Interface Complete Systems









Explore Force Measurement Systems

Building a complete and accurate force measurement system requires integrating a compatible sensor, instrumentation, and properly rated cables and connectors. Start with a high-quality load cell or torque transducer suited to your application. Pair it with instrumentation—such as a signal conditioner, digital display, or data acquisition system—that can excite the sensor and interpret its output. To maintain signal integrity, use shielded cables and connectors rated for your environment. When all components are correctly matched and calibrated, the result is a precise, dependable measurement system.

Complete Load Cell Systems

1000 Fatigue-Rated Universal LowProfile® Load Cell and 9325 Portable Sensor Display

The Interface 1000 Fatigue-Rated LowProfile® Load Cell and the 9325 Portable Sensor Display work together as a complete force measurement system. The 1000 series load cell accurately senses tension or compression forces and outputs a millivolt signal proportional to the load.

The 9325 handheld display powers the load cell, amplifies the signal, and converts it into a readable digital value. With features like TEDS auto-calibration, multiple display modes, and USB data output, this system delivers portable, high-precision force measurement ideal for both lab and field applications.



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the signal, and converts it into a readable digital value. With features like TEDS auto-calibration, multiple display modes, and USB data output, this system delivers portable, high-precision force measurement ideal for both lab and field applications.

ITCA Tension and Compression Load Cell and DIG-USB USB Output Module

The stainless-steel ITCA tension-compression load cell delivers high-capacity force measurement (1–150 MT), while the DIG-USB output module converts its strain gage signals into reliable digital data via USB for precise real-time logging and analysis.



Complete Mini Load Cell Systems

SSB Sealed Beam Load Cell and 1280 Programmable Weight Indicator and Controller

The SSB Sealed Beam Load Cell precisely measures applied force via temperature-compensated strain gages and environmental sealing, while the 1280 Programmable Weight Indicator and Controller receives this signal, processes weight data with its

BPL Pedal Load Cell and BTS Bluetooth Telemetry System

The BPL Pedal Load Cell paired with the BTS Bluetooth® Telemetry System delivers precise, wireless pedal force measurement. The compact load cell captures high-accuracy data, while the BTS transmits it in real time to mobile devices ideal for simulation, testing, and remote monitoring without the need for physical connections.





SSM or SSM2 Sealed S-Type Load Cell and ILM In-Line IO-Link Amplifier IO-Link Compatible System

The SSM or SSM2 Sealed S-Type Load Cell provides precise tension and compression force measurements, while the ILM In-Line IO-Link Amplifier digitizes the signal for seamless IO-Link connectivity, enabling real-time monitoring,

diagnostics, and simplified integration into smart factory systems—all in a compact, plug-and-play format.

Complete Torque Transducer Systems

AxialTQ™ Wireless Rotary Torque Transducer System with In-Line Magnetic Encoder Kit and Single or Double Flex Couplings

The Interface AxialTQ™ Torque Measurement System, developed with input from over 30 endusers, delivers precision torque data through a modular design featuring a rotor sensing element, eight torque capacities, and five DIN sizes. Paired with high-resolution In-Line Magnetic Encoder Kits and reliable Flex Couplings, it offers

customizable, high-speed, and durable performance for any application.



T2 Ultra Precision Shaft Style Rotary Torque Transducer and SI-USB4 4 Channel USB Interface Module with Floating Mount Single Flex Couplings



Interface's A T2 Ultra-Precision Shaft-Style Rotary Torque Transducer measures dynamic torque with high accuracy and optional speed/angle sensing. It connects via a Floating-Mount Single-Flex Coupling to ensure torsional stiffness and eliminate misalignment. The SI-USB4 Interface Module then digitizes the analog signals at 16-bit resolution for high-speed data capture on a PC.

5330 Hollow Flange Style Reaction Torque Transducer and 920i Programmable Weight Indicator and Controller

The 5330 Hollow Flange Style Reaction Torque Transducer detects static torque via strain-gage deformation and outputs a signal (mV/V), while the 920i Programmable Weight Indicator and Controller receives that signal, digitizes it at up to 960 Hz, displays multiple channels in real time, and enables calibration, setpoints, and control.



Complete Multi-Axis Sensor Systems



6ADF Series 6-Axis DIN Flange-Type Load Cells and BX8-HD44 BlueDAQ Series Data Acquisition System for Multi-Axis Sensors with Lab Enclosure System

The Interface 6ADF-Series 6-Axis DIN flange-type load cell captures forces and torques along six axes and outputs raw mV/V signals across six independent channels, using a 36-term coefficient matrix for conversion; the BX8-HD44 BlueDAQ data-acquisition system then accepts these signals, internally applies the matrix to compute

real-time axis load values, synchronously samples all channels, actively scales analog outputs, and provides graphing, logging, and PC interface functionality.

3A Series 3-Axis Load Cell and BX6-HD44-ECP Strain Gage Amplifier with EtherCat Protocol

Interface's 3A Series 3-Axis Load Cells and BX6-HD44-ECP Strain Gage Amplifier with EtherCat Protocol work together to deliver accurate, real-time multi-axis force measurement. The 3A Series captures X, Y, and Z forces with minimal crosstalk, while the BX6-HD44-ECP provides EtherCAT P interface connectivity and data logging through BlueDAQ software, allowing users to graph and analyze results instantly on a PC.





