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Data Sheet

ECM
Ethernet Communication Module

Key Features

- Low cost serial to Ethernet converter
- RS485 connection for multi-dropping up to 16 CEM serial devices on one chain
- 10/100Mbps Ethernet through an RJ45 connection
- Configuration connection with Tibbo Device Server Toolkit
- Board only version available to support existing CEM legacy installations that use NCN's
- Transparent connection between the CEM serial devices and the AC2000 Lite controller or the AC2000 Ethernet reader controller (RTC)

The ECM (Ethernet Communication Module) is a serial to Ethernet converter that enables CEM serial communication devices (such as the S700s intelligent reader range and sDCM intelligent 2 door controllers), to connect to the AC2000 central system via an Ethernet LAN.

The ECM can support a chain of up to 16 RS485 CEM devices connected to a single channel (up to a maximum length of 1.2 KM). This provides a cost effective means of connecting a group of serial readers to the AC2000 system from a single Ethernet point.

Simply load the software and configuration file supplied on the CD, and enter the network details. The AC2000 WEB tools application also offers straight forward system set up.

Serial Reader/ Device Compatibility on an IP System
The ECM improves communications by enabling traditional serial card readers/ devices to be quickly and easily connected to an IP-based Ethernet network.

RS485 Network Compatibility
A single ECM can be connected to a chain of up to 16 RS485 readers and multi-dropped on a cable length of 1.2KM.

System Compatibility
The ECM can be used with the AC2000 or the AC2000 Lite access control systems.

Windows Configuration
The ECM makes use of a Tibbo Ethernet module for connection to the Ethernet network. Tibbo supply a simple Device Server Toolkit (DST) application for setup and network configuration. Sample configuration files for standalone and legacy (ENCN) modes of operation are supplied.

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Specifications

Physical	
Size	140 x 110 x 35mm (5.5 x 4.3 x 1.4˝)
Weight	0.2Kg
Housing	Plastic enclosure or PCB only
Housing colour	Beige
Power	
Voltage	12Vdc
Current Consumption	250mA (excluding reader)
Environmental	
Temperature	–10°C to 55°C
LED Indicators	+12 Volts Power RS485 Rx and Tx Ethernet 100BaseT Ethernet Link
Tibbo LED Indicators	Status Red Status Green
Functionality	
Reader Power Output	12V, limited to 750mA (MAX) to power a single CEM reader. Excludes lock power (subject to cable resistance)
Configuration	Configurable via Device Server Toolkit, telnet or serial connection, AC2000 web tools
Communication Interface	
Inputs	10/100MB Ethernet via RJ45 connector
Outputs	RS232 via DB9 connector RS485 via 2 part screw terminal
To Host	10/100 Base–T TCP/IP using CAT5/6 Unshielded twisted pair Cable
Connection	RJ45
To RS485 Card Reader	RS485 multi–drop cable runs using Belden 8723 with maximum length of 1.2km without repeater
Connection	2 part screw terminal

Ordering Information

Product Code	Description
ECM/200/000	ECM (Complete with PSU and Enclosure)

Requirements

· AC2000, AC2000 Airport Edition, AC2000 Lite

· CEM Serial Devices

Related Products

- AC2000 SE
- AC2000 AE
- AC2000 Lite

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