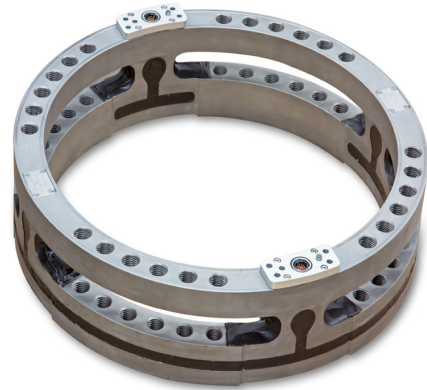


- Up to 100,000 lb (445 kN) radial load capacity
- Up to 80,000 lb-ft (108 kN-m) moment capacity
- Measures 3 forces and 3 moments
- Measures X & Z accelerations
- Measures combined loads of one or two tires
- Adapts to 19.5 inch and larger wheels
- Adapts to Ø285mm & Ø335mm hub bolt patterns
- Environmentally protected
- Rugged stainless steel construction
- Temperature compensated



Description

The *LW-2T-60K-S* and *LW-2T-100K-S* Wheel Force Transducers (WFT) are capable of measuring all of the wheel forces and moments on class 8 trucks and large off-road vehicles. They provide independent output signals for vertical, lateral, and longitudinal forces as well as camber, steer and torque moments. Being completely weatherproof, they are ideal for on-road and off-road measurements in all conditions. Both models can also be used to monitor and control laboratory tests. One WFT measures the combined loads for either a dual wheel set or a single tire configuration.

The matching amplifier package easily mounts onto the transducer. It amplifies and digitizes the transducer signals before they pass through the slip ring. The amplifier package also includes X and Z acceleration outputs and performs remote shunt calibration of the transducer.

The *CT2 Transducer Interface Box* performs real-time coordinate transformation and cross-talk compensation, and outputs analog, CAN, and Ethernet signals. An embedded web page allows the user to configure the WFT system.

Specifications

	LW-2T-60K-S	LW-2T-100K-S
Maximum Force Capacity, [Fx, Fz] (radial)	67,400 lb (300 kN)	100,000 lb (445 kN)
[Fy] (lateral) at Tire Patch	33,700 lb (150 kN)	50,000 lb (225 kN)
Maximum Torque Capacity [Mx, My, Mz]	60,000 lb-ft (81 kN-m)	80,000 lb-ft (108 kN-m)
Accelerometer range	± 55g	
Sensor	4 arm strain gage bridges	
Nonlinearity	≤ 1% of full scale output	
Hysteresis	< 0.5% of full scale output	
Cross Axis Sensitivity after correction	< 1% of full scale output	
Temperature Range, Operating	-40°F to 257°F (-40°C to 125°C)	
Angular Resolution	0.17°	

CT2 Transducer Interface Box

- Performs real-time coordinate transformation and cross-talk compensation
- Easy to use Zero, Shunt Calibration, and Bridge Power Off functions
- Simultaneous Analog, CAN, & Ethernet signal outputs
- Embedded web page enables user to:
 - Change set-up options
 - Move WFT measurement origin
 - View Transducer static values
 - Create .dbc file



Amplifier & Slip Ring Package

- Internal X & Z accelerometers
- High resolution encoder for position & speed measurement
- Internal smart chip contains all calibration, zero, & shunt values
- Provides signal conditioning & amplification to the transducer strain gage signals
- Digitizes Transducer, Encoder, & Accelerometer signals
- Supports slip ring

