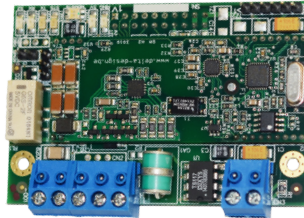


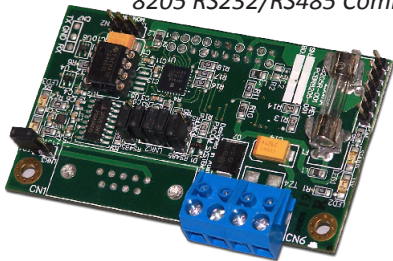
## DATASHEET

### EXPANSION MODULES – 8000-SERIES

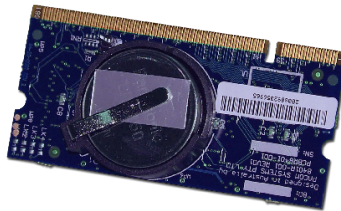
*8209 PSTN Modem*



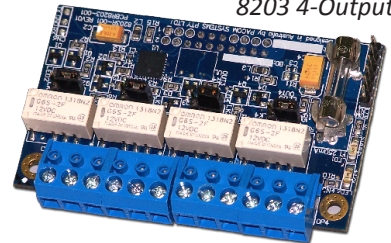
*8205 RS232/RS485 Comms*



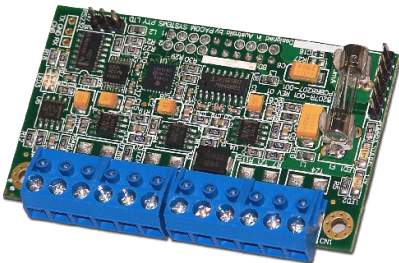
*8403 Memory Expansion*



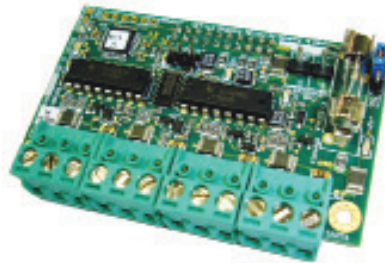
*8203 4-Output*



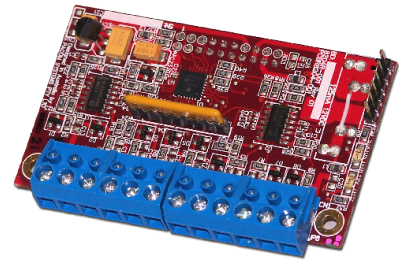
*8207 RS485 Star Coupler*



*8208 S-ART Interface*



*8204 8-Input*



## OVERVIEW

A range of expansion cards are available for PACOM 8000 series controllers and some other peripheral devices to provide additional features and capabilities. Expansion cards conveniently plug into the controller as “piggy-back” modules and use the controller as a power source.

When fitted, expansion cards are automatically configured. Expansion card firmware is also updated to the latest loaded version. Most expansion cards feature a number of diagnostic LEDs for simplified troubleshooting.

## TECHNICAL SPECIFICATION

### 8203 EXPANSION MODULE 4 OUTPUTS

Four output relays that can be used to control external devices such as sirens and lights (maximum 2A @ 12VDC). Compatible with PACOM 8001/8002, 8003 controllers and 8602 mutli interface.

|                       |                                                                                                                                                                                                                                                                                                                                                                                                              |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DIMENSIONS            | 76mm x 45mm x 18mm (3.0 x 1.8 x 0.7")                                                                                                                                                                                                                                                                                                                                                                        |
| POWER CONSUMPTION     | 40mA                                                                                                                                                                                                                                                                                                                                                                                                         |
| OPERATING ENVIRONMENT | EU: -10 to +55°C (14 to 131°F), 20 to 85% ±5% maximum humidity (non-condensing) @ 30°C (86°F)<br>UL: 0 to 50°C (32 to 122°F), 20 to 85% ±5% maximum humidity (non-condensing) @ 30°C (86°F)                                                                                                                                                                                                                  |
| APPROVALS             | ANSI/CIA CP-01, AS/NZS 60950.1 A1+A2+A3, AS/NZS CISPR22 Class B/A, EN 50130-4+A1+A2 ECII SG3, EN50130-5 ECII SG3, EN 50131-1 ECII SG3, EN 50131-3 ECII SG3, EN 50131-6 ECII SG3, EN 55022 Class A/B, EN60950-1+A1+A11+A12, EN 61000-3-2+A1+A2, EN 61000-3-3+A1+A2, FCC 47 Part 15/B Class A/B, NF&A2P 3 Shields ECII SG3, SSF 1014 Ver 3, UL 294, UL1076/ULC-ORD-C1076, UL 1610, UL 2017, ULC-S304, ULC-S319 |

