PACOM

FEATURES

▸ Designed for advanced access and alarm control applications

▸ On-board Ethernet 10/100 BaseT port

▸ Embedded web server

▸ Anti-passback capabilities

▸ Supports up to 500,000 cards with the addition of an SD card (default 1000 cards)

▸ Supports up to 50,000 card transaction with the addition of an SD card

▸ Unlimited access levels

▸ 8 on-board supervised input (expandable to 40)

▸ 8 on-board outputs (expandable to 24)

▸ Dedicated tamper input

▸ Online firmware upgrade

▸ Backup battery

▸ Supports up to 8 doors, each with an IN reader and OUT reader

▸ Support for cards of different format

▸ Embedded web server or PACOM host software for easy configuration

The PACOM 8003 is an intelligent IP-enabled hybrid controller that provides intrusion detection and access control. The 8003 Controller is built using PACOM-Edge technology, which represents a new family of devices enabling advanced security capabilities across an organization's Ethernet backbone. The IP capability means there is a reduced need for traditional security cabling ensuring convenient deployment and extensive scalability.

As an alarm device, the 8003 offers up to 8 configurable, 5-state inputs and 8 outputs comprising 2 relays and 6 open collectors. Inputs can be expanded up to 96 and outputs can be expanded to up to 40 via the addition of on-board expansion modules and/or remote I/O devices.

The 8003 also offers the flexibility of dual channel reporting, allowing users to simultaneously communicate events to multiple systems in real-time. The 8003 reports events and alarms to the PACOM host software. Using dual channel reporting, the 8003 can also send messages to a second monitoring system that accepts SIA or CID format messages. The 8003 can operate stand-alone for smaller or remote environments or can be easily incorporated as part of a fully integrated alarm and access control system for larger buildings or multi-site applications. It has been specifically engineered so that it can be conveniently installed in any location rated for a 3U rack mount device.

Built using the PACOM-Edge technology, the 8003 intelligent IP-enabled hybrid controller is designed for advanced alarm and access control applications with PACOM GMS and Unison.

