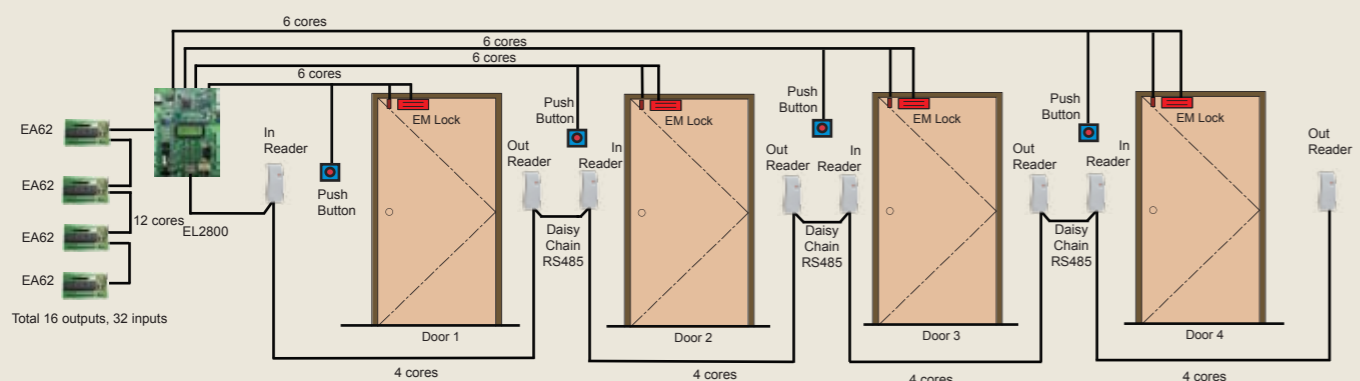
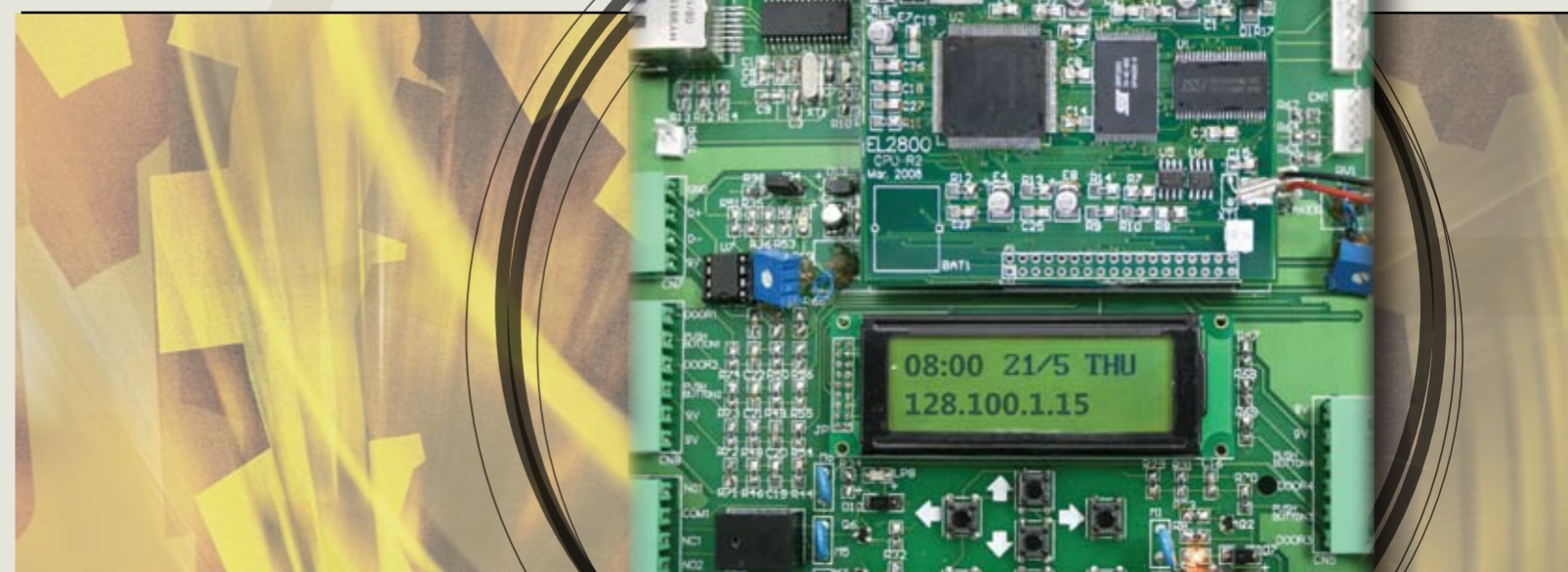
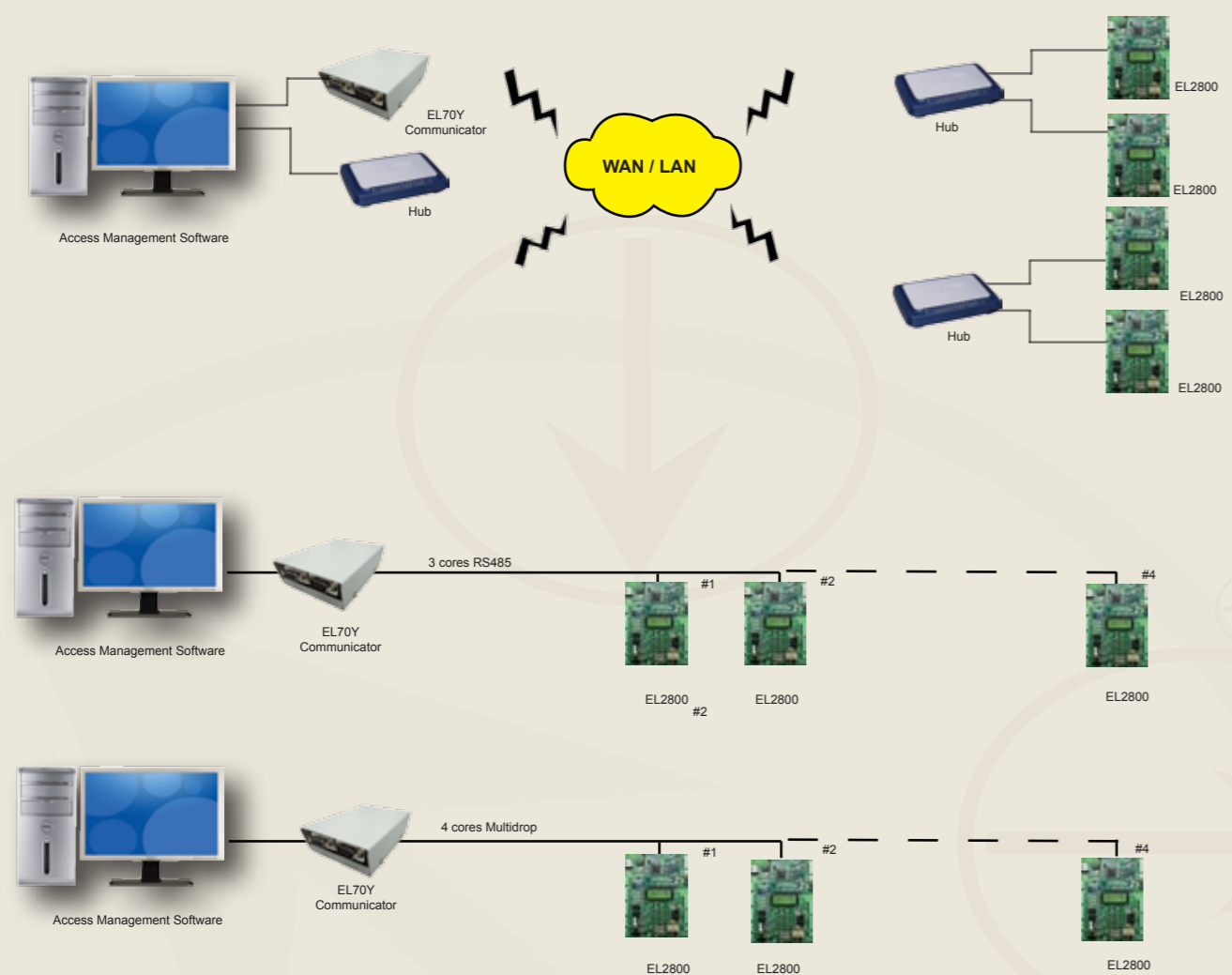


