



EL2300

Access Control System



.....reliability you can trust

EL2300 SERIES HIGH PERFORMANCE CONTROLLER

The EL2300 series card access controller is developed as a third generation successor to the popular EL2000/EL2200 series. ELID has sold tens of thousands of the EL2000/EL2200 series over a period spanning more than 20 years. The series has earned a reputation as one of the most reliable and versatile controllers in the market.

In the EL2300, ELID has made key hardware upgrades on the MCU, memory, and communication, using the latest technology advancement, while retaining the familiar user interface and programming steps of EL2200, so as to reduce learning-time for existing users to a minimum.

There are 3 variants of the EL2300 series controller which share similar features:



EL2301

The EL2301 is a 1-door 2-reader controller, enclosed in a plastic casing with LCD display and keypad, suitable for wall-mounting at eye level to facilitate programming.



EL2305

The EL2305 is a 2-door 2-reader controller, designed for mounting inside a metal housing together with power supply and battery.



EL2306

EL2306 is a full-fledged 2-door 4-reader controller with Entry Reader with Keypad; and Exit Reader for both doors. It designed for mounting inside a metal housing together with power supply and battery.

UPGRADE SUMMARY

With the EL2300 many upgrades have been incorporated:-

- Reliability is a key feature that has been inherited by EL2300 from EL2200. At the core of the EL2300 is a 16-bit, dual-core, automotive-grade MCU. This new MCU is 8 times faster than that used in EL2200, enabling it to respond much faster to assess situations and conditions.
- EL2300 features Flash as program storage. This allows in-circuit firmware upgrade via PC on-site, without the need to physically replace any memory chips.
- EL2300 offers much bigger memory than its predecessor, allowing for larger card user database and larger transaction log storage.
- EL2300 offers a wider choice of communication modes with PC at higher speeds namely, Multi-drop, RS485 and TCP/IP.
- EL2306 is a full-fledged 2-door 4-reader controller with Entry Reader with Reader; and Exit Reader for both doors.

SPECIFICATION

Microprocessor	16-bit MCU running at 40 MHz	Operation Mode	3 (Card, Card + PIN, PIN) PIN Only mode: 10 sets per door
Memory	512KB SRAM with battery back-up	Time Zone	10
Clock	Real-time Clock with battery back-up	Timer	24
Communication Interface	Multi-drop or RS485 or TCP/IP (optional LAN module)	Holiday	20
Output	1 (On-board), 6 (with EA8)	Adjustable Lock Release Time	Yes
Input	2 (On-board), 2 (with EA8)	Permanent Lock Release	Yes
Maximum Number of I/O Board (EL2306)	2 units of EA8 (provide 4 inputs and 12 outputs)	Automatic Pin Disable Time Zone	Yes
Power Consumption	12V/40 mA excluding readers/keypad	Automatic Lock Release Time Zone	Yes
Operating Temperature (°C)	0-50	Inhibit Access	Yes
On-board Back-up Battery	Yes	Continuous Swiping	Yes
Card Database	20,000	Anti-Passback	By reader
Transaction Database	10,000	Dual Card	Yes
Type of Supporting Reader	Proximity (EM/HID), Smart Card, Biometric, Bar-code, Magnetic	Interlock	Yes
		Dimensions	EL2301: 150(H) x 130(W) x 70(D) mm EL2305/EL2306: 155(H) x 146(W) mm

FEATURES

The same great features in the EL2200 are carried over to EL2300, features that made you repeatedly choose EL2200 over and above other models in the past.

Multiple Modes of Operation

EL2300 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. A card can be de-registered if wrong PIN is repeatedly entered.

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 pre-programmed into the controller, and a separate access routine set for holidays.

Wide Range of Readers

EL2300 is designed to work with a wide choice of signals from various types of standard readers. This include F2F signals (magnetic readers), raw optical signals (bar code readers), and Wiegand signals (proximity and smart card readers). For each type of reader, users can select different formats.

