

Interface

Digital Instrumentation



Digital Instrumentation v1.2 10-24-2025

Interface
FORCE MEASUREMENT SOLUTIONS

The World Leader in Force Measurement Solutions™



Interface provides a wide range of digital instruments that transform load cell and strain bridge input into digital data output in a variety of protocols and bus formats, within most industry standards.

Digital instrumentation allows our customers to take their test measurement programs and force measurement applications into the digital age. These instruments provide faster data input and output, and more robust analytics.

In addition to improved efficiency, accuracy, and speed, digital instrumentation and more specifically, digital signals, provide a plethora of benefits for test and measurement engineers.

These benefits include:

- Digital signals are less susceptible to noise
- Digital signals are more secure
- Digital signals can travel a long distance
- Digital signals allow multi-directional transmission simultaneously
- Digital instrumentation can integrate with other devices and networks more easily
- Digital instrumentation can communicate with protocols that are already being used in a facility

Another key reason our customers are demanding digital instrumentation is because of the push for Industry 4.0 facilities. Industry 4.0 involves the process of connecting various machines, smart and conventional, to the cloud with sensors to create a powerful sensor network.

The Industry 4.0 network will be fast and stable enough to relay data to people or other machines in real-time, which is critical for 21st century test and measurement programs. This data needs to be rapidly turned into insight and the information ultimately allowing engineers and manufacturers to automate more processes to create a more efficient factory. The digital instrumentation devices that Interface provides play a significant role in helping our customers create Industry 4.0 manufacturing for OEM products and compete in the fourth industrial revolution using digital technologies.

Connections

- RS232
- RS485
- RS422
- Wi-Fi
- Wi-Fi Direct
- USB
- Bluetooth®
- Ethernet

Protocols

- Continuous Fast Weight Transmission Protocol
- ASCII
- Modbus® RTU
- CANopen®
- DeviceNet™
- CC-Link®
- Profibus® DP
- Modbus®/TCP
- Ethernet TCP/IP
- Ethernet/IP
- PROFINet® IO
- EtherCAT®
- PowerLink™
- Sercos® III
- Allen Bradley® Remote IO
- ControlNet™



INF1 Single Sensor Weight Transmitter & Indicator

RS485, Analog, CANopen, PROFIBUS, Modbus/TCP, Ethernet TCP/IP, Ethernet/IP, & PROFINET IO



INF4 2, 3, and 4 Sensor Input Weight Transmitter & Indicator

RS485, Analog, CANopen, PROFIBUS, Modbus/TCP, Ethernet TCP/IP, Ethernet/IP, & PROFINET IO



9330 Battery Powered High Speed Data Logging Indicator

Portable Display



9825 General Purpose Indicator

Bipolar, High Speed



9840 Calibration Grade Multi-Channel Load Cell Indicator

Digital and Intelligent



9840-400-1-T 4-Channel Intelligent Indicator

Digital and Intelligent



9840TQ mV/V Input Torque Transducer Indicator

Digital and Intelligent



9870 High-speed High Performance Teds Ready Indicator

High Speed, Digital Indicator



BX6-ETH/CAN 6-Channel CANbus and Ethernet Strain Gage Amplifier

6-Channel Capability



BX6-HD44-ECP Strain Gage Amplifier with EtherCat Protocol

6 Channel



BX8 8-Channel Data Acquisition System and Amplifier

Software Available for Setup, Logging, Graphing, and Matrix Calculations



480 Bidirectional Weight Indicator

Environmentally Protected



920i Universal Programmable Weight Indicator/Controller

LCD Display



920i Deep Universal Programmable Weight Indicator/Controller

Deep Case



920i Panel Mount Programmable Weight Indicator/Controller

Panel Mount



920i Wall Mount Programmable Weight Indicator/Controller

Wall Mount



1280 Universal Programmable Weight Indicator/Controller

Graphical Color Display



1280 Panel Mount Programmable Weight Indicator/Controller

with Keypad



1280 Wall Mount Programmable Weight Indicator/Controller

Wall Mount



1280 7" Touch-Only Programmable Weight Indicator/Controller

Panel Mount



WTS-GW1 Wireless Gateway with Modbus and ASCII Serial Output
Capable of Gathering Data from Up to 100 Acquisition Modules

Wireless Telemetry System Modbus Gateway

The WTS-GW1 is a wireless Modbus gateway that provides a simple interface for users to gather data from up to 100 transmitters in a WTS network. The WTS-GW1 uses either the standard Modbus interface RTU protocol or a simple ASCII protocol.

The data sent by transmitter modules can be utilized by multiple receivers such as displays, handheld readers, analog outputs, relay modules, and PC interfaces. Receivers support common industrial power supplies and are available in robust IP rated enclosures with internal antennas optimized to give outstanding coverage.

The wireless telemetry Modbus gateway offers some simple commands available to wake, sleep, and keep awake WTS transmitters.

The license free 2.4 GHz direct sequence spread spectrum (DSSS) radio telemetry technology offers high integrity and error free communications which can co-exist with other wireless technologies such as Wi-Fi and Bluetooth.

The WTS Toolkit software offers a fast and simple way to configure the gateway module.



