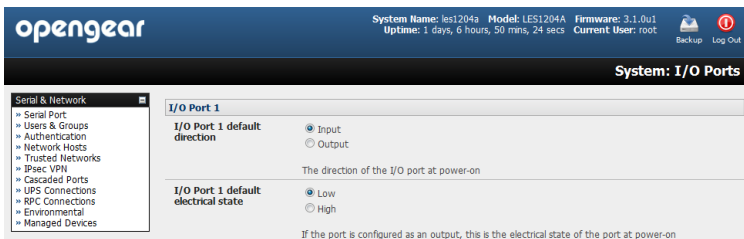# ACM5000-E

Environmental Sensors

You can connect external EMD5000 Environmental Monitors (and their attached environmental sensors) to the serial ports on any ACM5000.

Additionally each ACM5000 has an internal temperature sensor and all the ACM5000 models (except ACM5004-2-I/T) can be ordered with the environmental option –E.The ACM5000-E model has a green connector block on the side (marked *SENSORS 1 -4*) and four environmental sensors can be directly attached to this block.

With the ACM5004-2-I/T models the first two connectors on this green block (marked *DIO1* and *DIO2*) can also be configured to have external environmental sensors attached

By default each *SENSOR* (*DIO*) port is configured as an *Input,* so they are available to be used with external environmental sensors attached. To confirm the direction and state configurations for these ports select **System: I/O Ports** menu and the summary status of the four digital I/O ports will be displayed. *I/O Port1 = DIO1* or *SENSOR1*, *I/O Port2 = DIO2* or *SENSOR2*, *I/O Port3 = SENSOR3* and *I/O Port4 = SENSOR 4*
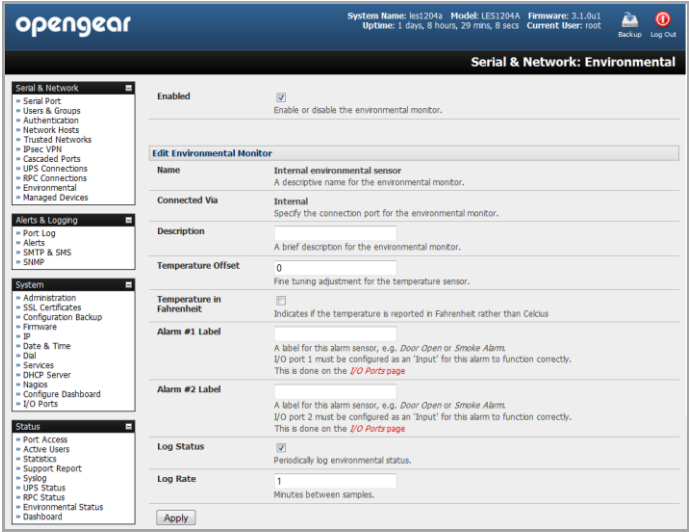

Note: The ACM5000 Sensor 'inputs' are four 'dry contact' inputs which are normally open. When open these are sensed as a TTL high or digital '1'. When activated the external devices (door close, vibration, water, smoke) present a short circuit and the contact 'closes to ground' which is read as a TTL low or a digital '0'.

For custom applications a user can sense the state (closed or open) of non-Opengear dry contact sensors through the UI or command line. It is also possible to control the sensor pins as 'outputs'. The user can set the pins as TTL high (1) or low (0) as required for their low voltage/low current application

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

When configured the *SENSOR* (or *DIO*) ports are notionally attached to the internal EMD. So go to the **Serial & Network: Environmental** page and enable the **Internal EMD**.

Then configure the attached sensors as alarms using the **Serial & Network: Environmental** menu

You can now set temperature, humidity and probe status alerts using **Alerts & Logging: Alerts**

You can monitor the current status of all any configured external EMDs (included the Internal EMD in the ACM5000-E) and any attached sensor using **Status: Environmental Status**