For Wiegand signals, 4 different formats can be selected:-

- 26-bit standard format, HID Corporate 2000 format, ELID format, and User-defined format

For bar code, 2 formats can be selected:

- 2 of 5 interleaved, and 3 of 9

For magnetic, 2 formats can be selected:

- ELID and ABA

Interactive Reader Keypad Display

EL2300 is designed to work specifically with ELID's serial readers which are equipped with 7-segment or LCD display and keypad. The display is to improve feedback to users. For example, if the controller is waiting for PIN to be entered, the display will show "PIN". If a card is rejected, because of wrong time zone, the display will show E-CA (Error in Category). If a card is rejected because of anti-passback, it will show E-AP.



Friendly Programming

EL2300 controller has a built-in LCD display with ability to display 2x20 alpha-numeric characters, and a 16-key keypad. All user programmable commands may be entered through the keypad guided by clear instructions in English. During normal operation, the LCD display will show the present status of the controller.

Large Database

Depending on the model and set-up selections, EL2300 can store up to 20,000 user ID card numbers. For secure applications, cards can be assigned to 2 separate groups, and access is only granted when 2 cards from different groups are successively swiped. Apart from normal user ID cards, it also distinguishes Special Cards, which can perform alarm arming/disarming functions, and activation/deactivation of outputs.

EL2300 recognizes 22 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 10,000 transactions can be stored. These records can be retrieved by a PC or directly printed out to a serial printer.

Versatile Inputs and Outputs

EL2300 supports 2 I/O boards each with 2 non-supervised inputs and 6 open-collector outputs. The inputs may be used for monitoring status or alarm signals. The outputs can be timer controlled or event controlled. In the timer mode, it is activated by an 8-day time zone. In the event-controlled mode, the user can select what event or combination of events can activate an output. Any of the 22 events recognized by EL2300 can be used to set the formula.

Flexible Networking

EL2300 is equipped with Multi-drop, RS485 and LAN. For Multi-drop and RS485 mode, up to 16 units can be connected together to form one bus. Address setting in each controller is then used to distinguish one controller from another. If LAN is used, the controller is distinguished by its IP address plus its unit address. This method of communication is used in most of ELID's standard equipment, and so different models can continue to work together when connected to the same bus.

Wide Choice of Software Programs

ELID has a wide range of Access Management software that can work with EL2300 and other controllers like EL1335, EL375 and EL363.

EastWin is a feature rich, ease-of-use single-workstation access management software. EastWin's configuration is automated. It controls up to 128 access points and comes with time attendance functions.

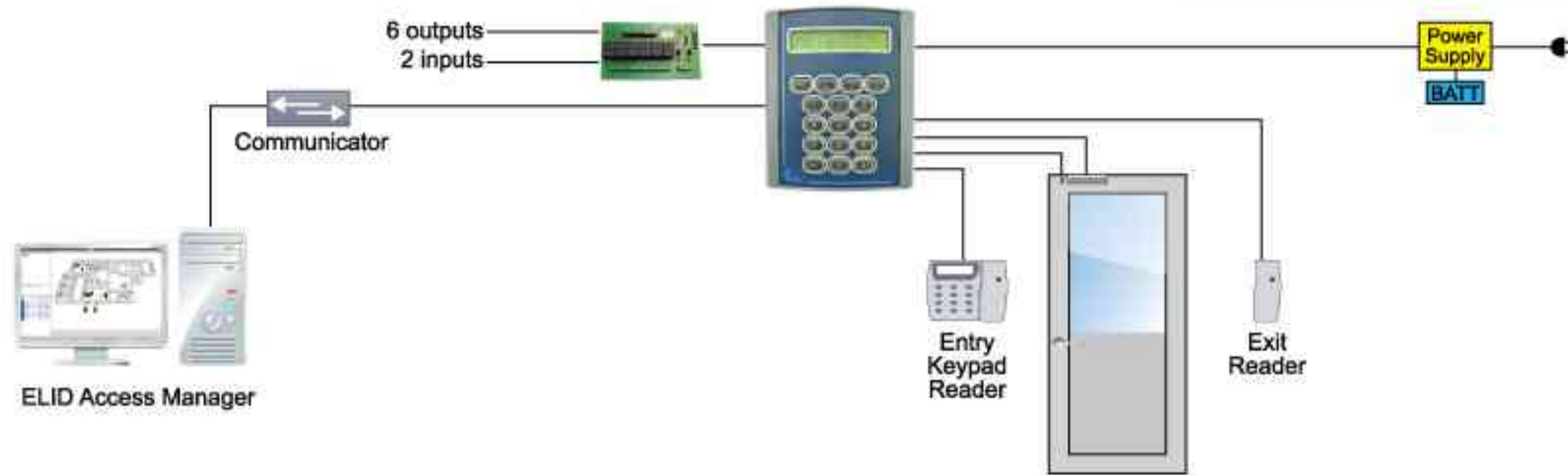
E.WIN is a powerful single-workstation access management software that allows control of up to 128 access points. It supports Web-View via internet browser. It has access management and time management capability.

