integration	No	No	Yes	Yes
19	Device Capacity	128 Doors, 128 Controllers, 128 Inputs, 64 Outputs	256 Doors, 256 Controllers, 512 Inputs, 256 Outputs	1024 Doors, 1024 Controllers, 1024 Inputs, 512 Outputs	1024 Doors, 1024 Controllers, 4096 Inputs, 2048 Outputs
20	Card User Capacity	20,000	50,000	100,000	200,000
21	Controller Supported	Yes			
22	XP-SNet5, XP-SNet10, XP-P1000i, XP-M1000i, XP-M2000i XP-GTR1200L/CPX, XP-GT3200L/CPX				
23	Connectivity	RS485, RS232, LAN, Modem Dial-up	RS485, RS232, LAN, 1 Modem Dial-up with Call Back	RS485, RS232, LAN, 3 Modem Dial-up with Call Back	RS485, RS232, LAN, Modem Dial-up with Call Back
24	Schedule Dial-Up	No	No	Yes	Yes
25	Card History Information	No	No	Yes	Yes
26	FingerPrint Login Support	No	Yes	Yes	Yes
27	Software User Activity Logging	Yes			
28	Software User Modify Database Logging	Yes - Summary	Yes - Record Date Value Changed	Yes - Record Date Value Changed	Yes - Record Date Value Changed
29	Software User Download Setting Logging	Yes			
30	Software User Command Usage Control - Default : Administrator, SuperUser, Manager, Security Manager, Security Officer Can be Configured Manually	Yes			
31	Use Integrated Windows Authentication	No	No	Yes	Yes
32	Interactive Floor Plan with Auto-Switching	Yes			
33	System Inventory Management	No	No	Yes	Yes
34	Fixed Shift Attendance System	Yes			
35	Support OptimizeHR Integration - Payroll, Auto-Shift Attendance System, HR Management	No	Yes	Yes	Yes
36	Who is Still IN Reporting Configurable by Door Group	Yes			
37	Door Access Level	255	255	1024	4080
38	Time Zones	255	255	255	4080
39	Time Sets (3 Intervals)	255	255	255	4080
40	Holiday Dates	30			
41	Floor Zones	255			
42	Floor Access	255			
43	Controller Setting Retrieval	Yes			
44	Firmware Download	Yes			
45	Spot Monitor Support	No	No	Yes	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.

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.

SNet Controller

SNet Features

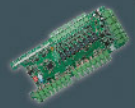
SNet 5 Base Controller



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 4 Extension Boards : SNet-E5D : 5 Door Extension Board SNet-E32R : 32 Relay Output Board SNet-E32S : 32 Supervised Input Board SNet-E248S : 24 Supervised Input & 8 Relay Output Board Max Extension Capacity : 5 Doors / 128 Inputs / 128 Outputs
19	Support Remote Interface Module	Yes - Use RS485 Door Interface Unit (Max 10) : MK801 Reader Interface I/O Controller (Max 10) : MiO-S168 – 16 Supervised Inputs / 8 Outputs MiO-R16 – 16 Relay Outputs MiO-L32 – 32 LED Driver for Mimic Panel Use Max Remote Capacity : 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

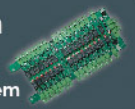
Add another 5 door support to the controller system, becomes a 10 door controller



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-E32R - 32 Relay Output Extension Board

Add support for lift 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-E32S - 32 Supervised Input Extension Board

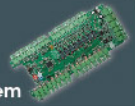
Add support for supervised alarm inputs system



No.	Item	Feature
1	Supervised Inputs	32 Able to detect line being bypassed, cut or triggered
2	Onboard Surge Suppressor	Yes
3	Power Requirement	12V @ 2A
4	Communication to Base Board	RS485
5	LED Indicator	Yes

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

Add support for supervised alarm inputs and Output system



No.	Item	Feature
1	Supervised Inputs	24 Able to detect line 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

* Depending on Model

Plato Readers



Slim Card Reader

Model	Description
Plato-P80	Proximity Reader
Plato-C80	Mifare / CEPAS Reader



Slim Card Reader with Touch Sense Keypad

Model	Description
Plato-P80K	Proximity Reader
Plato-C80K	Mifare / CEPAS Reader



Slim Card Reader with Touch Sense Keypad & Colour Graphic LCD

Model	Description
Plato-P80KL	Proximity Reader
Plato-C80KL	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)	4 GB	32-bit OS - 4 GB 64-bit OS - 8 GB Win Server - 16GB
3	OS	Microsoft Win7 Pro, Win8 Pro, 2003/2008 Server	Microsoft Windows 2003 / 2008 Server
4	Microsoft.Net Framework v2.0		Yes
5	Microsoft SQL Server 2008		Yes
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
4	Microsoft.Net Framework v2.0	Yes
5	Ethernet	Yes
6	USB Port / Serial Port	Optional (Required for USB desktop reader / serial port card reader)
7	Display (1024 x 768 x 16 bit colours)	Yes
8	Mouse / Keyboard	Yes
9	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-P80	Proximity Reader
14	Plato-P80K	Proximity Reader with Touch Sense Keypad
15	Plato-P80KL	Proximity Reader with Touch Sense Keypad & Colour LCD
16	Plato-C80	Mifare / CEPAS Reader
17	Plato-C80K	Mifare / CEPAS Reader with Touch Sense Keypad
18	Plato-C80KL	Mifare / CEPAS Reader with Touch Sense Keypad & Colour LCD
19	xPortalNet /3 SE	xPortalNet Software c/w 1 USB Key (Special Edition) 3 Client Version SQL Express Database
20	xPortalNet /3	xPortalNet Software c/w 1 USB Key 3 Client Version Runs on Microsoft SQL Server Database
21	xPortalNet /5	xPortalNet Software c/w 1 USB Key 5 Client Version Web Browser Access Runs on Microsoft SQL Server Database
22	XP-GTR1200L	IP Proximity Reader with Touch Sense Keypad
23	XP-GT3200L	IP FingerPrint + Prox Reader with Touch Sense Keypad
24	XP-GTR3200LCPX	IP Mifare + CEPAS Reader with Touch Sense Keypad
25	XP-GT1200LCPX	IP FingerPrint + Mifare + CEPAS Reader with Touch Sense Keypad

For enquiries, please contact:

Specifications subject to change without prior notice.