

DATS Measurement Card

8X04 ADC + Tacho, IEPE, Direct, Bridge, TEDS



Key Features

- 4 analog channels and 1 tacho input
- DC, AC and IEPE inputs
- 400k samples/second/channel (16 bits)
- Tacho input sampled at up to 800k samples/second/channel
- Programmable excitation
- Programmable 1/4, 1/2 & full bridge input
- Input nulling & excitation sensing
- TEDS with connection detection

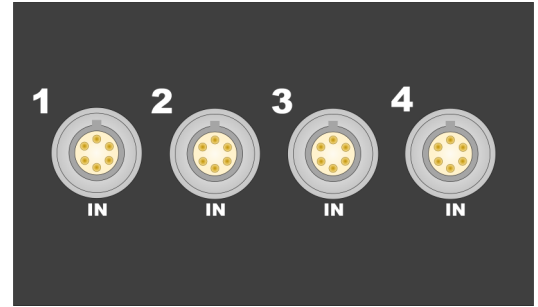
The 8X04 is an ultra-flexible general purpose acquisition card. It encapsulates Prosig's 30 years of test and measurement experience and is the only card you'll ever need! The 8X04 has all the functionality and full specification of the 8X02 card. But additionally each channel includes bridge completion configurations of 1/4, 1/2 and full bridge, internal calibration shunt resistors and selectable bridge resistance configurations of 120, 350 or 1000Ω. Further, each channel provides program selectable supply voltage of 5V & 10V for transducer excitation.

This card can be fitted to:

DATS-tetrad (8604)

DATS-hyper12 (8504)

P8012 (8404)



Description	4ch ADC + Tacho, IEPE, Direct, Bridge, TEDS
Input channels	4
Output channels	n/a
16-bit sample rate *	400k
24-bit sample rate *	100k
Effective bandwidth	0.4 x sample rate
Anti-aliasing attenuation	> 100dB
AC coupling high pass filter	20dB/dec-3dB at 0.3 or 1Hz
DC Input	✓
AC Input	✓
IEPE Input	✓
Charge Input	✗
Programmable excitation	✓
24-bit Dynamic range	105dB at 10Ks/s
24-bit Noise floor	-120dB at 10Ks/s
16-bit Dynamic range	92dB at 10Ks/s
16-bit Noise floor	-110dB at 10Ks/s
Non-linearity	< 1 bit
Accuracy	±0.1% FSD
DC Offset control	±50% FSD in 32768 steps
Tacho channels	1
Tacho input range	±28V
Supports TEDS	✓
Autozero	✓
Input range	±10mV to ±10VFSD
Output range	n/a
Gain Steps	13
Input common mode range	±10V
Absolute max input range	±24V
Prog. bridge completion	✓
Connector	Lemo
Power usage (worst case)	8W

* All sample rates are specified in number of samples per second per channel

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