### 8204 EXPANSION MODULE 8 INPUTS

Eight supervised five state inputs - secure/reset (normal), alarm, open circuit, short circuit and trouble/tamper. Default EOL resistance is 10kOhm, however, is alterable via software or SIP replacement to 3.3 to 25.4kOhm. All inputs support analog data (0 to 8VDC). Compatible with PACOM 8001/8002, 8003 controllers and 8602 mutli interface.

|                       |                                                                                                                                                                                                                                                                                                                                                                                                              |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DIMENSIONS            | 76mm x 45mm x 18mm (3.0 x 1.8 x 0.7")                                                                                                                                                                                                                                                                                                                                                                        |
| POWER CONSUMPTION     | 30mA                                                                                                                                                                                                                                                                                                                                                                                                         |
| OPERATING ENVIRONMENT | EU: -10 to +55°C (14 to 131°F), 20 to 85% ±5% maximum humidity (non-condensing) @ 30°C (86°F)<br>UL: 0 to 50°C (32 to 122°F), 20 to 85% ±5% maximum humidity (non-condensing) @ 30°C (86°F)                                                                                                                                                                                                                  |
| APPROVALS             | ANSI/CIA CP-01, AS/NZS 60950.1 A1+A2+A3, AS/NZS CISPR22 Class B/A, EN 50130-4+A1+A2 ECII SG3, EN50130-5 ECII SG3, EN 50131-1 ECII SG3, EN 50131-3 ECII SG3, EN 50131-6 ECII SG3, EN 55022 Class A/B, EN60950-1+A1+A11+A12, EN 61000-3-2+A1+A2, EN 61000-3-3+A1+A2, FCC 47 Part 15/B Class A/B, NF&A2P 3 Shields ECII SG3, SSF 1014 Ver 3, UL 294, UL1076/ULC-ORD-C1076, UL 1610, UL 2017, ULC-S304, ULC-S319 |

### 8205 EXPANSION MODULE RS232/RS485

Support additional PACOM RS485 devices or interface to third-party systems - intercom, video, elevator management systems etc. Compatible with PACOM 8001/8002 and 8003 controllers.

|                       |                                                                                                                                                                                                                                                                                                                                                                                     |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DIMENSIONS            | 76mm x 45mm x 18mm (3.0 x 1.8 x 0.7")                                                                                                                                                                                                                                                                                                                                               |
| POWER CONSUMPTION     | 10mA                                                                                                                                                                                                                                                                                                                                                                                |
| OPERATING ENVIRONMENT | EU: -10 to +55°C (14 to 131°F), 20 to 85% ±5% maximum humidity (non-condensing) @ 30°C (86°F)<br>UL: 0 to 50°C (32 to 122°F), 20 to 85% ±5% maximum humidity (non-condensing) @ 30°C (86°F)                                                                                                                                                                                         |
| APPROVALS             | ANSI/CIA CP-01, AS/NZS 60950.1 A1+A2+A3, AS/NZS CISPR22 Class B/A, EN 50130-4+A1+A2 ECII SG3, EN50130-5 ECII SG3, EN 50131-1 ECII SG3, EN 50131-3 ECII SG3, EN 50131-6 ECII SG3, EN 55022 Class A/B, EN 60950-1+A1+A11+A12, EN 61000-3-2+A1+A2, EN 61000-3-3+A1+A2, FCC 47 Part 15/B Class A/B, SSF 1014 Ver 3, UL 294, UL 1076/ULC-ORD-C1076, UL 1610, UL 2017, ULC-S304, ULC-S319 |

### 8207 EXPANSION MODULE RS485 STAR COUPLER

Enables RS485 cabling in a "star" configuration with up to four different paths (maximum of 32 devices in total). Compatible with PACOM 8001/8002 and 8003 controllers.

|                       |                                                                                                                                                                                                                                                                                                                                                                 |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DIMENSIONS            | 76mm x 45mm x 18mm (3.0 x 1.8 x 0.7")                                                                                                                                                                                                                                                                                                                           |
| POWER CONSUMPTION     | 25mA                                                                                                                                                                                                                                                                                                                                                            |
| OPERATING ENVIRONMENT | EU: -10 to +55°C (14 to 131°F), 20 to 85% ±5% maximum humidity (non-condensing) @ 30°C (86°F)<br>UL: 0 to 50°C (32 to 122°F), 20 to 85% ±5% maximum humidity (non-condensing) @ 30°C (86°F)                                                                                                                                                                     |
| APPROVALS             | ANSI/CIA CP-01, AS/NZS 60950.1 A1+A2+A3, AS/NZS CISPR22 Class B/A, EN 50130-4+A1+A2 ECII SG3, EN 50130-5 ECII SG3, EN 50131-1 ECII SG3, EN 50131-3 ECII SG3, EN 55022 Class A/B, EN 60950-1+A1+A11+A12, EN 61000-3-2+A1+A2, EN 61000-3-3+A1+A2, FCC 47 Part 15/B Class A/B, SSF 1014 Ver 3, UL 294, UL 1076/ULC-ORD-C1076, UL 1610, UL 2017, ULC-S304, ULC-S319 |