WTS-SO Wireless Interface with ASCII Serial Output
Serial Output to Printer, Display, PC or PLC



9325, 9325-NU Portable Sensor Display
Digital, Hand Held, Battery Powered, TEDS Ready



WTS-B3-3E Wireless Base Station with USB Interface
Includes WTS Toolkit Software and Log 100 Software



WTS-B3-4 Wireless Base Station with USB Interface in Industrial Enclosure
Includes WTS Toolkit Software and Log 100 Software



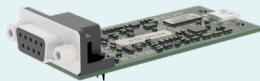
WTS-B3-6 Wireless Telemetry Dongle Base Station
Includes WTS Toolkit Software and Log 100 Software



CSD Digital Load Cell Converter
OEM PC Interface Module



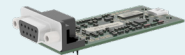
DIG-USB USB Output Module
PC Interface Module



DIG-USB-OEM OEM USB Output Module
OEM PC Interface Module



DIG-USB-F Fast USB Output Module
Fast PC Interface Module



DIG-USB-F-OEM OEM Fast USB Output Module
OEM Fast PC Interface Module



1280 12" Touch-Only Programmable Weight Indicator/Controller
Panel Mount



INF-USB3 USB Single Channel PC Interface Module
Single Channel



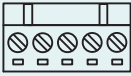
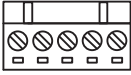

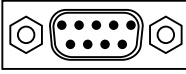


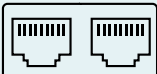
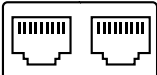
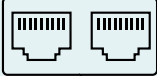
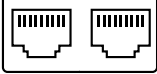
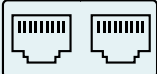


SI-USB USB Dual Channel PC Interface Module
Two Channel



SI-USB4 Four Channel USB Sensor PC Interface
Four Channel

INF1 and INF4 Fieldbus Options

Port	Model	Description
	INF1-RS485 INF4-RS485	RS485 serial port. Baud rate: 2400, 4800, 9600, 19200, 38400, 115200 (bit/s).
	INF1-Analog INF4-Analog	Optoisolated 16 bit analog output . Current: 0÷20 mA; 4÷20 mA (up to 300 Ω). Voltage: 0÷10 V; 0÷5 V; ±10 V; ±5 V (min 10 kΩ). Equipped with RS485 serial port.
	INF1-CANopen INF4-CANopen	CANopen port. Baud rate: 10, 20, 25, 50, 100, 125, 250, 500, 800, 1000 (kbit/s). The instrument works as slave in a synchronous CANopen network. Equipped with RS485 serial port.
	INF1-DeviceNet INF4-DeviceNet	DeviceNet port. Baud rate: 125, 250, 500 (kbit/s). The instrument works as slave in a DeviceNet network. Equipped with RS485 serial port.
	INF1-CC-Link INF4-CC-Link	CC-Link port. Baud rate: 156, 625, 2500, 5000, 10000 (kbit/s). The instrument works as Remote Device Station in a CC-Link network and occupies 3 stations. Equipped with RS485 serial port.
	INF1-PROFIBUS DP INF4-PROFIBUS DP	PROFIBUS DP port. Baud rate: up to 12 Mbit/s. The instrument works as slave in a Profibus DP network. Equipped with RS485 serial port.
	INF1-Modbus/TCP INF4-Modbus/TCP	Modbus/TCP port. Type: RJ45 10Base-T or 100Base-TX (auto-sensing). The instrument works as slave in a Modbus/TCP network. Equipped with RS485 serial port.
	INF1-Ethernet TCP/IP INF4-Ethernet TCP/IP	Ethernet TCP/IP port. Type: RJ45 10Base-T or 100Base-TX (auto-sensing). The instrument works in an Ethernet TCP/IP network and it is accessible via web browser. Equipped with RS485 serial port.
	INF1-Ethernet/IP INF4-Ethernet/IP	2x Ethernet/IP ports. Type: RJ45 10Base-T or 100Base-TX (auto-sensing). The instrument works as adapter in an Ethernet/IP network. Equipped with RS485 serial port.
	INF1-PROFINET IO INF4-PROFINET IO	2x PROFINET IO ports. Type: RJ45 100Base-TX. The instrument works as device in a Profinet IO network. Equipped with RS485 serial port.
	INF1-EtherCAT INF4-EtherCAT	2x EtherCAT ports. Type: RJ45 10Base-T or 100Base-TX (auto-sensing). The instrument works as slave in an EtherCAT network. Equipped with RS485 serial port.
	INF1-POWERLINK INF4-POWERLINK	2x POWERLINK ports. Type: RJ45 10Base-T or 100Base-TX (auto-sensing). The instrument works as slave in a Powerlink network. Equipped with RS485 serial port.
	INF1-SERCOS III INF4-SERCOS III	2x SERCOS III ports. Type: RJ45 10Base-T or 100Base-TX (auto-sensing). The instrument works as slave in a Sercos III network. Equipped with RS485 serial port.

Interface Digital Instruments

- Indicators
- Bidirectional Indicators
- Portable Indicators
- Programmable Indicators
- Battery Powered Indicators
- Battery Powered Bidirectional Indicators
- Transmitters
- Four Channel Transmitters
- Controllers
- Programmable Controllers
- USB Output Module
- PC Interface Module
- Sensor to USB Output Converter
- Data Acquisition Systems
- Wireless

Interface force measurement digital instruments are available in many design configurations for project designs requiring the highest performance.

To learn more about the Interface products 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.