

# Control entry Operating System

Security  
Access Control  
Energy  
Solutions

**CeOSnet<sup>®</sup>** is the next generation of Industrial and Commercial controls for the security industry.

**CeOSnet<sup>®</sup>** provides enhanced Scalability flexibility and competitiveness in the Security market place.

**CeOSnet<sup>®</sup>** is a Software and Hardware system encompassing Multi-Build architecture in its intelligent Universal Processing Controllers.



## System Overview

### Software

The software has been designed as both an **end user and administrator tool** for the management of the **CeOSnet<sup>®</sup>** Access Control hardware and software resources.

The **software** is based on the Microsoft Dot Net framework and utilizes a structure similar to Windows Outlook/Express providing a recognizable easy to use office platform.

### Hardware

The **hardware** is product specific meaning that it is designed and made for the application.

The **hardware** is based on the Intelligent **Universal Process Controller** known as a **UPC**.

A **UPC** can be used as an **Intelligent Door**, **Intelligent Lift**, **Intelligent Alarm** or an **Energy management** controller.

The design is based on a Multi-Build **UPC** architecture within a system.

The flexibility of the **UPC** comes through its system **Agility** and **Scalability** providing adaptability to a wide range of applications and Projects.

### Agility

**CeOSnet<sup>®</sup>** **UPC** have been designed around an **open configuration** concept that provides flexibility and adaptability to changing market forces.

Through **open configuration** the **UPC** can be issued with it's operating parameters and not be limited to pre-defined hardware constraints.

### Scalability

**CeOSnet<sup>®</sup>** provides the solution to resource allocation through scalability.

Once a **UPC** has been configured its resources can be allocated through scaling the devices it will serve.

This can be recognised in designing an Access Control system for say 24 doors.

Depending on the Security level requirement being High, Medium or Low a **UPC** can be configured to act as Intelligent 1-4 door controller for high level security, Intelligent 5-12 door controller for medium level security and 13 -32 door controllers for low level security applications.

This leads to designing a system in a precise way through resource allocation rather than having cumbersome and expensive system controllers trying to do the same job.

Other applications are Elevator control, Gate control, Energy management control and Alarm monitoring with return to base central monitoring station using **GPRS/PSTN** technology.

**CeOSnet<sup>®</sup> Starts Here.**

# System Software

The **CeOSnet<sup>®</sup>** resource function can now Interface to embedded Web Browser DVRs and Web Cameras that support TCP/IP Protocol. **CeOSnet<sup>®</sup>** Map manager provides a launch pad for full screen image.

The **CeOSnet<sup>®</sup>** Management Software is based on a MS-SQL (MSDE) Database utilizing the attributes of Microsoft.

