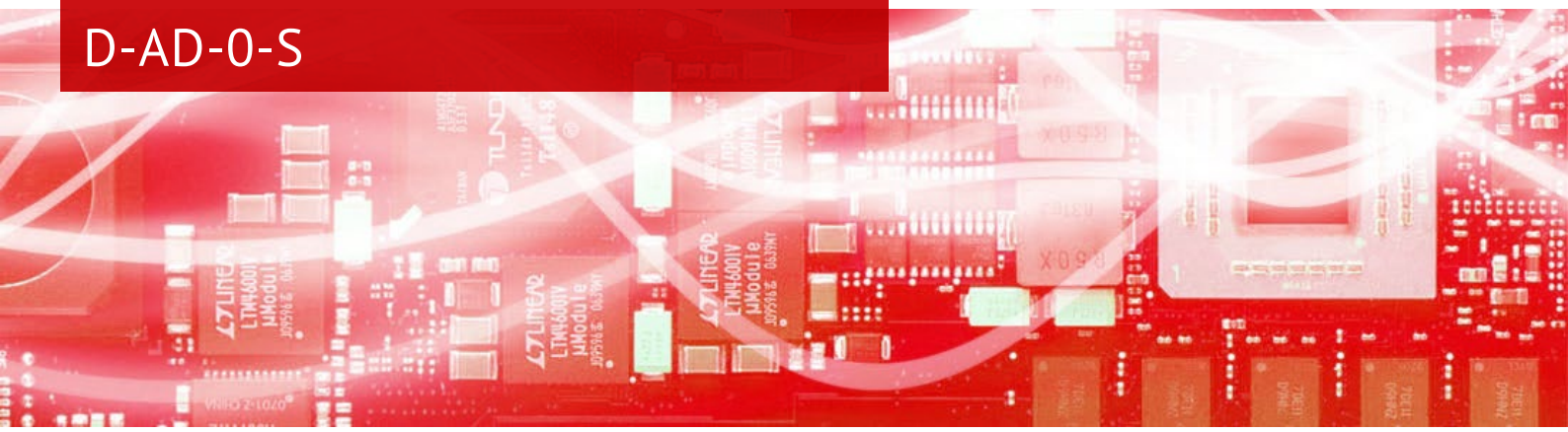
optomet.
LASER VIBROMETRY

Digital Acceleration Decoder
D-AD-0-S



Ultrafast FPGA-based Digital Signal Processing

Optomet Vibrometers feature an end-to-end FPGA-based digital signal processing allowing a fully digital read-out of the measurement data. Digital signal processing avoids any drawbacks of analog demodulation which may result from component aging, temperature dependencies, noise and non-linearities. Significantly higher sensitivity, better resolution, and stability are the benefits of OptoMET's end-to-end digital signal processing. Extremely low noise levels produce precise results even from poorly reflecting measurement objects.

HIGHLIGHTS:

- Digital decoder
- 8 acceleration measuring ranges
- Frequency range: 0 Hz - 25 kHz
- Max. acceleration 32,000 g
- Best acceleration resolution 70 µg / √Hz*

Start Acceleration Decoder

All vibrometers series feature by default a velocity decoder and can be supplemented with a suitable displacement and/or acceleration decoder.

The D-AD-0-S acceleration decoder allows acceleration measurements up to 32,000 g at a maximum of 25 kHz and 2 m/s.
Required velocity decoder: D-VD-0-S

* The resolution is defined as the signal amplitude (rms) that produces 0 dB signal/noise ratio with 1 Hz spectral resolution at 50 % fmax.

Technical data

Pos.	Full Scale Output (Peak) g	Max. Frequency kHz	Max. Velocity m/s
1	160	25	2
2	320	25	2
3	800	25	2
4	1,600	25	2
5	3,200	25	2
6	8,000	25	2
7	16,000	25	2
8	32,000	25	2