# All Weather, Non-Contacting Measurement of Torque on Test Vehicles with CV Shafts

## CV SHAFT TORQUE MEASUREMENT SYSTEM



CV shaft torque is often difficult to obtain because of limited space in this very hostile under-vehicle environment. The AT100 uses non-contact, digital data transfer technology to provide the user with a clean and responsive torque signal. Power is inductively supplied to the rotating collar eliminating the need for batteries.

#### **Features**

ECIFICATION

- Low profile for space constrained FWD applications
- All weather operation
- No components or wiring outboard of wheel
- Digital data transfer for a clean signal
- Temperature compensated
- Remote shunt calibration capability

- Scalable analog output
- User selectable frequency response
- Portability to other shafts by Teledyne Instruments
- No batteries or slip rings
- Racing and dynamometer units available

### **AT100 Rotating Electronics (Collar)**

Torque capacity: Dependent on shaft size, typically +/-2500 ft-lbs

Calibration range: 0-6000 ft-lbs (8100 Nm)

Operating temperature range: -40 to +85C, -40 to +120C optional

Physical size: 2.2" OD x 2.5" W

Environmental concerns: Completely weatherproof sealed

housing/bearings

Maximum speed: 5500 RPM (consult factory for higher speeds)

**AT100 Stationary Electronics** 

Combined accuracy: 0.5% FS NIST Traceable

Interface to collar: Serial Digital

Output signal: 0+/-5, 0+/-10 V (scalable)

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: 7.5" W x 7.5" D x 2.0" H

# **Applications**

- Engine development
- Transmission development
- Powertrain torque monitoring
- Traction Control
- Racing vehicles
- Fleet & Customer use testing

