INTERFACE
FORCE MEASUREMENT SOLUTIONS.

INF1 SINGLE SENSOR WEIGHT TRANSMITTER AND INDICATOR (U.S. AND METRIC)

FEATURES & BENEFITS

Connection to:

- PLC via analog output or fieldbus
- PC/PLC via RS485 (Up to 99 instruments with line repeaters, up to 32 without line repeaters)
- Remote display via RS485
- 8 load cells in parallel

- Digital Filter to reduce the effects of weight oscillation
- Theoretical calibration and real calibration with the possibility of weight linearizion up to 5 points
- Tare weight zero setting
- Automatic zero setting at power on
- Semi-automatic tare (net/gross weight) and predetermined tare
- Semi-automatic zero
- Direct connection between RS485 and RS232 without converter

SPECIFICATIONS

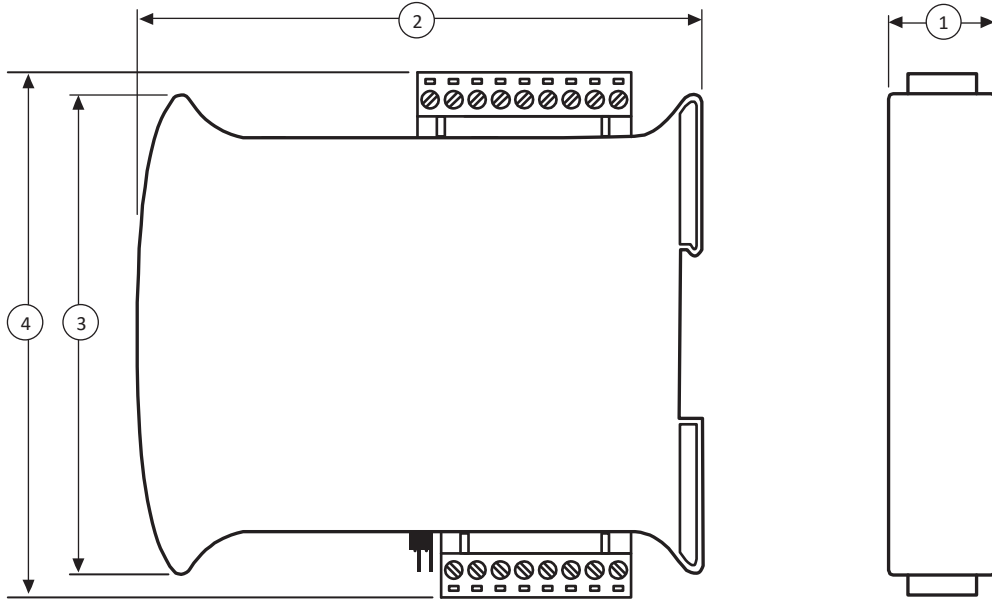| Parameter	
Power Supply and Consumption	12-24 VDC ±10% ;5W
Number of Load Cells	up to 8 (350 ohm) 4-6 wires
Load Cells Supply	5 VDC/240 mA
Linearity	<0.01% Full Scale
Linearity of Analog Output	<0.01% Full Scale
Thermal Drift	<0.0005% Full Scale/ºC
Thermal Drift of Analog Output	<0.003% Full Scale/ºC
A/D Converter	1 Channel - 24 bit (16000000 Points) - 4.8 kHz
Divisions (Range ±10mV , Sensitivity 2mV/V)	±999999 0,01 µV/d
Measure Range	±39 mV
Load Cell Sensitivity	±7 mV/V
Conversions Per Second	300/s
Display Range	±999999
Decimals	0-4
Display Increments	x1 x2 x5 x10 x20 x50 x100
Digital Filter	10 levels
Digital Conversion Rate	5 - 300 Hz
3 Relay Logic Outputs	115 VAC/150 mA
2 Optoisolated Logic Inputs	5 - 24 VDC PNP
Serial Ports	RS485
Baud Rate	2400, 4800, 9600, 19200, 38400, 115200 (Bit/s)
Analog Output	16 bit = 65535 Divisions. 0-20 mA; 4-20 mA (Up to 300 ohm) 0-10 V; 0-5 V; ±10 V; ±5 V (min 10k ohm)
Maximum Humidity (Condensation Free)	85 %
Storage Temperature	-30ºC +80ºC
Working Temperature	-20ºC +60ºC
3 Relay Digital Outputs	30 VAC, 60 VDC/150 mA

STANDARD CONFIGURATION
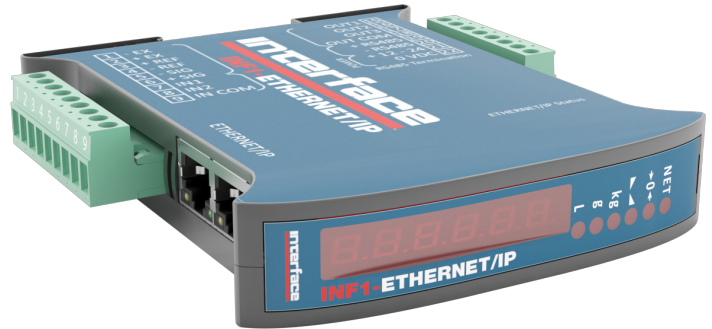
MODEL INF1-ETHERNET/IP (Shown)

- RS485 serial port for communication via Modbus RTU protocol, ASCII bidirectional or continuous one way transmission
- 3 relay logic outputs controlled by setpoint values or via protocols
- 2 optoisolated PNP logic inputs: status reading via serial communication protocols
- 1 load cell dedicated input
- Back panel mounting on Omega/DIN rail
- Dimensions: 25x115x120 mm
- Six-digit red LED semi-alphanumeric display (8 mm height), 7 segment
- Six indicator LED
- Four buttons for system calibration
- Extractable screw terminal boards

U.S. dimensions and capacities are provided for conversion only. Standard products have International System of Units (SI) capacities and dimensions.

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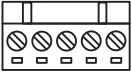# INF1 SINGLE SENSOR WEIGHT TRANSMITTER AND INDICATOR (U.S. AND METRIC)
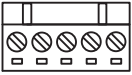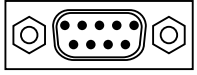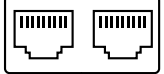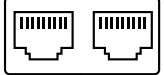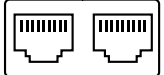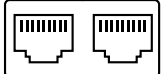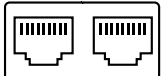
DIMENSIONS

See Drawing	Metric (mm)	U.S. (in)
(1)	22.5	0.89
(2)	120	4.72
(3)	101	3.98
(4)	111	4.37

INF1 SINGLE SENSOR WEIGHT TRANSMITTER AND INDICATOR (U.S. AND METRIC)

FIELDBUS OPTIONS

Port	Model	Description
	INF1-RS485	**RS485** serial port. Baud rate: 2400, 4800, 9600, 19200, 38400, 115200 (bit/s).
	INF1-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	**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	**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	**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	**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	**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	**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	**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	**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	**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	**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	**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.