

## FEATURES

- ▶ Compatible with all PACOM Controllers
- ▶ Configurable as a door controller and an input output module
- ▶ On-board Ethernet 10/100 BaseT port
- ▶ Embedded web server
- ▶ Anti-passback capability
- ▶ Supports USB smart card reader
- ▶ Supports up to 500,000 cards
- ▶ Supports up to 50,000 card transactions
- ▶ Support up to 17 different card formats (1 fixed, 16 customizable)
- ▶ Degraded memory for up to 1000 cards
- ▶ Remote firmware upgrade
- ▶ Dedicated tamper input - can be used with an external switch
- ▶ On-board color LEDs indicate Ethernet, power, transmission, reception and 2 relay outputs



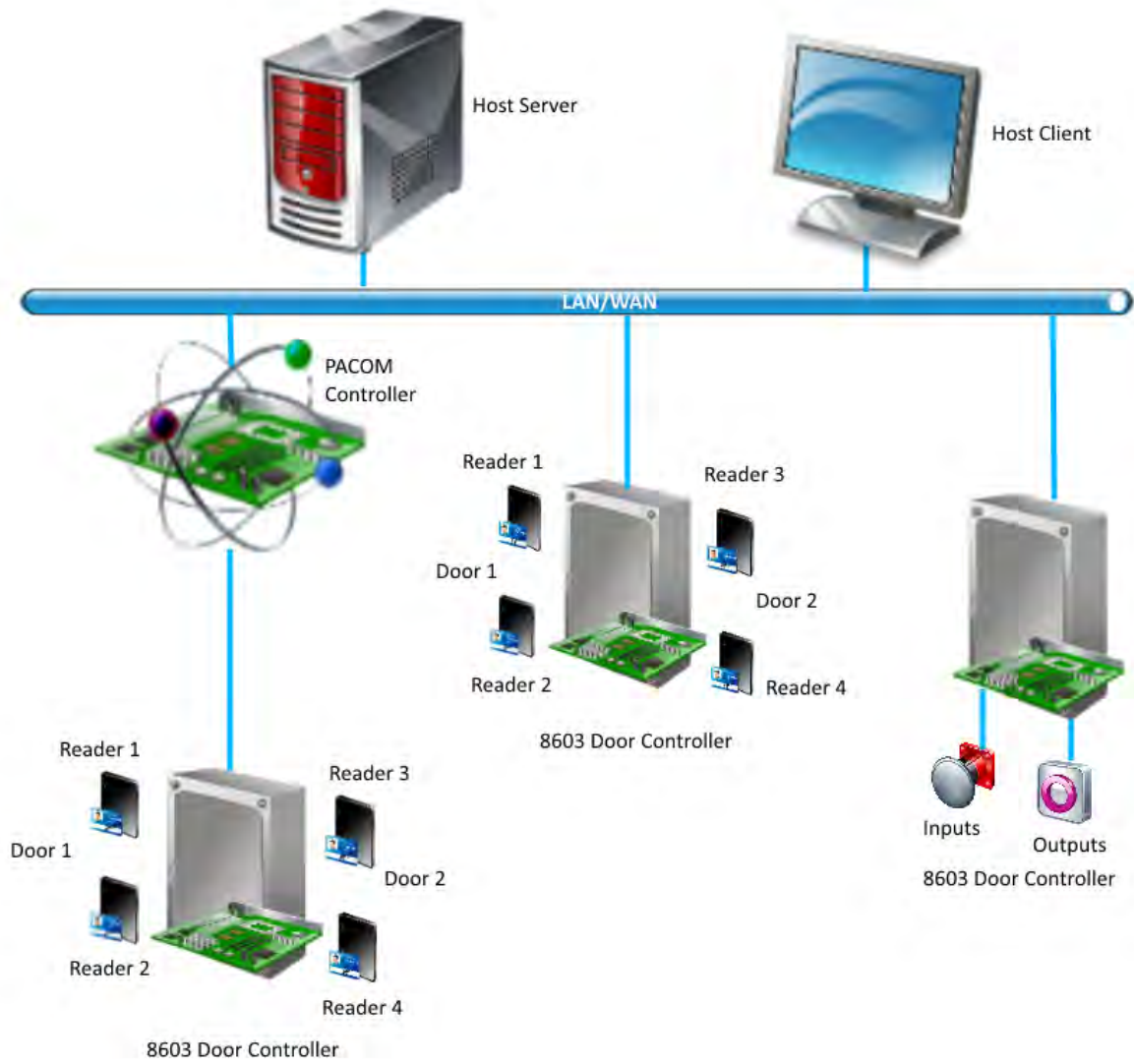
The PACOM 8603 Intelligent IP Door Controller and I/O module is built using PACOM-Edge technology. PACOM-Edge represents a family of devices enabling advanced security capabilities across an organization's Ethernet backbone. The IP capability reduces the need for traditional security cabling, which ensures convenient deployment and extensive scalability. Configuration of the 8603 is easily achieved using the embedded web server or PACOM host software.