WinPro

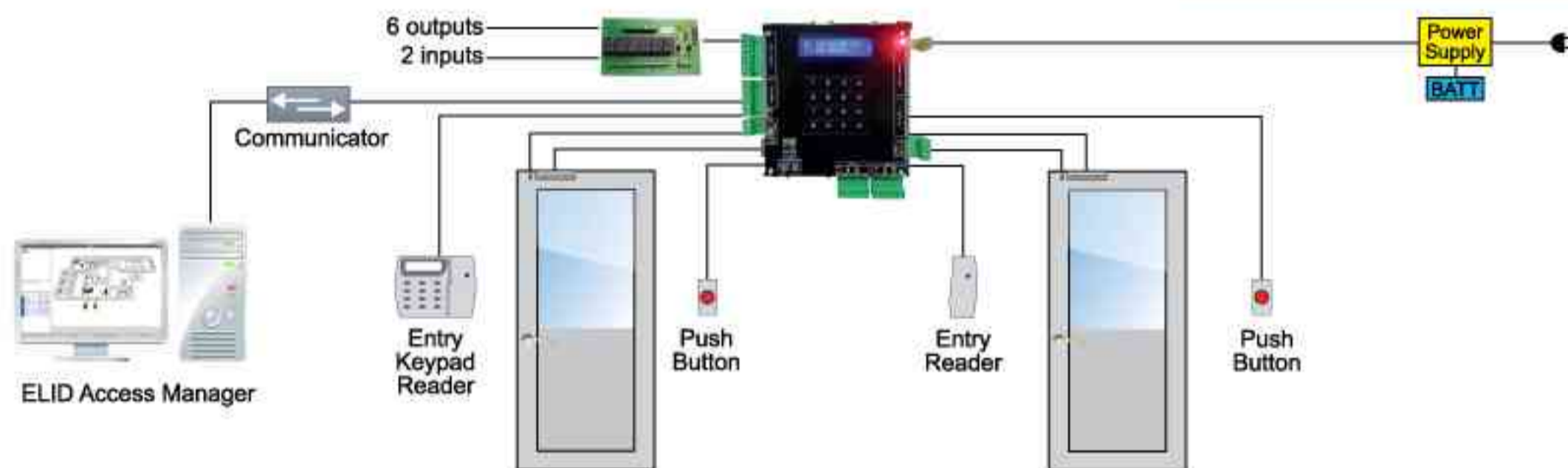
WinPro is a scalable SQL-based, multi-user, client-server access management software, and can control up to 1,024 access points with sophisticated access and intrusion alarm functions. It supports Live View Access via internet browser and SMS notification. It integrates with Time Attendance Software and Visitor Management Software.

