

DIU 210

Door Interface Unit



Features that make a difference:

- Door Interface Electronics held on one board
- Provides a coded lock serial interface between door hardware and card reader
- On site selectable for 12V or 24V lock output
- Fire alarm and break glass inputs for emergency door release
- Designed for ease of installation and maintenance using 2 part connectors throughout
- Compliant with EN55022 (emissions) and EN55024 (access control immunity)
- Backup battery connection for emergency power

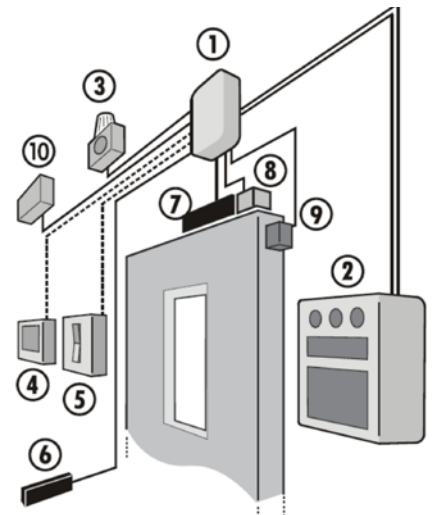
The Door Interface Unit (DIU 210) is designed primarily to provide power to a door lock, as well as local power to a CEM reader when a high level of security is required.

Upon a valid swipe at the card reader, the reader will instruct the DIU (over the RS485 communications channel) to activate the appropriate output to release the lock using a coded data signal (i.e. coded lock).

It has onboard inputs which can be used to monitor conditions such as a fire alarm or activated Break-glass condition.

The DIU 210 improves door security, by allowing the installer to locate lock controls on the secure side of a door, with an intelligent CEM reader on the unsecured side. The DIU 210 communicates with an intelligent CEM reader over a single pair RS485 cable.

As an added benefit, the DIU 210 monitors the status of all standard door monitoring inputs; inputs on an intelligent CEM reader are free for use as general purpose inputs. The DIU 210 is supplied in a steel enclosure complete with power supply backplane and an output for an additional door holder.



1. DIU Unit Enclosure
2. CEM Reader
3. Sounder
4. Break Glass Unit
5. REX/Exit Reader or Secure side push button
6. Door Holder
7. Door Lock
8. Lock Sense
9. Door Position sensor

Interfaces

The DIU 210 provides direct interfaces to the following devices:

- CEM Card Reader
- Electric Door Lock
- Fire Alarm System
- Break Glass Unit
- Exit Push Button
- Power Fail
- Battery Low
- Enclosure Tamper

8 inputs can be used for alarm/status monitoring devices directly to the DIU 210. These devices are used to monitor door sensors, DIU tamper and battery alarms and fire/ break glass emergency conditions.

If an input from the fire alarm system or break glass unit changes state, the power to the door lock is automatically dropped; this hardware-controlled facility ensures that the door opens in an emergency situation. Details of alarm conditions can be sent directly to the door controller or to the host, via the card reader, for central alarm notification

Board Protection

The DIU 210 has been designed to meet the UL294 standard providing resistance to power supply tamper, limiting the current to a reader so that shorting together the 12 Volt terminals prevents the lock from opening.

Reader inputs

The DIU 210 can also monitor the status of all the door furniture inputs, freeing up to another eight inputs on the intelligent CEM readers for general purpose input monitoring.

PSU Backplane Board and Enclosure

The DIU 210 is supplied with a steel enclosure and backplane board providing a mains input PSU, battery charging capabilities and door holder connections

Specifications

Size 300 x 250 x 150 mm (11.8 x 9.84 x 5.9in)
Weight 4.3Kg

Power

Voltage 100-240VAC, 50/60Hz
Current Consumption Minimum: 57mA (excluding locks and heads)
Maximum: 175mA (including locks and heads)

Environmental

Temperature -10° to 40°C (14° to 104°F)
Humidity 95% non condensing
LED Indicators +12 Volts OK, Lock supply OK, Lock Status, Watchdog, Fault, Battery Low, RS485 Rx and TX

Functionality

Inputs Door Position*
Lock Status*
Exit Push Button*
Break Glass Sense
Fire Alarm Sense
Power Fail
Tamper
Battery Low (reported internally)
Dedicated Power Fail Input
* = 4 state tamper protected inputs
Outputs Two 12V or 24V open collector outputs limited to 1.5A for Door Lock and Door Holder and one 12v External Sounder output
Reader Output 12V, limited to 800mA
Memory 32kB Flash memory
Batteries Two 12V 2.3Ah valve regulated lead acid (VRLA) batteries required.
(Recommended type: Yuasa NP2.3-12)

Communication Interface

To Card Reader RS485 multidrop cable runs using copper wire with maximum length of 1.2km without repeater
Connection 2 part screw terminals

Requirements

Compatible with the AC2000 access control family:

- AC2000 v6.3 and higher
- AC2000 Airport v6.3 and higher
- AC2000 Lite v6.3 and higher

Ordering Information

Product Code	Description
DIU/700/210	DIU 210 (Complete with PSU Backplane and Enclosure)

Related Products



AC2000
AC2000 Airport
AC2000 Lite

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