

eDCM 350

Two door Intelligent encrypted IP Controller



Features that make a difference:

- Support for two doors
- Two encrypted RS485 reader communication connections
- 100/10 Mbps Ethernet host Connection
- Communicates directly with the AC2000 central server – no need for an intelligent control panel in system design
- Eight supervised inputs (four inputs per door)
- Four outputs Two Relays (normally opened or normally closed) Two FET'S (Field Effect Transistor's) with 12V supply
- Self resetting fuses – saves maintenance time
- Onboard LED indicators – provides visual status
- Dedicated Tamper input
- Integrated backup battery monitoring and trickle charging
- A supervised input can be mapped to a physical output
- Suitable for use with AC2000 System family

The CEM eDCM 350 (Door Control Module) is a low cost, two-door controller that is designed to interface to CEM sPass DESFire smart card readers.

By utilising encrypted RS485 serial communications between the eDCM 350 controller and the sPass reader, the threat of Wiegand controller signal cloning is effectively eliminated. In addition, the CEM sPass reader utilises 3DES (Triple DES) encryption offering the highest measures of data security.

The eDCM 350 has an on-board 10/100 Ethernet connection and communicates directly with the AC2000 server. Using a powerful 32bit processor, the eDCM 350 gives full off-line verification and decision making at the point of entry, even when host communication is not available. Up to 50,000 off line transactions can be recorded per door.

The eDCM 350 supports two door configurations. It can either be configured for two sPass readers on two separate doors, with optional Exit push buttons, or can be configured to support two sPass readers (an Entry/Exit configuration) for bi-directional control on a single door. Together the eDCM 350 controller and

sPass reader offer an ideal solution when a panel approach is required. It offers a highly secure, encrypted DESFire solution at a cost effective price.

Encrypted Verification

The eDCM 350 offers 3DES (Triple DES) card verification and RS485 encrypted communications between the reader and the controller.

Off-line card Verification

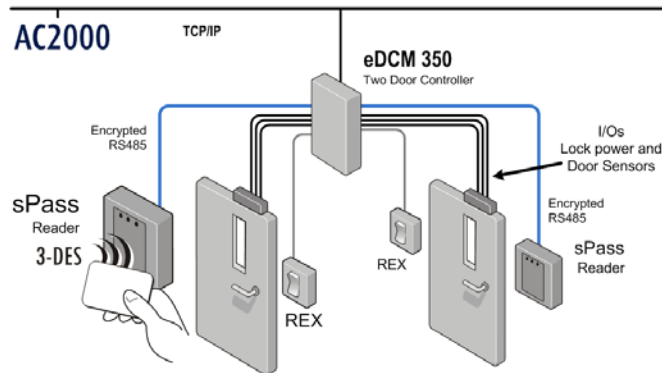
The card database is initially downloaded to the eDCM 350 internal memory from the AC2000 host server, with subsequent changes to card data automatically sent as updates. This ensures that the eDCM 350 has up-to-date card information when operating in off-line mode. While operating in off-line mode, the controller can hold 200,000 cards and store 50,000 transactions.

Easy to Install

The eDCM 350 is designed to be extremely easy to install. The installer simply enters the unit IP address on the server, sets the IP address on the reader, connects to an Ethernet network and the controller self-configures and can receive a 50,000 cardholder database in under two minutes.

Interlock Mode

Airlock mode will create an interlock between both doors when the unit is in two door mode. Full bi-directional interlock is only supported in single door mode.



ABOVE: eDCM 350 in two door (Master/Master) mode, shown with CEM sPass card readers. The sPass readers are connected using the encrypted RS485 channel.

Requirements

Compatible with the AC2000 access control family:

- AC2000
- AC2000 Airport
- AC2000 Lite
- RTC Ethernet Reader Controller

Ordering Information

Product Code	Description
DCM/350/005	eDCM 350 (Board Only)
DCM/350/101	eDCM 350 (Includes enclosure, board & power supply/battery charger)

Specifications

Physical

Size	
Board Only	180 x 120 x 20mm (7.1" x 4.7" x 0.8")
Enclosure	460 x 250 x 90mm (18" x 10" x 3.5")
Weight	
Board Only	0.1Kg
Enclosure	5.00kg
Housing	Wall mount 1.2mm steel enclosure
Color	Gray

Power

Board Only	
Voltage	11 – 15Vdc
Current Consumption	185mA (excluding locks and heads)
Enclosure	
Voltage	220-230 VAC 50/60Hz.
Backup Battery	Integral charging circuit provided with enclosure and space battery (Battery not supplied).

Environmental

Temperature	-10° to 55°C (14° to 131°F)
LED Indicators	Power, Link to host, Comms Tx/Rx, Fault / Tamper, Lock and Relay Status

Functionality

Inputs	<ul style="list-style-type: none"> • Door Position* • Lock Status* • Exit Push Button* • General Purpose* or Interlock* • Tamper • Battery Low • Dedicated Power Fail Input (For example mains fail on the PCB board)
--------	--

* = 4 state tamper protected inputs

These physical inputs can be used, if spare, as general purpose inputs for alarm monitoring

Outputs	<ul style="list-style-type: none"> • Two 12V open collector outputs limited to 1.5A (Door Lock and External Sounder) • Two relays rated at 30V@2A
Reader	Two RS485 serial sPass smartcard readers
Configuration	Operational parameters are downloaded from host computer
Database memory	2GB SD Card
Cardholders	Storage of 200,000 cardholders at the door.
Transactions	Up to 50,000 transactions in offline operation
RTC Battery Backup	3.0V rechargeable Lithium
Configuration	Operational parameters are downloaded from host computer.

Communication Interface

To Readers	RS485 encrypted
To System Host	10/100 Base-T TCP/IP using CAT5
Host Connection	Unshielded twisted pair cable RJ45

Related Products



AC2000
AC2000 Airport
AC2000 Lite

www.cemsys.com