Date/Time	Source	Item	Event	Description
5/12/02 11:06:06	Elevator East T...	Device 7	OFFLINE	Unknown Device
5/12/02 11:06:06	Elevator East T...	Device 8	OFFLINE	Unknown Device
5/12/02 11:06:06	Elevator East T...	Device 9	OFFLINE	Unknown Device
5/12/02 11:06:06	Elevator East T...	Device 10	OFFLINE	Unknown Device
5/12/02 11:06:06	Elevator East T...	Device 11	OFFLINE	Unknown Device
5/12/02 12:24:00	Main Panel	Area 1	ACCESSED	Office, 123456789, Unknown
5/12/02 12:24:00	Main Panel	All Areas	ACCESSED	
5/12/02 13:16:23	Second Panel	CardReader 0	INVALID	
5/12/02 13:16:23	Elevator East T...	SID 0	CLEARED	
5/12/02 13:16:23	Elevator East T...	Holiday	DEACTIVATED	
5/12/02 13:16:23	Elevator East T...	System	RESET	
5/12/02 13:20:02	Elevator East T...	Device 0	ONLINE	Elevator 1 Reader
5/12/02 13:20:02	Elevator East T...	Device 1	ONLINE	Elevator 2 Reader
5/12/02 13:20:02	Elevator East T...	SID 0	OFFLINE	
5/12/02 13:20:02	Elevator East T...	SID 1	OFFLINE	
5/12/02 13:20:02	Elevator East T...	SID 2	OFFLINE	
5/12/02 13:20:02	Elevator East T...	Holiday	DEACTIVATED	
5/12/02 13:20:06	Elevator East T...	Card1000	INVALID	Andrew Parker, Elevator 1 Re...
5/12/02 13:20:06	Elevator East T...	Card1000	INVALID	
5/12/02 13:20:06	Elevator East T...	Card1000	INVALID	Andrew Parker, Elevator 1 Re...
5/12/02 14:40:25	Elevator East T...	Card1000	VALID	Andrew Parker, Elevator 1 Re...
5/12/02 14:40:25	Elevator East T...	Card1000	VALID	Andrew Parker, Elevator 2 Re...
5/12/02 14:41:00	Elevator East T...	Card1000	VALID	Andrew Parker, Elevator 1 Re...
5/12/02 14:41:00	Elevator East T...	Card1000	VALID	Andrew Parker, Elevator 2 Re...
5/12/02 14:41:02	Elevator East T...	SID 0	ONLINE	
5/12/02 14:41:35	Elevator East T...	Card1000	VALID	Andrew Parker, Elevator 2 Re...

**HISTORY MANAGER**  
Select data with the Pick and Click History selection tool. It makes generating History reports from the database quick and easy. Relative data appears based on the selection criteria.

**MAP MANAGER**  
Allows Maps to be launched independent of the main CeOS program. Maps are dynamic with Icons for Doors, Alarm Input points and Computer control Outputs



**CONTACTS INFORMATION**  
Detailed information is entered via Contacts. Contacts provide all the necessary entry data relating to employees including Card and Security codes.

**Andrew Parker - Contact**

General | User Fields | Notes | Access | Security

**Details**

Full Name: Andrew Parker  
Job Title: [Empty]  
Company: Monitor Software  
Department: [Empty]  
Address: Street: [Empty], City: [Empty], State: [Empty], Post Code: [Empty], Country: [Empty]  
Work Phone: [Empty]  
Home Phone: [Empty]  
Mobile Phone: 0408 367006  
Fax: [Empty]  
Email: aparker@monitorsoftware.com.au  
Date of Birth: 26/3/62  
Employee Number: [Empty]

## Features Summary

### System

- 32 Time Clocks 128 Schedules.
- 64 Holidays 8 Lists.
- Dynamic Database download.
- DALI Protocol interface.
- 128 UPC Ethernet enabled.
- 4096 Access Control Doors.
- 31.744/32,000 Input/outputs.
- 512 Elevator Cars.
- TCP/IP Cameras Interface.

### Alarm

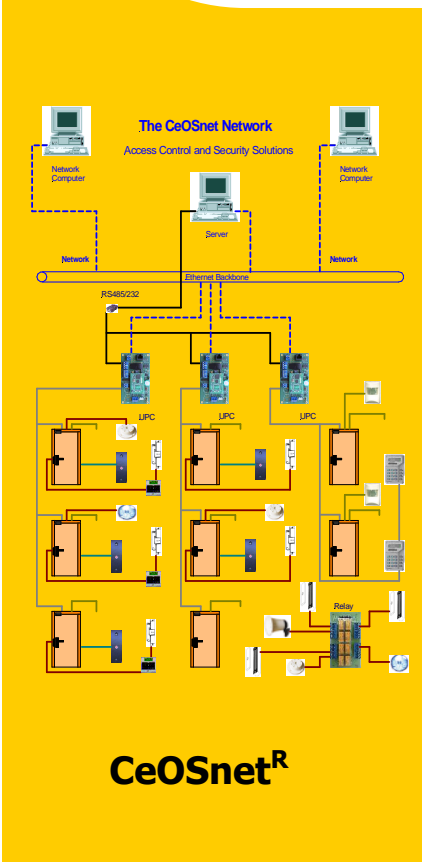
- 32 Areas per UPC.
- 248 Monitored Alarms per UPC.
- 250 Open Collect Outputs or 248 Relay outputs per UPC.
- 24 Hour Alarms Duress Industry Contact ID format Back to Base.
- GPRS with Backup PSTN Dialer.
- UPC Alarm Gathering Gateway.
- LCD Keypad/Card Arm/Disarm.

