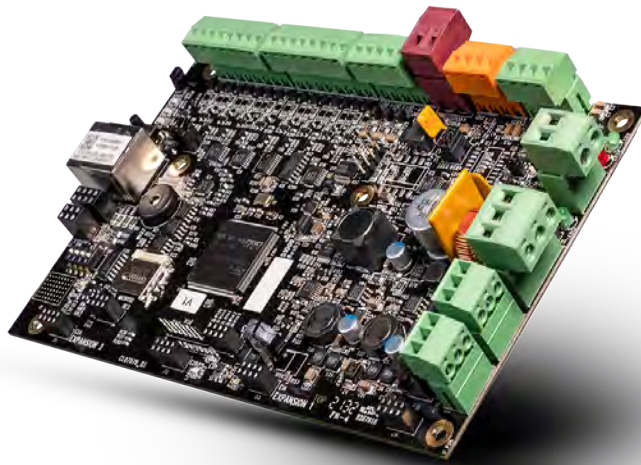# Remote IO

The Remote IO supports onboard 8 analog/digital inputs, 2 relay outputs and 3 O/C outputs and 1 onboard door without any expansion cards. In addition, it 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.

PACOM offers 2 types of Remote IO; the standard Remote IO and the Mini Remote IO. The Mini Remote IO contains only the essential features.

FEATURES OF THE REMOTE IO

- 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
Physical		
Dimensions	165mm (w) x 100mm (h) x 40mm (d) (6.3" x 3.9" x 1.6")	
Packed weight	150g (5.3oz)	
Environmental		
Operating temperature	-10°C (14°F) to 70°C (158°F) 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)	
Electrical		
Power input	10V to 60V (UL 294: 15VDC to 30VDC)	
Power consumption	typically 120mA at 12VDC UL 294: 1.42A at 12VDC input with full load, 1.14A at 30VDC input with full load	
Power protection	resettable fuse 3.0A	
Power supply		
AC input range	106VAC to 240VAC, 50Hz/60Hz, 1.5A maximum	
Auxiliary output supply	0.5A at 10VDC to 16VDC	
Communications		
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	2 version of the firmware can be stored and remotely upgraded (UL 294: NA)	
Communication	Multi-drop OSDP port isolated for connection to the main S1000 Controller	
Onboard I/O		
Inputs	8 multi EOL monitored inputs or analog inputs 0V to 10V (UL 294: NA) Default 10K, programmable from 1K to 50K (UL 294: 10K)	
Outputs	2 relay NO/NC dry contact 0.5A at 120VAC (UL 294: NA)/ 1A at 24VDC, 3 O/C 0V to 24V at 250mA	

	REMOTE IO	MINI REMOTE IO
Alarms		
Inputs	maximum 32	maximum 24
Outputs	maximum 23	maximum 18
Readers	maximum 8	maximum 6
OSDP devices	maximum 8	maximum 8 **Note:** Only OSDP readers/keypads are supported, not other device types.
Tamper input	top and bottom	
Miscellaneous		
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
Supported		
Expansion cards	8 Input 2 Output Expansion Cards 6 Out Expansion Cards CRI Expansion Cards	

Note: The specifications for the Remote IO and Mini Remote IO are very similar. Differences with the Mini Remote IO are explicitly stated in the above table.

PRODUCT COMPARISON

FEATURE	REMOTE IO	MINI REMOTE IO
Battery charger	✓	✕
External temperature monitor	✓	✕
Expansion sockets	3	2
Ethernet port*	✓	✕
RS485	2	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 AND ACCREDITATION

RoHS, RCM, FCC, CE

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
320 200 134	SD1-MINIO-PCB	Mini Remote IO PCB board only
320 200 135	SD1-MINIO-MENC	Mini Remote IO PCB board in a small metal enclosure

* The Ethernet port is physically present but currently not functional.The functionality will be available in the near future.