High Resolution Truck Torque Wheel

Model TWHR2000

- Measures up to 2000 lb-ft (2700 N.m)
- Accuracy of 2.3 lb-ft (3 N.m) or better
- Use to Measure Rolling Resistance, Brake Drag & Bearing Drag on Highway Trucks
- 20,000 lb-ft (27,000 N.m) Capacity
- Mechanical Protection allows the system to be used under normal driving conditions
- Telemetry or Slip Ring Packages Available
- Adapts to 22.5" rims and larger
- Environmentally protected
- Temperature compensated
- · Rugged stainless steel construction



Description

Michigan Scientific's *TWHR2000 Truck Wheel Torque Transducers* are highly sensitive torque transducers. Ideal for measuring small variations in wheel torque on highway trucks, these units provide one channel of torque data, and are designed to attach to adapters that simulate production wheel rims. The adapter system is fabricated by generating a profile of the original wheel rim, and designing a hub adapter and rim adapter that duplicate the critical dimensions of the original rim

The TWHR2000 Truck Wheel Torque Transducers measure up to 2000 lb-ft and resolves 1 lb-ft (1.5 N.m) with an accuracy of 2.3 (3 N.m) or better over the entire measurement range. Mechanical overload protection allows the transducer to be used under normal driving conditions. Torque and combined steer/camber moment overload ratings of each transducer is 20,000 lb-ft. High grade stainless steel material and weatherproof sealing provide excellent resistance to corrosion and environmental conditions. Temperature compensation ensures stable output throughout a wide temperature range.

Specifications

	TWHR2000
Maximum Load Capacity	20,000 lb-ft (27,000 N-m)
Full Scale Measureable Load	2,000 lb-ft (2,700 N-m)
Sensor	4 arm strain gage bridges
Nonlinearity	0.12% of full scale output
Hysteresis	0.05% of full scale output
Repeatability	0.05% of full scale output
Zero Balance	Within 0.5% of rated output at zero load
Temperature Range, Compensated	75°F to 200°F (-40°C to 93°C)
Temperature Range, Useable	-40°F to 300°F (-40°C to 149°C)
Excitation Votlage, Maximun	10VDC

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TWHR2000 System Options

Amplifier & Slip Ring Package

- Easy connection to the transducer and vehicle
- High resolution speed and wheel position signals
- Rotating amplification
- · Simple shunt calibration control







Telemetry Package

- Wireless Solution
- · RF Based Telemetry System
- Rotating amplification





Adapters

- Hub Adapter
- Inside Rim Adapter
- · Outside Rim Adapter







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