



SA

instrumentation

Mobile System

High Performance Data Acquisition



The same DAQ card as used in our Decimus product for Passive Acoustic Monitoring (PAM) processes, is now available as part of the new Mobile PAM system.

Compact battery operated and easy to use system capable of sampling one or more analogue channels (max 4) simultaneously at up to 1MHz per channel, outputting the data over a USB 2.0 connection. The output is displayed on the integrated Microsoft Surface Pro running PAMGuard software.

Data Export available on USB port.

Live pre filter/gain audio from each hydrophone input available, internal battery/charger status indication, optional supplementary external 12v battery.

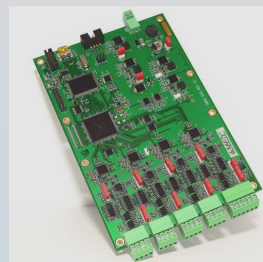
Supplied with end user interface connection box and can be supplied with Reson hydrophone and 20mtr cable assembly.

Applications:-

Analogue Audio Data collection using:-

- ◆ **Hydrophones, Microphones, Geophones, etc. with or without pre-amplifiers can be adapted**
- ◆ **High Volume Data Analysis**
- ◆ **Marine environmental noise measurement/ recording and analysis including marine mammal vocalizations**
- ◆ **Terrestrial noise and sounds e.g. bats, structural stress and civil construction work**
- ◆ **Ideal for single or multi-channel applications in research, industrial & security applications**

INPUT/OUTPUT



- ◆ One external 12 pin female SubCon connector for Hydrophones or interface box *+ one external 4 pin Sub-Con for charging or additional battery
- ◆ Integrated Microsoft Surface Pro 12"touch screen with MS scribe pen, additional BT keyboard/mouse. PAM-Guard pre installed

*+12v DC Out, Signal + in, Signal - in, 0v/ Ground available for each hydrophone on external 12pin SubCon

The audio output of each connected input channel are available on the case interior control panel, these are presented as 4 x 3.5mm Audio out jack socket and are suitable for driving the line inputs of a sound card or headphone amplifier

One USB 2.0 Data connector, for connection to an external memory stick (or separately powered portable hard disk drive) allows data to be uploaded/saved from the system

Technical Specifications

Parameter	Description	Min	Typical	Max	Unit
Operating Systems					
OS Support	Surface Pro Windows 8.1 DAQ Software Drivers -	Windows 7	PAMGuard pre installed		
Environmental					
Operational Temp	Surface Pro	0	-	35	°C
DC Supply	Internal re-chargeable sealed Battery	11.8*	12	20	V
Average Power	-	1	1.5	3	W
DAQ Technical					
Channels	Sampling Channels	1	-	4	-
Sampling Rate	Channel Sampling Rate	62.5	250/500	1000	kHz
Bit Depth	Channel Data Word Width	-	16	-	bits
Anti-Aliasing**	Single Pole LP	-	200	-	kHz
Channel Gain	Applied Per Channel, SW Selectable	-	0/6/12/18/24/30	-	dB
Channel Filters	Channel Signal Filters (2 Pole), SW Selectable	-	Butterworth HP:10/100/2k/20k	-	Hz

*Electrical noise is introduced into the system if the input voltage drops below 11.5v

**Note each channel is oversampled at a x 16 rate allowing for a single pole anti alias filter, with additional filtering inside the ADC



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