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Data Sheet

eDCM 350 OSDP
Two door Intelligent Encrypted IP Controller

Key Features

- Support for two doors.
- AES128 encrypted RS485 reader communication connection
- Supports OSDP (Open Supervised Device Protocol) v2.1.5.
- 100/10 Mbps Ethernet host Connection.
- Eight monitored 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 access control.

The CEM eDCM 350 (Door Control Module) is a low cost, intelligent two-door controller that is designed to interfaceto Open Supervised Device Protocol (OSDP) compliant smart card readers.

By utilizing RS485 serial communications with strong AES128 encryption between the eDCM 350 controller and the OSDP compliant reader, the threat of Wiegand controller signal cloning is eliminated.

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.

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

OSDP v2 Support

OSDP is an Open Supervised Device Protocol for peripheral devices. With added Secure Channel Protocol (SCP) specification, it provides bi-directional communications and advanced security features for connecting OSDP compliant card readers to eDCM 350 control panels.

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 8,000 transactions.

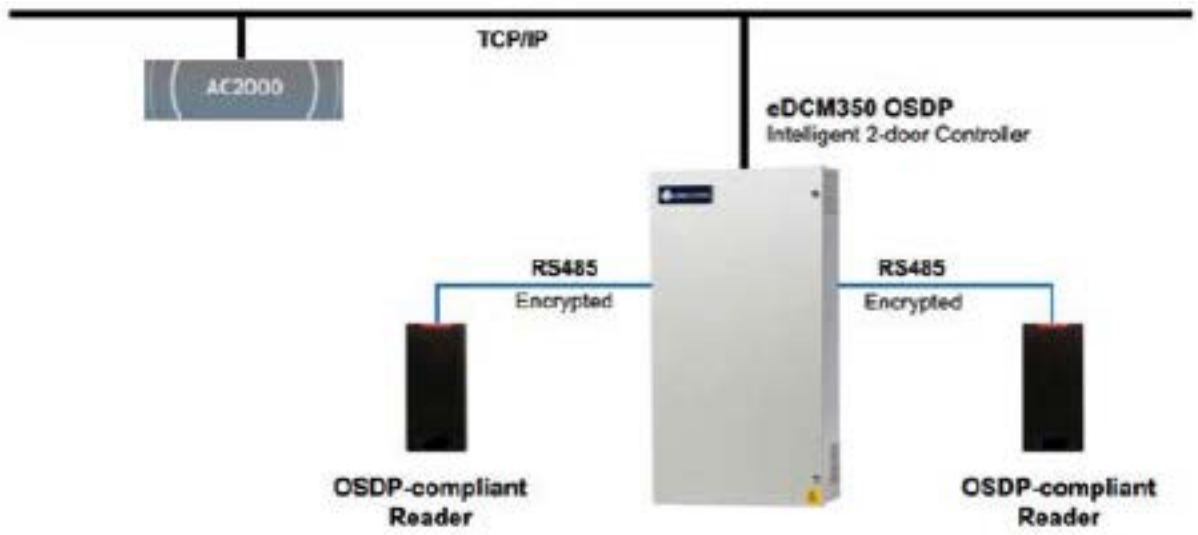
Easy to Install

The eDCM 350 is designed to be extremely easy to install. The installer simply enters the unit IP address and device configuration 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.

Specifications

Physical	
Size	
Board Only	148mm x 193mm
Enclosure	257mm x 476mm x 94mm
Weight	
Board Only	0.1kg
Enclosure	3.95kg
Housing	Wall-mount 1.2mm steel enclosure
Power Requirements	
Board Only	
Voltage	11-15V DC
Current Consumption	185mA (excluding locks and heads)
Enclosure	
Voltage	100-240V AC
Backup battery	Integral charging circuit provided with enclosure and battery fitting space (battery not supplied)
Environmental	
Temperature	-10°C to 55°C (14°F to 131°F)
LED Indicators	Power, Link to host, Comms Tx/Rx, Fault/Tamper, Lock and Relay status
Functionality	
Inputs	Door Position* Lock Status* Exit Push button* Interlock* Tamper Battery Low Power Fail *4-state tamper protected inputs
Outputs	Two 12V open-collector outputs limited to 1.5A (Door Lock / External Sounder) Two relays rated at 30V 2A
Reader capacity	Two RS485 OSDP-compliant readers
Configuration	Operational parameters are downloaded from host computer
Cardholders	200,000 cardholders
Transactions	50,000 transactions
RTC battery backup	3.0V rechargeable Lithium

Communication Interface	
To readers	Encrypted OSDP RS485
To system host	10/100 BaseT TCP/IP using Cat5 Unshielded twisted pair cable
Host connection	RJ45



eDCM 350 OSDP in two door (Master/Master) mode, shown with example OSDP readers, connected using the encrypted RS485 channel.

Ordering Information

Product Code	Description
DCM/350/035	eDCM 350 OSDP Controller (Board Only)
DCM/350/131	eDCM 350 OSDP Controller (Mounted in Enclosure with 12V PSU)

Requirements

OSDP-compliant readers:

Product Code	Description
HDS/054/010	HID iClass SE R10 OSDP (900NTPNEK0007V)
HDS/054/030	HID iClass SE R30 OSDP (930NTPNEK0007V)
HDS/054/040	HID iClass SE R40 OSDP (920NTPNEK0007V)
HDS/054/K40	HID iClass SE RK40 OSDP (RK40EKNN)

Related Products

- AC2000
- AC2000 Airport
- AC2000 Lite

DCM400

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