August 2022

ARCHITECTURE
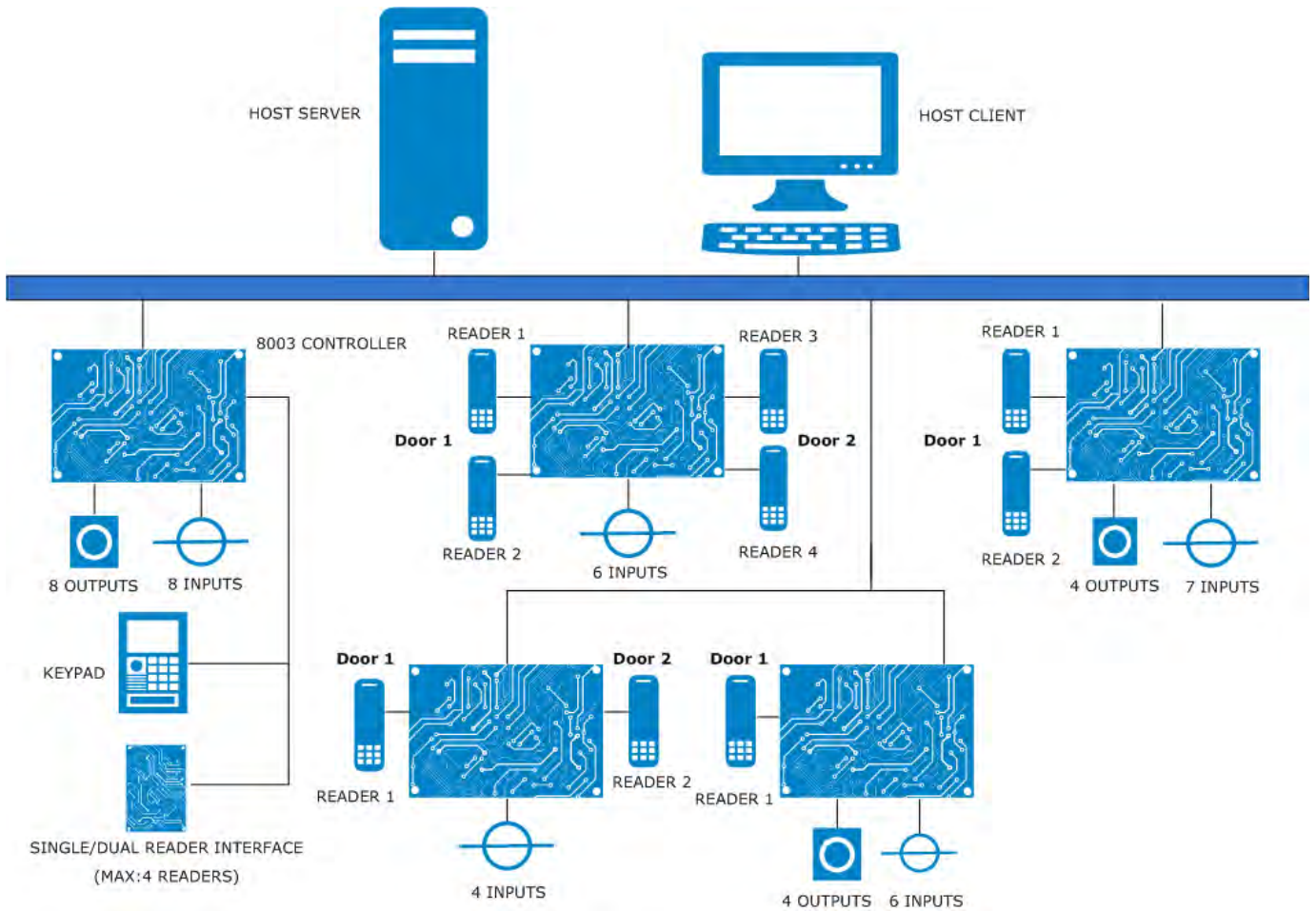
DEFAULT CONFIGURATION

POINT NUMBER	INPUT FUNCTION	OUTPUT FUNCTION
1	General Purpose	Relay (door 1)
2	General Purpose	Relay (door 2)
3	Door Contact (door 2)	Green LED (door 1)
4	Strike (door 2)	Red LED (door 1)
5	Egress/RTE (door 2)	Buzzer (door 1)
6	Door Contact (door 1)	Green LED (door 2)
7	Strike (door 1)	Red LED (door 2)
8	Egress/RTE (door 1)	Buzzer (door 2)

TECHNICAL SPECIFICATIONS

ELECTRICAL

Input Voltage	9 to 36VDC @ 2A
Available Auxiliary Power	1000mA @ 12VDC for peripheral devices
Current Consumption	210mA @ 12VDC typical, excluding expansion cards
Power Protection	Resettable fuse 3.0A

BATTERY

Internal Memory	CR1216 3V lithium type Provides 100 days of backup
Backup Battery	Lithium CR1216 3V battery provided to protect Real Time Clock (RTC) and SRAM

ENVIRONMENTAL

Operating Temperature	-10 to +55°C (14 to 131°F)
Maximum Humidity	93% (non-condensing) @ 40°C (104°F)

PHYSICAL

Dimensions	160 x 100 x 22mm (6.3 x 3.9 x 0.9") 160 x 100 x 32mm (6.3 x 3.9 x 1.3") with expansion cards
Packed Weight	175g (6.2oz)

COMMUNICATIONS

Network Protocol	Ethernet (10/100 auto switching), PPP
Modem	N/A (PACOM 8209 recommended)
Port	RS485 (each device line can support up to 32 PACOM RS485 peripheral devices) RS232 Ethernet USB Device USB Host SD Card Slot PACOM Expansion Slots (x2)

SIGNALING

On-Board Inputs	8 (expandable to 40)
Total Inputs Supported	96
On-Board Outputs	8 (expandable to 24)
Total Outputs Supported	40

SECURITY

Tamper Switch	On-board support provided
Encryption	AES-128, AES-256

MISCELLANEOUS

Memory	321MB (expandable) All persistent configuration is stored in NAND Flash located at U12 • 1MB SRAM • 256 MB Non-Volatile Flash Memory (storage)
Dual Flash ROM	Allows 2 versions of firmware to be stored and enables remote upgrades to be performed without any downtime.
Indicators	7 status indicator LEDs Relay outputs, Ethernet (speed and link status) and RS-485 (Tx, Rx)
Expansion Card Connection	2 x 20-pin (suitable for 8000 Series Expansion Cards except 8202R-001-UL PSTN modem)
Programming	Configuration via embedded web server or PACOM host software. Intelligent 'Auto Configure' function in the web server uploads the 8003 device configuration.
Expressions / Macros	Unlimited
Alarms	Inputs: 96 max Outputs: 40 max Intrusion Areas: Unlimited Alarm Keypads: 32 RS485 Bus: 3 Channels (32 max per bus)

Card/User Capacity	1000 default (500,000 with SD card)
Card Transaction Capacity	1000 default (50,000 with SD card)
Access Levels	Unlimited
Holidays	Unlimited dates, 5 holiday types
Time Schedules	256 each with up to 10 start and stop periods

SUPPORTED

Card Formats	26-bit Wiegand, Wiegand Custom (up to 128-bits)
Expansion Modules	8201 GPRS Expansion Module 8203 4-Output Expansion Module 8204 8-Input Expansion Module 8205 RS232/RS485 Expansion Module 8207 Star Coupler Expansion Module 8209 PSTN Modem Expansion Module 8220 Dual Expansion
Peripheral Devices	1064 Single Door Controller 1068 2-Input/1-Output Module 1076 8-input/4-output Module 1076 2-Door Controller 8101 Series Keypads 8303 Monitoring Power Supply 8501 Input/Output Module 8603 Door Controller

COMPLIANCE AND ACCREDITATION

RoHS, EMC | CE | C-Tick | FCC Part 15 CLASS B ANSI C63.4-2009, UL | EN 55032:2015 | EN 50130-4: 2011+ A1:2014 | EN 61000-3-2: 2014 | EN 61000-3-3: 2013 | EN 60950: 2006: A1, A2, A11 & A12

EN 50131-3:2009 including the related requirements of: EN 50131-1:2006 + A1:2009 | EN 50130-4: 2011 + A1:2014 | EN 50130-5:2011

EN 50136-2:2013 | EN 50131-10:2014 including the related requirements of: EN 50136-1:2012 | EN 50130-4:2011 + A1:2014 | EN 501310-5:2011

ORDERING INFORMATION

PART NUMBER	TYPE CODE	DESCRIPTION
300 040 121	8003R-001	8003 Intelligent Controller