SYSTEM CONFIGURATION

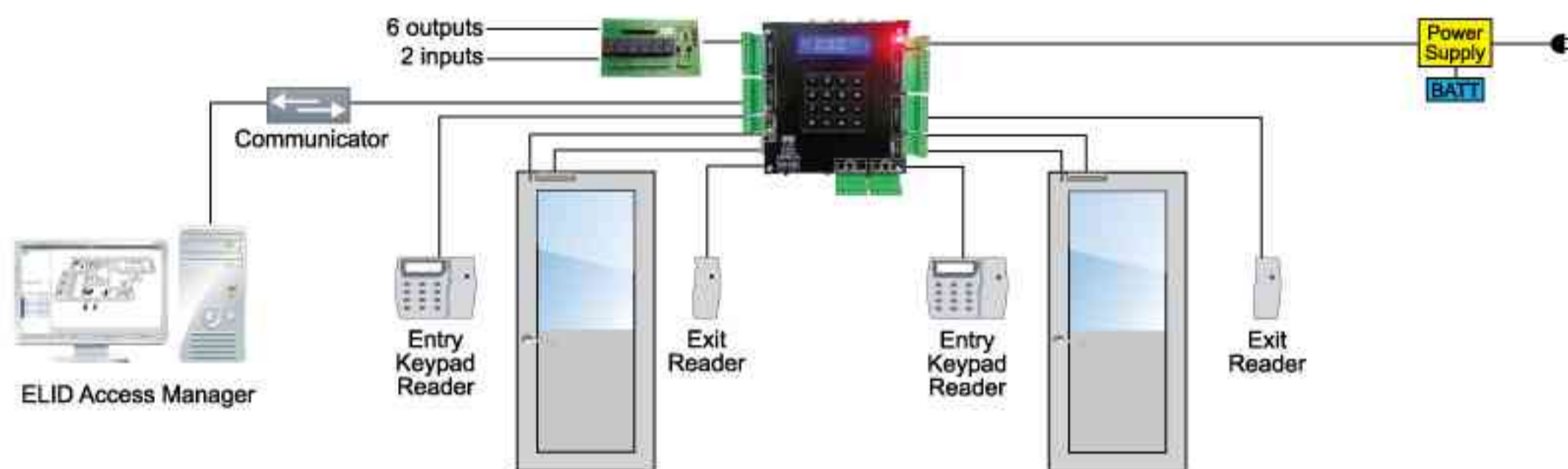
EL2301 1-Door 2-Reader



EL2305 2-Door 2-Reader



EL2306 2-Door 4-Reader



ORDERING INFORMATION

Controllers

- EL-2301-001
1-Door 2-Reader Controller supplied in plastic casing
- EL-2305-001
2-Door 2-Reader Controller Module without casing
- EL-2306-001
2-Door 4-Reader Controller Module without casing

Accessories

- EP-0023-003
Power supply 12V/2.5A, complete with PS2 low-voltage cut-off
- CS-1127X
Metal casing
- EA-0079-001
EA79 LAN Module for EL2301
- EA-0079-002
EA79 LAN Module for EL2305 & EL2306

Compatible Keypad

- EK9S Keypad
7-segment display with keypad (Beige/Dark Grey)

Compatible Readers/ Keypad Readers

- EM Proximity
ERM823 EM proximity reader (Black)
ERM923 EM proximity reader (Beige/Dark Grey)
- 7-segment display keypad reader (Beige/Dark Grey)
EK8R 7-segment display keypad reader (Black)
EK8RX Extended range of EK8R (Black)
- HID Proximity
ERH923 HID proximity reader (Beige/Dark Grey)
- Smart Card
ER828 Mifare smart card reader (Black)
ER928 Mifare smart card reader (Beige/Dark Grey)
- Fingerprint
ER301 Fingerprint reader (EM/Mifare/HID card reader)
- Magnetic
ER5S Magnetic track 2 reader with integral keypad
ER5SB Magnetic track 2 reader without keypad
- Bar Code
ER36 Bar-code reader with integral keypad
ER36B Bar-code reader without keypad



For more information: Check out the website at 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.