# Industrial Noise Monitoring System

The **Industrial Noise Monitor (INM)** provides the ability to simultaneously store All Pass (*AP*) and Band Pass (*BP*) acoustic measurement results.

The **INM** builds upon existing Ngara technology with additional hardware allowing the implementation of custom filtering.



# Band Pass (BP) Filters

Filters are user configurable in 1/3 octave steps from 10Hz to 20kHz and run in parallel to the standard results. Results are stored at 100ms intervals, with the ability to post process to extract statistics from session data or to push statistics directly to Noise Cloud<sup>TM</sup>.

The BP filters report the following acoustic measurements results;

- SPL (A and C)
- L<sub>eq</sub> (A and C)

# **Control and Configuration**

Simple control and configuration of the logger (including *BP* Filter configuration) can be accomplished through the on board interface.

More advanced control and configuration functions are made available through the Ngara backwards compatible remote host software.

Advanced functionality include;

- Alarm functions
- Triggering events
- Email Configuration
- Noise Cloud<sup>TM</sup> Configuration

Additional options include;

- 3G Modem for remote access
- Solar panel
- Noise Cloud<sup>TM</sup> Subscription

# File Session Control Disk Detail View Help Logger Reruts Flesuits SPL-4.6.8.4 84 dB SPL-5.6.7.88 dB Leq-C: 66.87 dB Leq-C: 66.87 dB Leq-C: 66.87 dB Session State: Logger Recording Session State: Session Running Logger Operations: Logger No Operations Disk State: Checking Disk... Session Error: Session Name: 2017/0606\_1641/02 IP Address: 10.0.0.12 Disconnect

### **Available Interfaces**

- USB ports used to interface data storage devices
- Ethernet port allowing bidirectional communications to the logger
- Push-button input to trigger recording of raw data

# INM

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# Noise Cloud<sup>™</sup>

When connected to the Internet using a suitable modem the **INM** is capable of pushing AP and BP live statistics to Noise Cloud<sup>TM</sup>.

The **INM** can be configured to produce the following statistics;

- 1x L<sub>eq</sub>
- 5x L<sub>n</sub> Results (Percentiles and Levels user settable)

From the following streams;

- All Pass A
- All Pass C
- Band Pass A
- Band Pass C



The **INM** is capable of saving battery power by uploading once an hour (user settable) or by not requiring the use of USB storage (upload in standby mode).

The **INM** can also handle a full 2 days of logging without a valid Internet connection. If Internet is restored, the buffered data is uploaded.

### **Email Events**

The INM can be configured to send alert emails for either AP, BP or both. These emails can be configured to trigger on any combination of the following;

- A or C
- 1x L<sub>eq</sub>
- 3x L<sub>n</sub> Results (Percentile and Level user settable)

## **Specifications**

Instrument Type	IEC 61672 Class 1	Measured Data	
Microphone Type	1/2" Condenser	All Pass	SPL (A and C) L <sub>eq</sub> (A and C)
Acoustic Noise Floor	20dBA (Typically)	Band Pass	SPL (A and C) L <sub>eq</sub> (A and C)
Electric Noise Floor	20dBA (Typically)	Meta Data	Temperature Battery Voltage
Frequency Response	A and C	<b>Band Pass Filter</b>	
Time Response	FAST or SLOW	Roll off	-40dB / Octave
WAV File Specifica- tions	48 kHz	Break Freq.	1/3 Octave steps
Measurement Range	20-120dB	PC Interface	Ethernet
Environment	-10°C to +50°C		