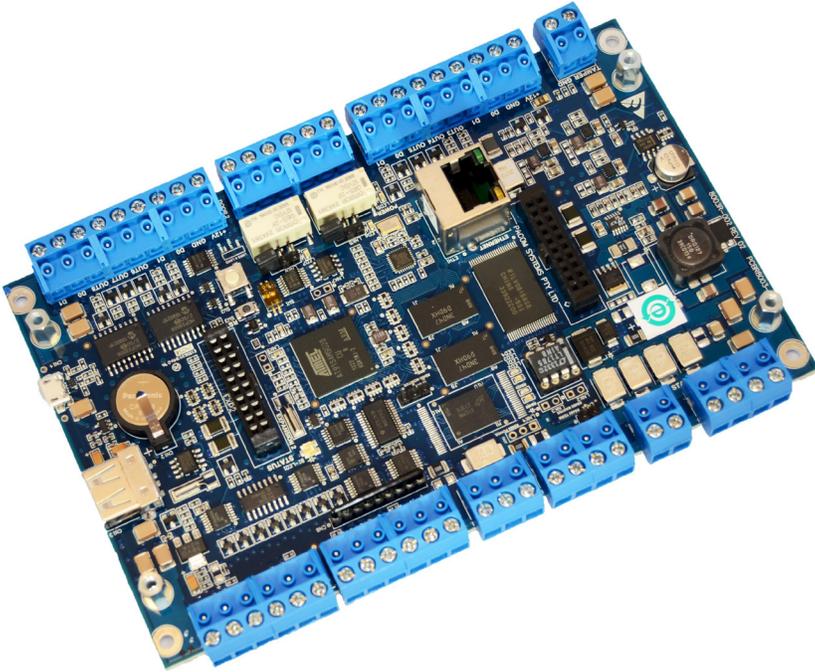# DATASHEET
PACOM-EDGE – 8003 INTELLIGENT SECURITY CONTROLLER

FEATURES

▶ Integrated access control and intrusion detection

▶ On-board Ethernet

▶ Standard 3U rack mount size

▶ Support for up to 2 doors, each with an IN and OUT readers

▶ 500,000 user/card capacity

▶ 50,000 transaction storage

▶ Unlimited access levels

▶ 8 on-board supervized inputs (expandable to 64)

▶ 8 on-board outputs (expandable to 32)

▶ Embedded web server for easy programming

▶ Online firmware updates

OVERVIEW

The 8003 is an intelligent IP-enabled hybrid controller that provides flexible intrusion detection and access control for up to two doors. The 8003 is built using PACOM-Edge technology. PACOM-Edge 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 which ensures convenient deployment and extensive scalability.