The IP door controller is designed for advanced access control applications, besides supporting the normal lock, unlock and offline access modes. Configure up to 2 doors, each with an IN reader and OUT reader to suit environments that require an anti-passback system. The 8603 supports 1000 cards by default, which can be easily scaled to support 500,000 cards with the addition of an SD Card. It supports card readers that use the Wiegand or MiFARE technology and when used with the expansion modules it supports cards using the Open Supervised Device Protocol (OSDP).

The 8603 provides 8 configurable 5-state inputs and 8 outputs comprising of 2 relays and 6 open collectors. Using the compatible on-board expansion modules, the 8603 can be expanded to support up to 40 inputs and 24 outputs.

***The 8603 is an intelligent IP-enabled hybrid door and an input output controller that provides flexible access control for up to 2 doors.***

# 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	General Purpose	Red LED (door 1)
5	Egress/RTE (door 2)	Buzzer (door 1)
6	Door Contact (door 1)	Green LED (door 2)
7	General Purpose	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
Fuse	Resettable fuse 3.0A

### 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
Port	RS485 (each device line can support up to 32 PACOM RS485 peripheral devices) RS232 Ethernet USB Device USB Host SD Card Slot

### SIGNALING

Input	8 x supervised (10kΩ EOL resistance standard. Can be programmed for any value between 1kΩ and 100kΩ)
Output	2 x relay controlled, relay contact rating: 1.0A @ 30VDC when powered from an external power supply 6 x open collector, transistor controlled (100mA maximum 215VDC when powered from an external power supply)
On-board I/O	4 readers, 2 doors (Wiegand D0/D1, door contact, egress, door lock, green/red LED control, buzzer) <b>Note:</b> OSDP is supported via installation of an expansion module.

### SECURITY

Tamper Switch	On-board support provided
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### MISCELLANEOUS

Memory	321MB (expandable) 256MB non-volatile flash memory (storage)
Processor	ARM9 32-bit@400MHz
Indicators	7 status indicator LEDs Relay outputs, Ethernet (speed and link status) and RS-485 (Tx, Rx). Status LED
Expansion Card Connection	2 x 20-pin (suitable for 8000 Series Expansion Cards except the 8202R-001-UL PSTN Modem)
Power Status Monitoring	Dedicated pin for connection to PACOM 8309 Power Supply to report AC fail, battery low and battery missing messages
Programming	Configuration via embedded web server or PACOM host software.
Database	Card/user capacity: 1000 default (500,000 with SD card) Card transaction capacity: 1000 default (50,000 with SD card)

## SUPPORTED

Card Formats	26-bit Wiegand, Wiegand Custom (up to 128-bits)
Expansion Modules	8203 4-Output 8204 8-Input 8205 RS232/RS485 (for OSDP) 8207 Star Coupler (for OSDP) 8220 Dual Expansion

## COMPLIANCE & ACCREDITATION

RoHS, Radiation: EN55032 Class B I.FCC Part 15, Immunity:EN50130-4: 2011/A1:2014 | EN61000-3-2 | EN61000-3-3 + A1/A2 | UL294 Ed 6

## ORDERING INFORMATION

PART NUMBER	TYPE CODE	DESCRIPTION
300 047 021	8603R-001	8603 IP based 2 Door 4 Reader Controller with in-built support for 8 inputs and 8 outputs (supports Wiegand D0/D1). 2 expansion slots for increasing I/O and/or communications options supporting 8203, 8204, 8205 and 8207 Modules.
300 047 022	8603R-OSDP	8603 IP based 2 Door 4 Reader Controller with in-built support for 8 inputs and 8 outputs (supports Wiegand D0/D1). 2 expansion slots for increasing I/O and/or communications options supporting 8203, 8204, 8205 and 8207 Modules. + 8205 RS232/RS485 Comms (giving support for OSDP).
300 047 023	8603R-001-ENC	8603 IP based 2 Door 4 Reader Controller with in-built support for 8 inputs and 8 outputs (supports Wiegand D0/D1). 2 expansion slots for increasing I/O and/or communications options supporting 8203, 8204, 8205 and 8207 Modules. + PACOM Standard Enclosure.
300 047 024	8603R-OSDP-ENC	8603 IP based 2 Door 4 Reader Controller with in-built support for 8 inputs and 8 outputs (supports Wiegand D0/D1). 2 expansion slots for increasing I/O and/or communications options supporting 8203, 8204, 8205 and 8207 Modules. + 8205 RS232/RS485 Comms (giving support for OSDP) + PACOM Standard Enclosure.