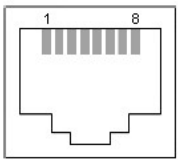
ACM5000-I

Power

The industrial **ACM5004-2-I** model can be powered externally by either:
- connecting +9V to 30 VDC to *DC PWR* and *GND* on the green screw terminal block,
- supplying 12VDC from an external AC/DC power supply to the *PWR* socket or
- connecting an external 9 to 24 VAC source to the *PWR* socket

RS232/422/485

Each of the four RJ45 serial ports can be configured as RS-232, RS422 or RS485 ports using the **Signaling Protocol** menu under **Serial Port: Configuration**



Pin	RS232	RS422	RS485
1	CTS	RX+	D+
2	DSR		
3	RXD	RX-	D-
4	GND	GND	
5	GND	GND	
6	TXD	TX+	D+
7	DTR		
8	RTS	TX-	D-

Prior to initial configuration all the serial ports are RS232. Also Port1 is configured by default a local serial console (and can be reconfigured as a serial port through the command or GUI).

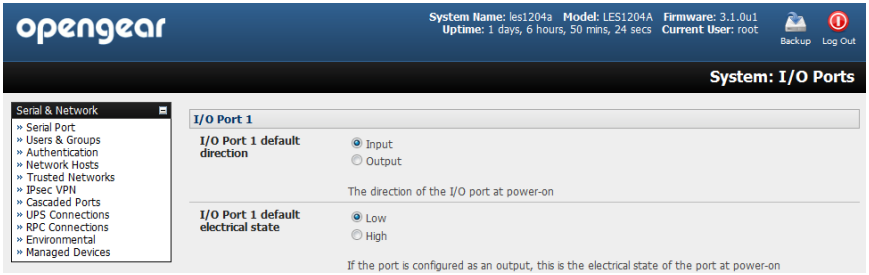
Note: In RS-485 mode two short cable loops are required between the RX+/TX+ pins (pins 1 & 6) and RX-/TX- pins (pins 3 & 8) for two wire operation

Digital I/O

There are four digital I/O ports which present on a green connector block

- *DIO1* and *DIO2* are two TTL (5V max @ 20mA) level digital I/O ports
- *OUT1* and *OUT2* are two "High-Voltage" (>5V to <= 30V @100mA) output ports

These I/O ports are configured on the **System: I/O Ports** menu



Alternately you can *ssh* or *telnet* into the ACM and use the *ioc* command line utility:

ioc: digital io-port controller:

-p	pin_num	pin number (1 to 4)
-d	pin_dir	pin direction (0 = output 1 = input)
-v	pin_val	pin electrical value in output mode (0 = low 1 = high)
-r		reset pins to all inputs and low
-g		display the pin directions and current values
-l		load pin configuration from *configlity*

Note: OUT1 and OUT2 are high voltage outputs which are to be used is to pull a connected line to ground.

Environmental Sensors

External environmental sensors can be attached directly to the two *DIO* ports.

On the **System: I/O Ports** menu configure *I/O Port1* = *DIO1* or *SENSOR1* or *I/O Port2* = *DIO2* or *SENSOR2* as an *Input)*

Screw the bare wires on any smoke detector, water detector, vibration sensor, open-door sensor or general purpose open/close status sensors into the *DIO* terminals on the green connector block

These *SENSOR* and *DIO* ports are "notionally" attached to an internal EMD so enable the **Internal EMD** on the **Serial & Network: Environmental** page

Wide Temperature

The **ACM5004-2-I** requires an external power source to operate -35° to 74° C. The 110-240V AC power adapter supplied with the unit is only for operations 5°C to 50°C