### EL2800 Standard Configuration



### EL2800 System Configuration



# EL2800

## IP Based Access Control System

IP based building access with IT and Security working together...



For more information: check out the website at [www.elid.com](http://www.elid.com), or contact our dealers. ELID has a policy of continuous research and development, and reserves the right to change specifications without notice.

[www.elid.com](http://www.elid.com)

We make YOUR world secure

## EL2800 IP Controller

The EL2800 is an advanced multi-door IP controller. It is driven by an ARM7 32-bit MCU running at 60 MHz. Programs are stored on large Flash memory and can be modified in-circuit. There is also generous provision of SRAM with battery backup for card database and transaction logs.

EL2800 uses native LAN (not a terminal server which converts RS232 to LAN). Consequently, it is like a PC and can take full advantage of web access.

### Features

#### 4-Door Control

EL2800 provides access control functions for 4 doors. Entry and Exit readers are RS485 based and are connected by 4 wires in daisy-chain mode. 2 of the 4 wires are used for reader power supply. Door sensor signals and exit push button signals are directly wired to EL2800 main board.

#### Friendly Programming

EL2800 is equipped with a graphic LCD and a 16-key keypad. Basic communication set-up such as IP address, unit number, baud rate etc can be selected using this built-in keypad. Diagnostic tests to check status of readers and input/output devices can also be performed using this built-in keypad/GLCD, and it is particularly convenient for installers working on site.

Programming of access functions such as timer, time zones and enrolling or deleting cards etc can be done via PC running Access Management software such as E.WIN.

Programming via the LAN is also possible by logging to the IP address of the controller using any web browser such as Internet Explorer.

