

RT100D

All Weather, Non-Contacting Measurement of Torque
on FWD, RWD, and AWD Test Vehicles

PROP & CV SHAFT TORQUE MEASUREMENT SYSTEM



The RT100D allows the user to obtain an accurate and responsive torque measurement from a variety of prop and CV shaft designs without modifying the existing powertrain. The RT100D eliminates the need to weld or "cut in" heavy, in-line torque sensors that drastically effect the torsional dynamics and critical speed of a drive shaft. Inductive power is supplied across a generous air gap for reliable all-weather performance.



RT100D CV Shaft Application.

Features

- All weather operation
- No batteries or slip rings
- Remote shunt calibration
- Digital data transfer for a clean signal
- Scalable analog output
- Custom form factors available

- Temperature compensated output
- NIST traceable turnkey installation with 0.5% accuracy
- Non-critical antenna placement (± 0.75 inches)
- Light weight collar does not present balance problems
- Racing and dynamometer units available

SPECIFICATIONS

Torque Sensor Flexplate/Flywheel & Rotating Electronics

- Torque capacity: Dependent on shaft size, typically +/- 2-5000 ft-lbs
- Calibration range: 0-6000 ft-lbs (8100 Nm)
- Operating temperature range: -40 to +85C, -40 to +120C available
- Physical Size: Collar projects 0.50" from shaft diameter, with 5.25" axial length
- Environmental concerns: Completely weatherproof
- Maximum speed: 5500 RPM (consult factory for higher speeds)

Stationary Electronics

- Combined accuracy: 0.5% FS NIST Traceable
- Output signal: 0+/-5, 0+/-10 V (scalable)
- Sample Rate: 27,000 s/s
- System frequency response: 2, 20, 200 or 2000 Hz (-3dB, user selectable)
- Input power requirements: 9 to 18 VDC, 0.8 amp (1.8 amp startup surge)
- Operating temperature range: 0 to +50C
- Physical size: 7.0" W x 10.5" D x 3.0" H

Applications

- Transmission development
- Engine development
- Powertrain torque monitoring
- Traction control
- Customer-use testing
- Racing vehicles



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