### Access Control

- 30,000 Users per UPC.
- 32 Card Read Interface per UPC.
- Door Alarm with Local Siren.
- Door to Door Input Interlock.
- 3 Modes of Anti-Pass back.
- Auto Door and Output Clock.
- Selectable Card retry Lockout.
- 26/32/34/35/37 bit weigand.
- 96 Floors per Elevator.

### Energy Management

- 248 Input Points per UPC
- 250 Open Collect Outputs or 248 Relay outputs per UPC.
- Toggle Input Mode.
- On/Off Input Mode.
- On only or Timed Input Mode.
- Off only or Timed Input Mode.
- Output Clock selection.
- Day Light Saving.



# System Hardware

## Hardware Structure

The **UPC Universal Process Controller** is an Intelligent Controller providing a **Multi-Build Security Access Control, Security Elevator Control and Energy Management** with Input-Output Processing capacity to suit most Applications.

A Multi-Build architecture introduces controller flexibility that can adapt to High, Medium and Budget based systems.

The **scalability of Access Control** ranges from 1 door through to 32 doors per UPC with measured **Intelligent** applications and from 1 elevator to 4 elevator with up to 96 floors per UPC.

The **scalability of Input processing and output control** ranges from 1-248 input points and 1-250 output points, 1-32 Areas and 1-32 LCD Key Pads Modules .

The **scalability of the UPC** within a system can range from a single controller to multiple controllers operating in a serial or Ethernet configuration.

The UPC are Programmed by the **CeOSnet<sup>R</sup>** Management software application.

The **PIM Power supply Interface Module** is an intelligent management devices on the CeOSnet system via the RS485 communication port.

The PIM has the facility to monitor an auxiliary power supply.

The onboard fire release facility provides the PIM fire relay to drop power for safety on selected locking devices, while maintaining power to the Control devices.

The **SIO Serial Input-Output Interface** distributes Input and Output capabilities for the UPC Controller across an RS485 Multi-drop format providing long distance data gathering and output control.

Input sensing is based on 248 Input monitored digital format per UPC.

The input sector line is configured as an EOL End Of Line monitoring resistors.

Output distribution is based on 250 open collector Output format or 248 relay Output per UPC.

Inputs and Outputs are programmed from the **CeOS-net<sup>R</sup>** Management software application for various function type.

The function type selected varies control behaviour relating to input or output devices.

## Specifications

Enclosure	Powder coat metal housing with knockouts
Size	540mm x 350mm x 70mm
Weight	4 Kilograms fully optioned
Temperature	0 to 45 degree C 90% Humidity non-condensing
Power	13.5Volt DC@270mAmps fully optioned
Distance	RS485@1200m / Ethernet@100m / RS232@15m
PCB Dimension	140mm x 80mm

The **CRI Card Reader Interface** is used to convert the 26 to 52 bit Weigand interface to an RS485 Multi-Dropped communication Interface.

The CRI is considered to be a part of the reader electronics but can reside in a cabinet some distance away from the reader location.

To reduce long cabling runs relating to the locking mechanism a relay output is provided together with a auxiliary Relay for a local Alarm condition.

The Request to Exit facility, Door Sensor, Emergency BGA and the latch or Bond Sensor are provided on the CRI as local facility and are integrated into the overall system.

The **CRI/LIM Card Reader Lift Interface Module** is used in Elevators.

The **CRI/LIM** can reside in the Elevator cabinet.



