

795M Entry to FFT Data Collector and Signal Analyzer (1-Channel)

The 795M is an economical portable single channel multi-function data collector and FFT spectrum analyzer. It is versatile for overall values measurement, bearing condition diagnostic, spectrum diagnosis and in-situ-multi-plane balancing of rotating machinery (up to 8 planes of correction, up to 16 point to check vibration).

It is a simple and useful device that allows for easy condition monitoring and unbalance correction of any rotating equipment found almost in every process industries. With the Windows based program "ConSpect" software, it creates an easy to use, cost effective, scalable solution that meets the needs of the novice as well as advanced user. The small, rugged, and light weight IP 65 design makes it ideal for any harsh industrial environments.

Features

- Vibration measurement of Velocity, Acceleration and Displacement
- Trending of characteristics overall values on conspect software
- Shock pulse measurement for bearing condition evaluation
- Frequency spectrum analysis
- Time- domain analysis
- Envelope spectrum analysis for ball and slider bearing
- Display of true RMS and Peak-to-Peak values
- Non-contact infra-red tachometer sensor for rotation frequency
- Phase measurement
- Run-up / Coast-down measurement
- Dynamic multi-plane balancing of up-to 8 plane
- Rechargeable battery save to trouble of battery replacement and money.



TECHNICAL SPECIFICATIONS

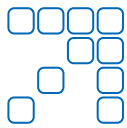
Instrument

Input Signal Type	Charge (piezoelectric accelerometer)
Signal	RMS, Peak-to-Peak, 0 to Peak
Measurement Parameters	Acceleration, Velocity, Displacement, FFT domain Shock-pulse, phase
Frequency Range	2 Hz to 10 kHz
Sampling rate	33 kHz

Dynamic Frequency Range

Acceleration	2 – 10000 Hz (-3dB) & 0.01 – 500 m/s ²
Velocity	2 – 16 Hz (-3dB) & 0.8 - 5000 mm/s 10 – 1000 Hz (-3dB) & 0.1 - 79 mm/s
Displacement	2 – 16 Hz (-3dB) & 0.05 - 50 mm 10 – 100 Hz (-3dB) & 0.003 - 1.2 mm 10 – 1000 Hz (-3dB) & 0.003 - 0.02 mm
Accuracy	±5%





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FFT

FFT Spectrum resolution	400, 800, 1600 lines
Windows weighting function	Hanning, Blackman-harris & Rectangular
Averaging mode	Time domain: Linear, exponential Frequency domain: Linear, exponential
Trigger mode	Free-run, Internal or Ext. on fall or rise pulse trigger & delay trigger
One-third octave	34 bands w/ central frequencies from 4 to 8000 Hz

Phase angle range	0° to 360°
RPM	20 to 20,000 rpm ± 1 RPM

Housing	ABS
Environmental Protection	IP65 (water spray resistant, shock and dustproof)
Operating temperature	-10°C to 50°C
Relative humidity	up to 80%
Battery & operating life	4.8Volts, 8 hours continuous operating
Automatic shutoff	Yes, approx. 15mins
Memory capacity	2 Mbytes
Com interface	Serial port

Accelerometer

Type	Piezoelectric accelerometer
Sensitivity	pCs ² /m - 0.1 to 500
Frequency Range	2 Hz to 10 kHz
Resonance frequency	> 28 kHz
Transverse sensitivity	< 5 %

Carrying Case	
Standard	ABS with form inserted
Case dimension	Approx. 456 x 355 x 133 mm
Weight incl. all std parts	5.1 Kgs

Standard Delivery:

1. Display Unit
2. Accelerometer
3. Accelerometer cable – 2 meter
4. Accelerometer Pin adaptor
5. Accelerometer Magnet adapter
6. Bearing Condition Probe with cable attached.
7. Tachometer with 5 meters cable attached TI-7
8. Tachometer Magnetic Bracket
9. Charger
10. PC cable USB-RS232 – 1.5 meters
11. USB-RS232 adaptor
12. Liquid Marker
13. Carry Case
14. Operation Manual
15. Conspect software
16. Calibration & Quality Certificates