The 8003 is designed for advanced alarm and access control applications. As an access control device, it can support up to 2 doors, each with an IN reader and OUT reader - satisfying the needs of environments where users may want anti-passback.
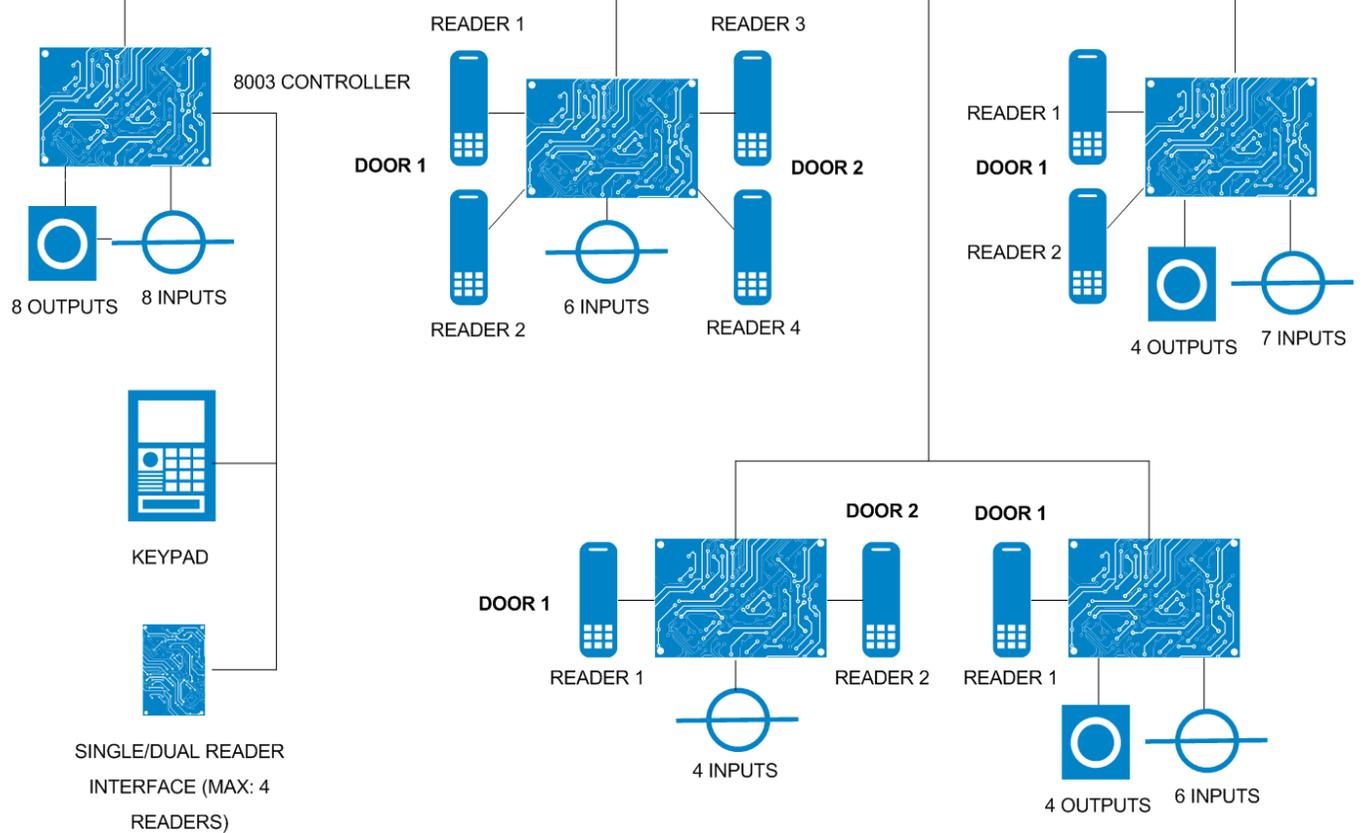
As an alarm device, the 8003 offers up to 8 configurable 5-state inputs and 8 outputs comprising 2 relays and 6 open collectors. Inputs can be expanded up to 64 and outputs can be expanded to up to 32 via the addition of on-board expansion modules and/or remote I/O devices.

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. The 8003 has also been specifically engineered so that it can be conveniently installed in any location rated for a 3U rack mount device.

ARCHITECTURE

HOST SERVER

HOST CLIENT

8003 CONTROLLER

8 OUTPUTS   8 INPUTS

KEYPAD

SINGLE/DUAL READER INTERFACE (MAX: 4 READERS)

READER 1   READER 3

DOOR 1   DOOR 2

READER 2   6 INPUTS   READER 4

READER 1

DOOR 1

READER 2

4 OUTPUTS   7 INPUTS

DOOR 2   DOOR 1

DOOR 1

READER 1   READER 2   READER 1

4 INPUTS

4 OUTPUTS   6 INPUTS

* This assumes that the 2 inputs for monitoring the lock status are not used

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	Egress/RTE (door 2)	Red LED (door 1)
5	General Purpose	Buzzer (door 1)
6	Door Contact (door 1)	Green LED (door 2)
7	Egress/RTE (door 1)	Red LED (door 2)
8	General Purpose	Buzzer (door 2)

TECHNICAL SPECIFICATIONS

DATABASE

- Card/user capacity: 1000 default (500,000 with SD card)
- Transaction storage: 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
- Card formats: 26 bit Wiegand, HID Corporate 1000 (35 bit), Wiegand Custom (up to 32 bits)