#### Multiple Modes of Operation

EL2800 can operate in PIN mode, CARD mode, or CARD+PIN mode.

In CARD+PIN mode, the PIN can be generated by an internal algorithm, or set by the user.

All modes of operation are subjected to time zone constraints. 10 time zones are provided, and each time zone has an 8-day schedule (7 weekdays + 1 holiday) with 2 start/stop periods per day.

Doors can be programmed to be unlocked automatically by timers.

Changing from CARD to CARD+PIN mode can also be automatically activated by timers.

Up to 20 holidays can be programmed into the controller, and a separate access routine set for holidays.

#### Wide Choice of Readers & Formats

EL2800 is designed to work with RS485 readers, such as ERM945, which can read EM proximity cards. In order for EL2800 to work with standard range of ELID readers with Wiegand output, a converter EA45 has to be added. The EA45 is the size of a match box and can be easily installed behind the reader.

EL2800 allows selection of 4 different Wiegand formats:- 26-bit standard format, HID Corporate 2000 format, ELID format and user-defined format.

#### Large Database

Depending on the model and set-up selections, EL2800 can store up to 10,000 user ID card numbers.

Apart from normal user ID cards, it also distinguishes Special Cards, which can perform alarm arming/disarming functions, and activation/deactivation of outputs.

EL2800 recognizes 15 different types of activities (such as 'valid entry', 'door forced open', 'wrong PIN' etc). It records each transaction with date, time, and card number. Depending on setting, up to 4,000 transactions can be stored. These transactions can be retrieved by a PC or directly printed out to a serial printer.

#### Inputs & Outputs Expansion

For security applications requiring sensing of inputs and activation of outputs, EA62 can be added. Each EA62 plugs into EL2800 expansion socket and provides 8 supervised inputs and 4 relay outputs. The inputs may be used for monitoring alarm or status signals. The outputs can be timer controlled, or remotely controlled through PC software. In the timer mode, it is activated by an 8-day time zone. In the general purpose mode, it can be activated by the Access Management software running on PC or locally activated via Special Card.

#### Flexible Networking

3 networking modes are available on EL2800 depending on your specific needs. The first option is ELID's multi-drop, which provides field-proven protection method against lightning surges.

The second option, with higher speed is RS485. The RS485 on EL2800 is isolated to provide additional protection from interference and surges.

The third option is LAN, and is the preferred mode, as it allows users to reap the full benefits of EL2800 IP features.

#### Wide Choice of Access Management Software

EL2800 is compatible with all existing ELID Access Management software such as EsofWIN X3, E.WIN and E.NET, where it is treated like 4 units of controllers. EsofWIN X3 is an entry level Access Management software available free of charge and is able to control 16 doors. It offers basic access management functions and simple time attendance reports.

E.WIN is a powerful Access Management software that controls up to 128 controllers. It can directly communicate with EL2800 over WAN. It also has lift-floor access management and time management capability. E.NET is an integrated Access Management Security software, and can control up to 1024 controllers, with sophisticated access and intrusion alarm functions.



#### ELID's Network Security Platform (ENSP)

To realize EL2800's full potential, users should move upward to adopt ENSP platform. ENSP is a common platform for a new generation of IP-based controllers from ELID.

Such devices will consist of IP access controllers (such as EL2800), IP CamReader (such as EL3610), IP intrusion alarm panel, IP cameras etc, which ELID will continue to develop. Each device can work independently, and yet each can be programmed to interact with another on a peer-to-peer basis, or indirectly through a server.

Operational staff can configure, control and monitor these devices from a standardized web interface.

A Web server will be responsible for keeping configuration data as well as transactions from all the IP devices.

A Web browser such as Internet Explorer can be used to log into the system to configure, view and control the devices.

With this platform, various devices connected to a common network, can be designed to work together as a coordinated and integrated system. For example, IP camera 5 could be commanded to start recording when the Main Door connected to EL2800 IP controller detects a 'door-forced-open' alarm.



Controller Configuration



Card Database



Parameter Setting

### Ordering Information

#### Models

- EL-2800 -001 4-door IP controller module

#### Accessories

- EA-0062-001 - Peripheral module with 8 supervised inputs and 4 relay outputs
- EP-0023-003 - Power supply 12V/2.5A, complete with PS2 low-voltage cut off

#### Related Product

- EB-2800-001 - Car Park controller for controlling 4 entry and 4 exits with anti-passback

#### Compatible Readers

- RS485 Reader  
EM-0845-001 - EM RS485 reader
- Reader Converter  
EA-0045-001 - Wiegand to RS485 reader converter

#### Compatible Readers Fitted With EA45

- Proximity  
ER-0923-0M2 - HID compatible proximity reader  
ER-0923-006 - EM compatible proximity reader
- Smart card  
ER-0928-E06 - Mifare proximity reader

### Technical Information

#### CPU

- 32-bit MCU running at 60 MHz

#### Power Consumption

- 12V/90 mA excluding readers

#### Dimensions

- EL-2800-001 - 208(H) x 154(W) x 30(D)