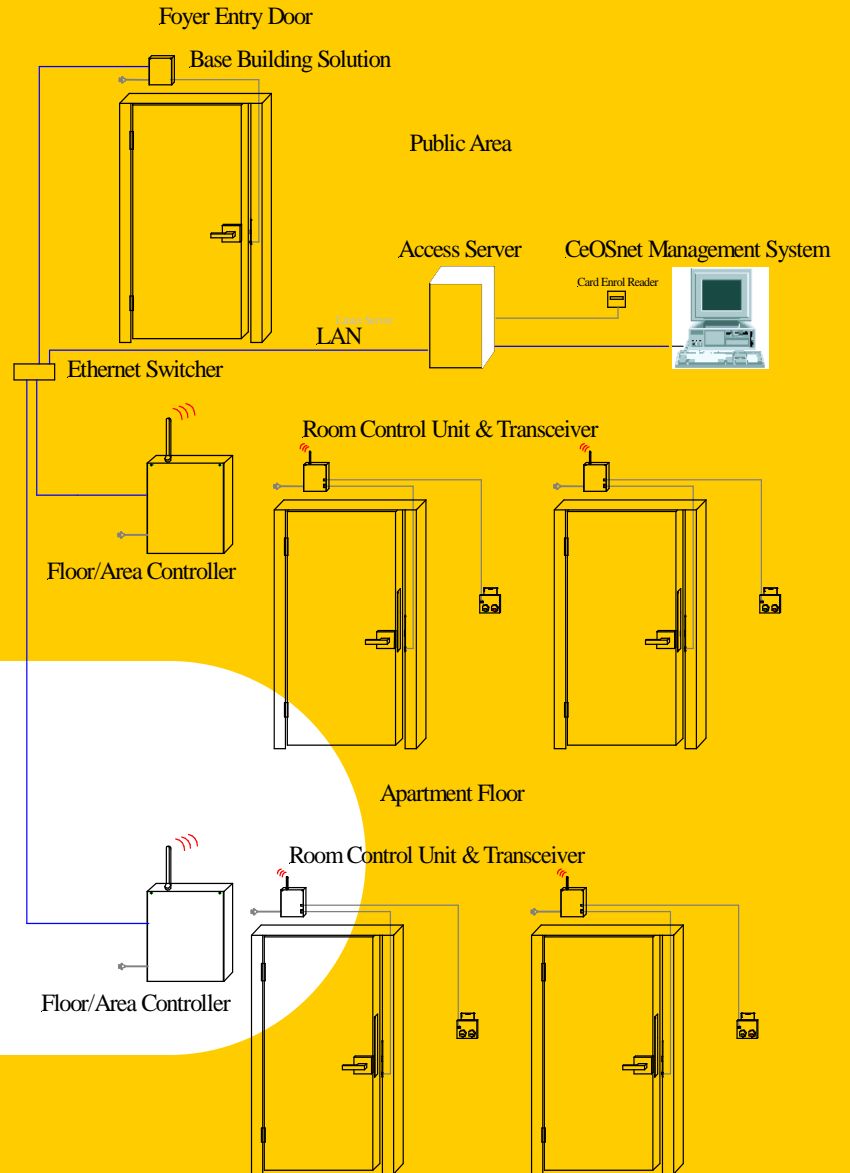
The **KPM Key Pad Module** is designed to Arming and Disarming multiple Areas.

The **KPM** is connected to the **UPC** via the communication cable.

The alphanumeric LCD English display provides visual feed back of arming and disarming, System diagnostic and alarm input conditions.

Security codes and Area control requirements are programmed by the **CeOSnet<sup>R</sup>** Management Software system.

# System Network



**CeOSnet<sup>R</sup>**  
**Door entry systems**

**Interface to Hotel and Apartment door entry systems**

**Orion**

Hotel electronic locking solution with Real time data streaming and Total energy management

**Rhine**

Take Control of your Security with the Next Generation of Access Control for Residential living

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