

## Remote IO and Mini Remote IO

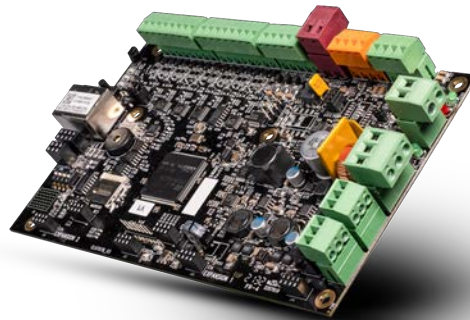
### SD1-REMIO-PCB and SE1-MINIO-PCB

PACOM offers two types of Remote IO; the standard Remote IO and the Mini Remote IO.

The Remote IO and the Mini Remote IO support onboard 8 analog/digital inputs, 2 relay outputs and 3 O/C outputs and 2 onboard doors without any expansion cards. Additionally, the Remote IO has a built-in battery charger, Ethernet port\*, and 2 OSDP ports.

Three expansion module sockets are available for a maximum of 3 cards, in any combination. This allows the Remote IO to expand to 32 digital/analog inputs or 23 outputs or 4 doors or a maximum of 8 Wiegand/OSDP readers in any combination.

Connection to the S1000 Controller is by OSDP over RS485 and/or Ethernet\*. Dual banks for firmware updates are supported.



### FEATURES OF THE REMOTE IO

The Mini Remote IO contains only the essential features. For feature comparison, see the [Product Comparison table](#).

- Digital, analog inputs and card readers software configurable
- Auxiliary output supply
- Built-in battery charger
- Expansion operation capability
- Supports RS485
- Modular configuration using expansion cards
- Sensor monitoring

## TECHNICAL SPECIFICATIONS

	REMOTE IO	MINI REMOTE IO
<b>Physical</b>		
Dimensions	165mm (w) x 100mm (h) x 40mm (d) (6.3" x 3.9" x 1.6")	
Packed weight	150g (5.3oz)	
<b>Environmental</b>		
Operating temperature	-10°C (14°F) to 70°C (158°F) UL 2610, UL 294: -10°C (14°F) to 49°C (120.2°F)†	
Maximum humidity	95% ± 5% relative humidity (non-condensing) at 30°C (86°F)	
<b>Electrical</b>		
Power input	10V to 60V (UL 2610, UL 294: 15VDC to 30VDC)	10V to 60V (UL 294: 15VDC to 30VDC) (For UL application intended to be powered by VOUT on S1000 Controller or SD1-REMIO.)
Power consumption	Typically 120mA at 12VDC UL 2610, UL 294: 1.42A at 12VDC input with full load, 1.14A at 30VDC input with full load	Typically 120mA at 12VDC UL 294: 640mA at 12VDC input with full load
Power protection	Resettable fuse 3.0A	
<b>Power supply</b>		
AC input range	106VAC to 240VAC, 50Hz/60Hz, 1.5A maximum	NA
Auxiliary output supply (VOUT)	0.5A at 10VDC to 16VDC	
<b>Communications</b>		
Processor	ARM 7 32ibt at 200MHz	
Memory	1MB SRAM 2MB program flash 8MB data flash 512K EEPROM	1MB SRAM 2MB program flash 8MB data flash
Dual flash memory	Two versions of the firmware can be stored and remotely upgraded (UL 2610, UL 294: NA)†	
Communication	Multi-drop OSDP port isolated for connection to the main S1000 Controller	
<b>Onboard I/O</b>		
Inputs	8 multi EOL monitored inputs or analog inputs 0V to 10V (UL 2610, UL 294: NA)† Default 10K, programmable from 1K to 50K (UL 2610, UL 294: 10K)†	

	REMOTE IO	MINI REMOTE IO
Outputs	2 relay NO/NC dry contact 0.5A at 120VAC (UL 2610, UL 294: NA)/ 1A at 24VDC, 3 O/C 0V to 24V at 250mA†	
<b>Alarms</b>		
Inputs	Maximum 32	Maximum 24
Outputs	Maximum 23	Maximum 18
Readers	Maximum 8	Maximum 6
OSDP devices	Maximum 8	Maximum 8 <b>Note:</b> Only OSDP readers/keypads are supported, not other device types.
Tamper input	Top and bottom	
<b>Miscellaneous</b>		
DIP switch	Switch 1 to Switch 4: Set the OSDP address on the bus	
Status indicators	Relay outputs Ethernet (speed and link status) RS485 (TX, RX) RS232 (TX, RX) DC power Battery System status	Relay outputs RS485 (TX, RX) RS232 (TX, RX) DC power System status
<b>Supported</b>		
Expansion cards	8 Input 2 Output Expansion Cards (SE1-8I2O-PCB) 6 Out Expansion Cards (SE1-6OUT-PCB) CRI Expansion Cards (SE1-CRI-PCB)	

†**Note:** Only the Remote IO has been certified for UL 2610. The Mini Remote IO certification for UL2610 is pending.

## PRODUCT COMPARISON

FEATURE	REMOTE IO	MINI REMOTE IO
Battery charger	✓	×
External temperature monitor	✓	×
Expansion sockets	3	2
Ethernet port*	✓	×
RS485	1 isolated, 1 non-isolated	1 isolated, 1 non-isolated
I2C port	✓	×
Micro SD socket	✓	×
Buzzer	✓	×
Remote firmware updates	✓	✓
Top and bottom tamper for EN 50131 compliance	✓	✓

**Key:** ✓ Feature is available      × Feature is not available

## COMPLIANCE

RoHS, RCM, FCC, CE, UL 294, UL 2610

**Note:** Only the Remote IO has been certified for UL 2610. The Mini Remote IO is not certified for UL 2610.

## ORDERING INFORMATION

PART NO.	PRODUCT CODE	DESCRIPTION
320 200 130	SD1-REMIO-PCB	Remote IO PCB board only
320 200 139	SD1-REMIO-PCBKIT	Remote IO PCB board plus mounting kit for a small enclosure
320 200 132	SD1-REMIO-MENC	Remote IO PCB board in a small metal enclosure
320 200 131	SD1-REMIO-MENC2	Remote IO PCB board in a large metal enclosure with 2.5A, 240V-24V DC supply
320 200 133	SD1-REMIO-MENCL5	Remote IO PCB board in a large metal enclosure with 5A, 240V-24V DC supply
320 200 129	SD1-MINIO-PCB	Mini Remote IO PCB board only

\* The Ethernet port is for future use.