

Data Acquisition System

Key Benefits

- **Rugged & highly portable**
- **Complete with capture software and optional analysis suite**
- **USB powered by your laptop/PC**
- **Rugged (MIL-STD tested)**
- **Simple capture & application software**



The DATS-solo is a pocket-sized, ultra portable, high quality, 24-bit data acquisition system. It is compact, rugged and has 4 inputs selectable as IEPE, voltage or tachometer inputs. Industry standard SMA connectors are used for input with optional adapters for other connectors. The size, tough packaging and power from USB make it ideal for mobile use. Internally there is comprehensive signal conditioning for IEPE or voltage with anti-alias filters, all controlled by Prosig's DATS software.

The fully integrated DATS software provides options for acoustic & vibration testing, rotating machinery analysis, NVH tests, hammer impact analysis, resonance testing and modal analysis.

DATS-solo - a complete solution!



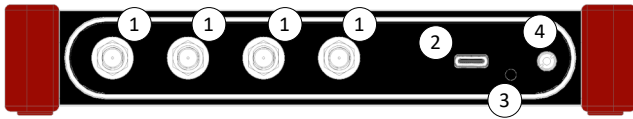
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Data Acquisition System

CONNECTORS



- ① Analog/tacho inputs
- ② USB-C (Data & power)
- ③ Power LED
- ④ Electrical ground

Measurement Sensors

The DATS-solo can measure the following:

- Vibration**
- Acoustics**
- Tachometers**
- Displacement**
- Pressure**
- Torque**
- Shock**
- Force**
- Position**
- Load**

Or any other suitable IEPE or externally powered sensor

SYSTEM

Inputs	4 x analog (IEPE or voltage)
Maximum sampling rate	100k samples/sec/channel
Resolution	24 bit
Noise floor	-130dB
Overall accuracy	± 0.10% FSD
Input voltage range	9 selectable ranges
Input impedance	1MΩ
IEPE power	20V@4mA switchable
Communications	USB

ANALOG INPUTS

Input mode - Analog	IEPE (single ended), voltage (differential)
Anti-alias protection	>150dB
Dynamic range	100dB @ 10k samples/second
Maximum input range	± 24V

TACHOMETER INPUTS

Input mode - Tachometer	IEPE, voltage
Tacho range	1,500,000rpm @ 1ppr
Tacho input range	± 24V

ENVIRONMENT & GENERAL

Operating temperature	-30°C to 65°C (-22°F to 149°F) (Cold start)
Shock and vibration	MIL-STD-810G 2014, 514.7C-2 MIL-STD-810G 2014, 514.7C-3
Humidity	95% RH, non-condensing
Power usage	< 2W (worst case)
Shock and vibration	MIL-STD-810G
IP Rating	IP54
Supply voltage	From USB
Connectors	4 x SMA (Analog inputs) USB-C (Power & data)
Dimensions (H x W x D)	30mm x 167mm x 97mm 1.2" x 6.6" x 3.8"
Weight	365g (0.80 lbs) 823g (1.81 lbs) with case and accessories

