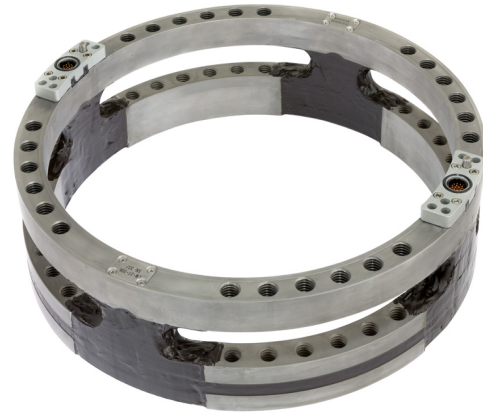


- Up to 40,000 lb (178 kN) radial load capacity
- Up to 20,000 lb (89 kN) lateral load capacity
- Measures 3 forces and 3 moments
- Measures X & Z accelerations
- Measures combined loads of one or two tires
- Adapts to 15 inch and larger dual wheels
- Adapts to Ø275mm and smaller hub bolt patterns
- Environmentally protected
- Temperature compensated
- Rugged stainless steel construction



Description

The *LW-2T-30K* and *LW-2T-40K Wheel Force Transducers (WFT)* are capable of measuring all of the wheel forces and moments on commercial vehicles, skid steers, medium duty trucks, off-road equipment, and large forklift trucks. It provides independent output signals for vertical, lateral, and longitudinal forces as well as camber, steer and torque moments. It is completely weatherproof making it ideal for on-road and off-road measurements. It can also be used to monitor and control laboratory tests. One sensor measures the combined loads for a dual wheel set or a single tire.

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 accelerometers 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-30K	LW-2T-40K
Maximum Force Capacity, [Fx, Fz] (radial)	30,000 lb (133 kN)	40,000 lb (178 kN)
[Fy] (lateral) at Tire Patch	15,000 lb (66 kN)	20,000 lb (89 kN)
Maximum Torque Capacity [Mx, My, Mz]	22,000 lb-ft (30 kN-m)	30,000 lb-ft (40 kN-m)
Accelerometer range	± 55g	
Sensor	4 arm strain gage bridges	
Nonlinearity	≤ 0.75% of full scale output	
Hysteresis	< 0.5% of full scale output	
Cross Axis Sensitivity after correction	< 0.5% 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