ONBOARD I/O

- 4 readers, 2 doors - Weigand D0/ D1, door contact, egress, door lock, green/red LED control, buzzer)
- Inputs - 8 x end-of-line monitored inputs (default 10K, programmable from 1K to 250K)
- Outputs: 2 x relay (NO/NC), 2A @ 30VDC; 6 x open collector, 150mA@15VDC

ALARM

- Inputs: 64 max (incl door inputs)
- Outputs: 32 max (incl door outputs)
- Intrusion Areas: 32 max
- Alarm keypads: 4 max
- RS485 Bus: 4 Channels (32 max per bus)

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

COMMUNICATION

- RJ45 Ethernet Port 10/100 BaseT
- RS485 multi-drop port for PACOM peripherals
- RS232 port for interfacing to third-party devices (future)
- USB port 1: USB 2.0 Type A, female. Used for connection to a flash drive for performing local firmware updates (future)
- USB port 2: USB 2.0 Micro B, female.For connection to a computer for basic configuration and performing firmware updates
- SD card slot: Micro SD slot used to increase the number of offline cards and transactions. Refer to Order Information section for SD card part number (not supplied)
- PACOM expansion ports: 2 Expand I/O capacity and add communications options. Refer to next section for supported devices

SUPPORTED EXPANSION MODULES

- 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

POWER STATUS MONITORING

Dedicated pin for connection to PACOM 8303/8305 power supplies to report AC fail, battery low and battery missing messages

SUPPORTED PERIPHERAL DEVICES

- 8101 Series Keypads
- 8501 Input/Output Module
- 8303 Monitoring Power Supply
- 1068 2-Input/1-Output Module
- 1076 8-input/4-output Module
- 1064 Single Door Controller
- 1076 Two Door Controller

APPROVALS

RoHS, EMC, CE, C-Tick, FCC Part 15 CLASS B, ANSI C63.4-2009, UL pending, EN50130-4:2011, EN61000-3-2:2006 + Amdt 1:2008 + Amdt 2:2009, EN61000-3-3:2008, EN61000-4-2:2009, EN61000-4-3:2006+A1:2008+A2:2010, EN61000-4-4:2004+A1:2010, EN61000-4-5:2006, EN61000-4-6:2009, EN61000-4-11:2004, EN55022

DIMENSIONS

3U size (160mm W x 100mm H x 40mm D) (6.3" W x 3.9" H x 1.6" D)

WEIGHT

150g (5.3oz)

PROCESSOR

ARM9 32-bit @ 400MHz

MEMORY

- 1MB SRAM
- 256 MB Non-Volatile Flash Memory (storage)

POWER INPUT

9 to 36VDC

POWER CONSUMPTION

Typically 250mA @ 12VDC

POWER PROTECTION

Resettable fuse 3.0A

DUAL FLASH ROM

This allows two (2) versions of firmware to be stored and enables remote upgrades to be performed without any downtime

BACKUP BATTERY

Lithium CR1216 3V battery provided to protect Real Time Clock (RTC) and SRAM

STATUS INDICATORS

Relay Outputs, Ethernet (speed and link status) and RS-485 (Tx, Rx). Status LED

ENVIRONMENT

-10 to +55°C (14 to 122°F) 85% +/- 5% relative humidity (non-condensing) @ 30°C (86°F)

ORDER INFORMATION

PART NUMBER	TYPE CODE	DESCRIPTION
400 052 061	8003R-ENC	8003 PACOM-Edge Intelligent Security Controller with 8303 Power Supply in Standard Enclosure
400 053 041	8003R-ENC-UL	8003 PACOM-Edge Intelligent Security Controller with 8303 Power Supply in Standard US Enclosure [ETL listed to UL standards, USA only]
400 053 043	8003R-ENC-07	8003 PACOM-Edge Intelligent Security Controller with 12VDC Plug Pack and Compact Enclosure [ETL listed to UL standards]
300 044 104	8404R-001-UL	1GB Industrial Grade SD Card for increased card and transaction capacity in the 8003