ROTEC
TORSIONAL VIBRATION PROFESSIONALS

Laser Tachometer 3

ELLAS3

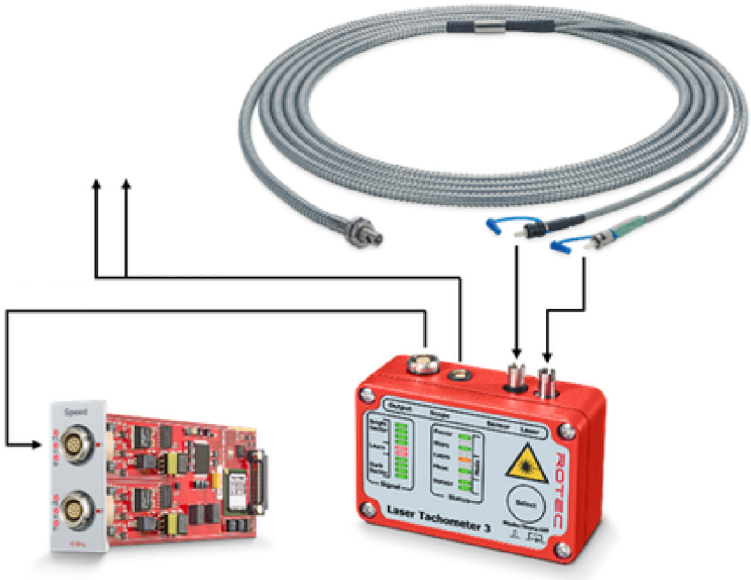
The ROTEC Laser Tachometer 3 is used for optical measurement of the rotational frequency or rotational speed. The electronics generates a power-controlled laser light that is transmitted from the sensor to a black/white pattern (disc or tape) attached to the measurement object. The light-dark transitions of the target are scanned using the reflex method. The optical signal received is first converted into an analog signal and then into a digital signal. This results in a pulse sequence with TTL level and speed-proportional frequency. The analog sensor signal and the digital pulse sequence can be tapped separately at the scope output of the electronics.

Features

- Measures rotational frequency / speed optically
- Generates power-controlled laser light
- Scans light-dark transitions of the target using the reflex method
- Converts optical signal into digital signal with pulse sequence (TTL level)
- Provides row signal and speed pulse sequence at separate “Scope” output socket
- Power supplied by RASdelta Speed Board

Measurement Chain

- ROTEC Optical Laser Sensor
- Laser Tachometer 3
- RASdelta Speed Board
- RAS Software



Technical Data	
Input signal	Fiber optics F ST socket
Laser characterisitcs	• Laser class 2 • Laser power < 1 mW • Wave length 650 nm
Input (tooth) frequency range	• 0 Hz to 65 kHz („Measure“ mode) • 1 Hz to 50 kHz („Learn“ mode)
Output socket speed signal	8-pin Lemo
Output signal type	TTL
Output pulse width	0,2 µs
Output socket monitor signals	3-pin Lemo
Output analog sensor signal	5 Vpp / 100 kΩ
Output digitized sensor signal	TTL / 1 M Ω