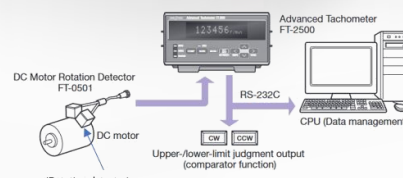## FFT-analyzing measuring device
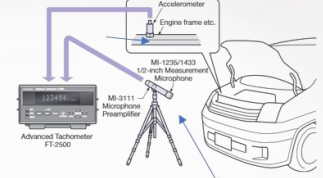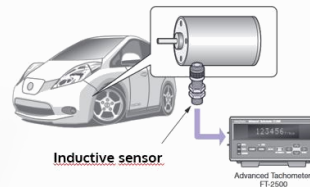
Speed measuring device FT-2500

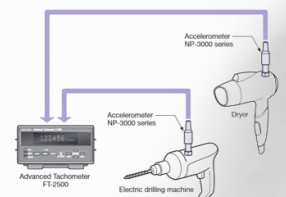Speed measurement on a DC motor,(magnetic flux leakage sensor, detection of direction of rotation)

Speed measurement on a car with combustion engine,(Accelerometer & Microphone)

Speed measurement on an e-car or air conditioning system,(inductive sensor technology)

Speed measurement on electrical appliances,(acceleration sensor technology)

Product description

A digital speed measuring device (tachometer) is used for individual acquisition, display and evaluation of speed-relevant measurement signals, as well as use for remote monitoring or an external data recorder.

FFT tachometers allow precise speed calculation of rotating machines via signal evaluation from various physical signal sources.

Applications

- E-Motors and Drives
- Internal combustion engines
- Generators
- Pumps
- Small electrical appliances

Benefits

- Multifunctional, digital FFT tachometer for stationary applications using microphone, acceleration, firing pulse, magnetic flux leakage or inductive sensing.
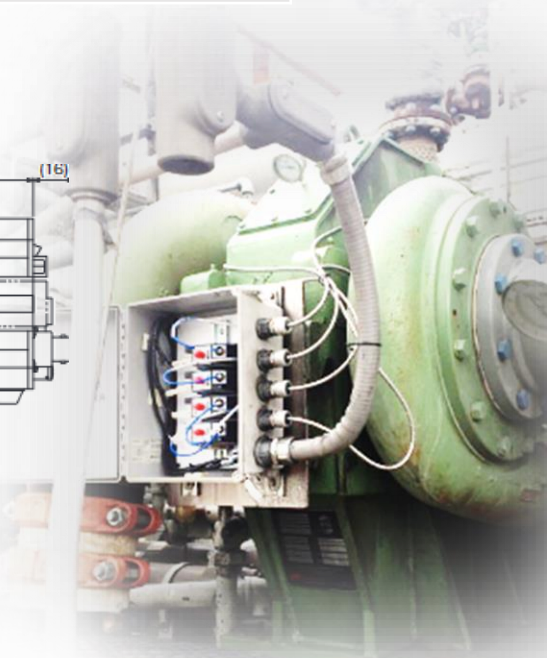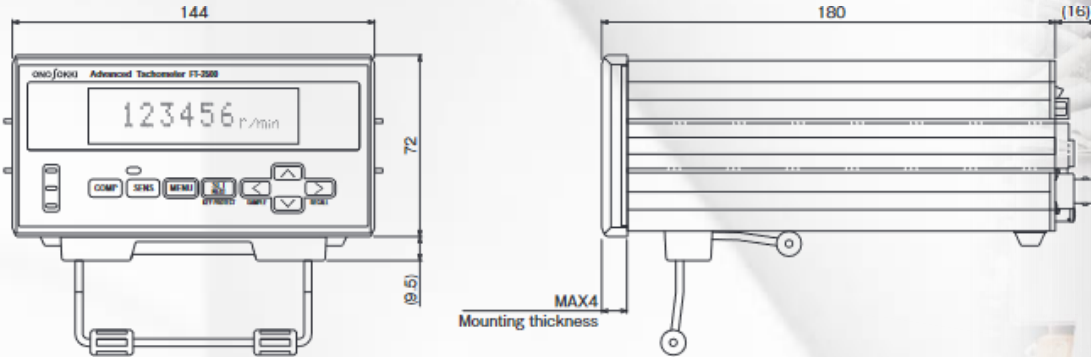
Features

- Simple and accurate speed measurement using various sensors:
  - Microphone
  - Accelerometer
  - Ignition pulse detector (automotive)
  - Cigarette lighter (automotive)
  - Rotation detector for DC motors
  - Induktiver Sensor
- Compact FFT (Fast Fourier Transformation) measuring device allows measurements even in hard-to-reach places

- Adjustable measurement algorithm
- Ethernet connection (optional) for (PLC, SPS)
- Analogue outputs for data recorder and external FFT analyser
- Comparator outputs for 'lower/upper' evaluation
- RS 232C interface for serial communication
- Highly visible and dimmable fluorescent display

CE

Technical data

Characteristics	Technical values
Power supply	100 …240 VAC
Frequency range	500 Hz, 2kHz, 10kHz
Measurement algorithm	Rotation: Power spectrum and peak detections Resolution: frequency range ÷ 12800 × 60 ÷ pulse counting (setting value P/R)
Data update	(rotation) ≤ 250 ms
Temperature range (operation)	0°C …+40°C
Temperature range (operation)	0°C …+50°C
Dimensions	144 (B) × 72 (H) × 180 (T) mm
Weight	2,000 kg

Drawing

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