6A Series 6-Axis Standard Capacity Load Cell and BX8-AS BlueDAQ Series Data Acquisition System

Interface's 6A-Series 6-axis load cell captures forces (Fx, Fy, Fz) and torques (Mx, My, Mz) across six channels, while the BX8-AS BlueDAQ data acquisition system logs, graphs, and outputs all six measurements in real time creating a complete, high-resolution multi-axis measurement solution.

Complete Load Pin Systems

ILMP Standard Stainless Steel Load Pin and 920i Programmable Weight Indicator and Controller

The ILMP stainless steel load pin delivers rugged, real-time force measurement up to 3,307 K lbf, while the 920i programmable weight indicator in a NEMA 4X enclosure displays, logs, and controls the data with high resolution and rapid sampling—creating a reliable, integrated load-monitoring system.



ILMP Standard Stainless Steel Load Pin and 9325 Portable Sensor Display

The ILMP Standard Stainless Steel Load Pin replaces a load-bearing pin and houses strain gauges to measure applied force, while the 9325 Portable Sensor Display reads that data via bridge sensor output and delivers real-time, calibrated force readings, logging, and display functions.

ILPW Standard Wireless Load Measuring Pin and WTS-BS-1-HA Wireless Handheld Display for Multiple Transmitters

The ILPW Standard Wireless Load Measuring Pin transmits real-time force data wirelessly to the WTS-BS-1-HA handheld display, enabling seamless monitoring from multiple sensors on a compact, portable interface.





Complete Load Shackle Systems

WTSSHK-B Wireless Crosby™ Bow Load Shackle and WTS-BS-1-HA Wireless Handheld Display for Multiple Transmitters

The WTSSHK-B Wireless Crosby™ Bow Load Shackle transmits real-time force data wirelessly to the WTS-BS-1-HA handheld display, enabling seamless monitoring from multiple sensors on a compact, portable interface.



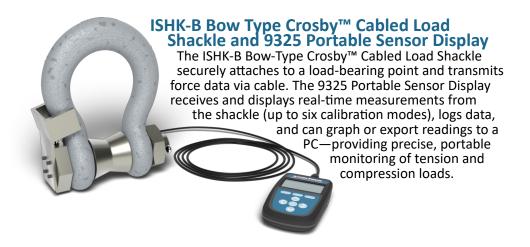
The WTS Wireless Crosby Load Shackle measures lifting and tension forces, transmitting data to the WTS-BS-4 Base Station via secure long-range telemetry.



Connected to a PC, the base station streams

data into Log100 software for real-time logging and visualization of up to 100 channels with customizable layouts and browser-based remote monitoring.





Complete Tension Load Links Systems

WTSATL Lightweight Aluminum Wireless Tension Load Link and WTS-BS-1-HA Wireless **Handheld Display for** Multiple Transmitters

The WTSATL Lightweight Aluminum Wireless Tension Load Link transmits real-time



force data wirelessly to the WTS-BS-1-HA handheld display, enabling seamless monitoring from multiple sensors on a compact, portable interface.

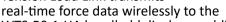
ITL Tension Load Link and 9325 Portable Sensor Display

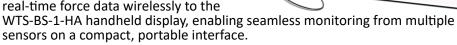
The ITL Tension Load Link, a rugged stainless-steel link-type load cell delivering amplified outputs (e.g. 5 VDC, 10 VDC, or 4–20 mA) for measuring tension in lifting applications up to 100 metric tons Interface.

works seamlessly with the 9325 Portable Sensor Display, which powers the sensor, captures its signal, and converts it into live digital readings with high resolution, multiple display modes, TEDS auto-calibration, and USB data logging creating a portable, precise, real-time force measurement system.

WTSATL Lightweight Aluminum Wireless Tension Load Link and WTS-BS-1-HA Wireless Handheld Display for Multiple **Transmitters**

The WTSATL Lightweight Aluminum Wireless Tension Load Link transmits





Data AQ Pack Systems

- **WTS Wireless 1200 Series Data AQ Pack**
- 1000 Fatigue-Rated Universal LowProfile® Load Cell and 9325 Portable Sensor Display Data AQ Pack
- T25 USB High Speed Shaft Style Rotary Torque Transducer **Data AQ Pack**

Interface

- Sensors
- Instrumentation
- Cable Assenblies
- Mating Connectors
- Software
- System Level Calibration
- Data Acquistion
- Couplings

Interface Complete Systems are all available for project designs requiring the highest performance.

To learn more about the Interface Systems or force measurement solutions call 480-948-5555.

Interface is the world's trusted leader in technology, design and manufacturing of force measurement solutions.
Our clients include a "who's who" of the aerospace, automotive and vehicle, medical device, energy, industrial manufacturing, test and measurement industries.

Interface engineers around the world are empowered to create high-level tools and solutions that deliver consistent, high quality performance. These products include load cells, torque transducers, multi-axis sensors, wireless telemetry, instrumentation and calibration equipment.

Interface, Inc., was founded in 1968 and is a US-based, woman-owned technology manufacturing company headquartered in Scottsdale, Arizona.