**Environmental noise monitors**

**CR:465 Galactus environmental noise monitor**

***Description:***

The CR:465 Galactus instruments are a range of high performance noise monitors that have been designed to integrate with external data loggers and environmental measurement systems and to provide a comprehensive set of acoustic data.
Comprising a processor unit and a fully weather protected microphone system, the Galactus instruments meet the Class 1 requirements of IEC 61672 and IEC 61260 and can provide a comprehensive set of user configurable acoustic data parameters via an industry standard RS232 protocol.
The Galactus instruments can provide the acoustic information required to calculate the parameters defined in ISO 20906:2009 making the units ideal for the monitoring and measurement of unattended aircraft noise.
The CR:465 Galactus instruments are controlled by a set of commands that are sent to the unit via a standard RS232 communications protocol.
This allows for full external control of all aspects of the instrument, including calibration and verification using the electrostatic actuator system. This allows the units to be integrated quickly and easily alongside other sensors and data sources.
Measurement data is returned as packets of information via the RS232 port with the packets sent at either 1 second or 0,5 second intervals. These packets can contain any of the acoustic measurement values which can be configured to suit the application in which the instrument is being used.
To allow for the calculation of Ln values in accordance with ISO 20906:2009 “Acoustics - Unattended monitoring of aircraft sound in the vicinity of airports”, the data packets can contain 1/8th second LAS data points allowing exceedence levels (% LN values) to be calculated.

**Specification:**

### *Key Specification Features*

* Class 1 performance to IEC 61672 & IEC 61260
* Total Measurement Range of 20dB to 140dB RMS (Single Range)
* Simultaneous measurement of:
	+ A,C & Z frequency weightings
	+ F,S & I time weightings
	+ 1:1 octave bands from 31,5Hz to 16kHz
	+ 1:3 octave bands from 6,3Hz to 20kHz
* Live data output of:
	+ Lxy (Sound Pressure Level)
	+ LxyMax (Maximum Sound Pressure Level)
	+ LxEQ (Equivalent Continuous Sound Pressure Level)
	+ LxEQ16MAX – Maximum Leq,62.5ms (1s)
	+ LxPEAK – Peak Sound Pressure
	+ OCTz – 1:1-Octave band Leq
	+ 3OCTz – 1:3-Octave band Leq
* Where x is A, C or Z and y is F, S, or I
* Simultaneous measurement of A,C & Z and F, S & I

The rear panel 15 way D-type connector also provides the option of a 4-20mA current loop output which can be used with standard interface modules.