## 8208 EXPANSION MODULE S-ART

Enables serial-addressable receiver/transmitter (S-ART) compatible devices to connect to controllers. Each card has four lines (30 devices maximum each), up to a total of 120 inputs and 60 outputs. Compatible with PACOM 8001/8002 controllers.

|                       |                                                                                                                                                                                           |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DIMENSIONS            | 76mm x 45mm x 18mm (3.0 x 1.8 x 0.7")                                                                                                                                                     |
| POWER CONSUMPTION     | 22mA; 25mA per input; 12mA per output                                                                                                                                                     |
| OPERATING ENVIRONMENT | EU:-10 to +55°C (14 to 131°F), 20 to 85% ±5% maximum humidity (non-condensing) @ 30°C (86°F)<br>UL:0 to 50°C (32 to 122°F), 20 to 85% ±5% maximum humidity (non-condensing) @ 30°C (86°F) |
| APPROVALS             | EN 50130-4+A1+A2 ECII SG3, EN 55022 Class A/B, EN 60950-1+A1+A11+A12                                                                                                                      |

## 8209 EXPANSION MODULE PSTN MODEM

The PACOM 8209 PSTN Modem expansion module is designed to provide a backup communications option for PACOM controllers across a PSTN (Public Switched Telephone Network) line. PACOM 8209 ensures that important alarms, card activity and other status changes are reported even if other forms of communication are not available. The 8209 provides a secondary or tertiary form of communications should the IP Ethernet or GPRS mobile network become unavailable making the 8209 a good choice for remote locations where a physical telephone line connection is installed and other forms of communications are unreliable. 8209 supports voice listen-in operation, where the controller initiates a connection on alarm over the PSTN line, to an operator or digital receiver who can immediately listen to live sounds coming from the microphone connected to the 8209 Modem and then quickly verify the severity within seconds. 8209 PSTN Modem also supports a number of dial-up features including support for mode 3 telephone line sharing to support phone calls and fax transmissions on the same line as the security controller, Contact ID (CID) alarm messaging for central station receivers and line detection to determine if the telephone line is active and ready to be used for backup purposes. Compatible with PACOM 8001/8002 and 8003 controllers.

|                       |                                                                                                                                                                                           |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DIMENSIONS            | 76 x 50 x 18mm (3.0 x 2.0 x 0.7")                                                                                                                                                         |
| POWER CONSUMPTION     | 40 mA                                                                                                                                                                                     |
| OPERATING ENVIRONMENT | EU:-10 to +55°C (14 to 131°F), 20 to 85% ±5% maximum humidity (non-condensing) @ 30°C (86°F)<br>UL:0 to 50°C (32 to 122°F), 20 to 85% ±5% maximum humidity (non-condensing) @ 30°C (86°F) |

## 8403 64MB SODIMM MEMORY EXPANSION

Increases cardholders and offline event storage for "large" model controllers. Compatible with PACOM 8001/8002 controllers.

|                       |                                                                                                                                                                                           |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DIMENSIONS            | 67.5 x 32.5 x 15mm (2.7 x 1.3 x 0.6")                                                                                                                                                     |
| POWER CONSUMPTION     | 10 mA                                                                                                                                                                                     |
| OPERATING ENVIRONMENT | EU:-10 to +55°C (14 to 131°F), 20 to 85% ±5% maximum humidity (non-condensing) @ 30°C (86°F)<br>UL:0 to 50°C (32 to 122°F), 20 to 85% ±5% maximum humidity (non-condensing) @ 30°C (86°F) |
| APPROVALS             | ANSI/CIA CP-01, UL 294, UL 1076/ULC-ORD-C1076, UL 1610, UL 2017, ULC-S304, ULC-S319                                                                                                       |

## ORDERING INFORMATION

| PART NUMBER | TYPE CODE    | DESCRIPTION                              |
|-------------|--------------|------------------------------------------|
| 300 041 003 | 8203R-001    | 8203 Expansion module 4 outputs          |
| 300 041 004 | 8204R-001    | 8204 Expansion module 8 inputs           |
| 300 041 005 | 8205R-001    | 8205 Expansion module RS485/232 port     |
| 300 041 007 | 8207R-001    | 8207 Expansion module RS485 star coupler |
| 300 041 008 | 8208R-001    | 8208 Expansion module S-ART              |
| 300 041 110 | 8209R-001-UL | 8209 Expansion module PSTN modem         |
| 300 044 103 | 8403R-001-UL | 64 MB SODIMM Memory expansion            |