

# CO<sub>2</sub>, Temperature and Humidity Sensor

Part No: 60.CO2 SLR TMP HUM.[868]-[902]-[928]

The Pressac Sensing wireless CO<sub>2</sub> Sensor is designed to measure and report levels of Carbon Dioxide, ambient temperature and relative humidity in an internal environment. During normal operation, the sensor is powered from ambient room light: in prolonged low light environments the security of battery back-up ensures up to 10\* years of continued maintenance free operation. The sensor supports the open EnOcean<sup>®</sup> standard (ISO/IEC 14543-3-10), facilitating seamless connection with building management systems.



### Features and Benefits:

- Energy harvesting powered by ambient light from the surrounding environment
- Maintenance-free for cost efficiency
- No wiring required low cost of installation
- Fast installation time minimal disruption for retro fits
- Optimal positioning no wiring constraints



#### **Functionality:**

- Easily wall mounted, with no cabling required
- Powered by ambient light from the surrounding environment
- Battery\* back-up, for robust operation in periodically dark areas
- Transmits data wirelessly using EnOcean<sup>®</sup> technology

\*Battery life dependant on ambient light conditions

#### **Applications:**

- Demand/occupancy driven ventilation
- CO<sub>2</sub> monitoring in educational environments
- HVAC control
- Retrofit projects



Ready for IBM Watson IoT



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TECHNICAL SPECIFICATIONS		
Measurement Range	CO <sub>2</sub>	0 to 2550 PPM
	Temperature	0°C to +51°C
	Humidity	0 to 100% RH
Accuracy	CO <sub>2</sub>	+/- 125PPM
	Temperature	+/- 0.5°C
	Humidity	+/- 5% RH
Operation Frequency	Available in 868.3MHz, 902MHz and 928.35MHz	
Maximum Power Output	3dBm	
Sampling Rate	Can be fixed to 15 minutes or can dynamically adjust between 5 and	
	15 minutes dependent on power source and light conditions	
Repeater	No	
Telegram	4BS	
Environment	IP2X	
Battery* Back Up	3.6v A size non rechargeable Lithium	
Power Source	Solar Panel Energy Harvesting and Battery	
Enclosure Material	ABS	
Calibration	Manual or auto recalibrates every 8 days	
Solar	Amorphous Silicon Solar Cells	
Operating Temperature Range	-5°C to +60°C	
Storage Temperature Range	-20°C to +55°C	
Sensor Response Time	Telegram transmission is within 2 seconds of measurement	
Dimensions	115mm x 80mm x 35mm approx.	
FFP	A5-09-04	

\*Typical life expectancy of the battery is up to 10 years dependant on ambient light conditions.



Pressac Sensing products incorporate EnOcean® wireless technology, and are fully compliant with EnOcean® protocols. The Pressac Sensing range can be integrated with EnOcean® products from over 300 global manufacturers.

EnOcean<sup>®</sup> is a widely established and global technology, and has been installed in over 250,000 buildings worldwide. The EnOcean<sup>®</sup> wireless standard is the first to be ratified as an international standard - ISO/IEC 14543-3-10: together with the EnOcean<sup>®</sup> Equipment Profiles (EEPs) drawn up by the EnOcean<sup>®</sup> Alliance, this international standard lays the foundation for fully interoperable, open wireless technology comparable to standards such as Bluetooth and WiFi. The standard can be downloaded from www.iso.org.



#### **Pressac Communications Limited**

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