






**Strain Meter / Controller**

The **INFS** strain gage meter is a microprocessor-based indicator/ controller with enhanced features that allow you to easily configure the unit for virtually any application. It is compatible with most strain gage sensors such as load cells and pressure transducers.



Shown with LC101 Series Load Cell  
Sold Separately

NEWPORT PRODUCT INFO
• <a href="#">MANUAL - PDF Version</a> 
• <a href="#">QUICKSTART</a> 
• <a href="#">OPTIONS &amp; ADDENDUMS</a> 
• <a href="#">SOFTWARE</a>
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## INFS

- ✓ 6 Digits
- ✓ Optional Split Meter System
- ✓ Four Isolated Open Collector Outputs
- ✓ Wide Selection of dc Voltage and Current Ranges
- ✓ Ratiometric Inputs
- ✓ Tare
- ✓ 1.5 to 11 and 24 Vdc Sensor Excitation
- ✓ Peak and Valley Detection and Memory
- ✓ Large Digital Offset Capabilities Enabling Easy Scaling in Engineering Units
- ✓ Smart Filtering Detects the Difference Between a Spike or Process Change (Patent Applied For)
- ✓ Selectable Decimal Point and Read Rates of up to 13 Readings/Sec
- ✓ Configurable Via Front Pushbuttons or Via RS-232 or RS-485

## OPTIONS

- ✓ Isolated Dual 7 Amp Form C Relays
- ✓ Isolated Parallel BCD Output
- ✓ Isolated Analog Output of 0-10 Vdc, 0-5 Vdc, 1-5 Vdc, 0-20 mA dc and 4-20 mA dc
- ✓ Isolated Serial RS-232
- ✓ Isolated RS-485, Addressable up to 199 Units

The **INFINITY®** strain gage meter can be configured, via the five front-panel pushbuttons and/or the optional serial communications boards, to accept any of a variety of dc voltage ranges (some ranges plus unipolar or bipolar are first selected via a jumper located at the top of the instrument housing) and display them in engineering units.

The **INFW** scale meter offers the same features as the INFS strain meter, plus it is easily integrated into your data acquisition systems, PLCs or other computer-controlled systems with the optional inputs. Other features include dual relay of BCD output, isolated analog output, RS-232 or RS-484 serial communications options, auto or sequential tare, class selection, and display of units of measure. Self-diagnostics are performed automatically on power-up.

These meters provide both software and hardware lockout configurations which let you define the parameters, from setpoint adjustment to total reprogramming. Users can scale and offset their input signal into any engineering units desired. This is accomplished by the use of an exclusive two-data point method of scale and offset that eliminates the signal errors transmitted from a sensor. The meter provides a choice of sensor excitations of 1.5 to 11 Vdc or 24 Vdc for sensors such as load cells, strain gages, and pressure transducers.

### INFZS Split Meter with remote display



### MECHANICAL REFERENCE

### PRICE LIST

### Low Range Constant Moment Beam Load Cell with 4-Direction Overload Stops



### SPECIFICATIONS

**Accuracy:**  $\pm 0.005\%$  rdg

**Span Temperature Coefficient:**  $\pm 15$  ppm/ $^{\circ}\text{C}$

**Step Response:** 1 sec to 9.9%

**Warm-up to Rated Accuracy:** 50 min

**Operating Ambient:** 0 to 50 $^{\circ}\text{C}$  (32 to 122 $^{\circ}\text{F}$ ), 95%RH, non-condensing

**Storage Ambient:** -40 to 85 $^{\circ}\text{C}$  (-40 to 185 $^{\circ}\text{F}$ )

**Power:** 115 or 230 Vac, 49-400 Hz; 10 to 32 Vdc

**Power Consumption:** 6 W nominal, 10 W max.

**Normal Mode Rejection:** 60 dB

**Common Mode Rejection:** 120 dB

**Common Mode Voltage:** 1500 V peak per Hv test

**Conversion:** dual-slope technique

**Resolution:** 15-bit

**Reading Rate:** 3/sec or 13/sec, 60 Hz; 3/sec or 12/sec, 50 Hz

**Display:** red or green 6-digit, 14-segment, 13.7 mm (0.54"); 4 alarm indicators

**Dimensions:** 48 H x 96 W x 165 D mm (1.89" x 3.78" x 6.5")

**Panel Cutout:** 45 H x 92 W mm (1.772" x 3.622"); 1/8 DIN

**Weight:** 574 g (1.27 lb)

**TTL Outputs:** four, isolated open collector; rated 150 mA at 1 V sink, 30 V open

**BCD Output:** isolated, tri-state, TTL/CMOS compatible; external 5 V supply for isolated; internal 5 V supply for non-isolated

**Dual Relays:** form C, 7 A at 30 Vdc or 230 Vac

**Four Relay Option:** dual 7A relays and dual 1 A relays

**Analog Output:** 0-5 V/1-5 V/0-10 V/0-20 mA/4-20 mA, user selectable; 354 Vp isolation; 14-bit resolution; 0.1% accuracy, 50 msec step response

**RS-232 Communications:** 300/600/1200/2400/4800/9600/19.2k baud; RJ11 4-wire connection; complete program setup and message display capability; programmable to transmit current display, alarm status, min/max, actual measured input value and status

**RS-485 Communications:** 300/600/1200/2400/4800/9600/19.2k baud; RJ12 6-wire connection; addressable from 0 to 199

**Voltage Input Ranges:** 0-100 mV, 0-1 V, 0-5 V, 1-5 V, 0-10 V, 0-100 V,  $\pm 50$  mV,  $\pm 500$  mV,  $\pm 5$  V,  $\pm 50$

**Current Input Ranges:** 0-20 mA, 4-20 mA

**Input Configuration:** single-ended

**Polarity:** unipolar/bipolar, programmable

**Span Adjustment:** +0.00001 to 500,000, programmable

**Offset Adjustment:** 0 to 999,999 or 0 to -99,999; programmable

**Sensor Excitation:** 10 V at 30 mA for bridge; 24 V at 25 mA for loop power

**To Order** (\* insert number code to complete model number)

Basic Model	Power/ Display	Control Output	Analog Output	Serial Output	Input Signal	Description
INFS	(*)	(*)	(*)	(*)	(*)	Strain gage/load cell panel meter
INFZS	(*)	(*)	(*)	(*)	(*)	Strain meter with remote display
	0					115 Vac power, red LED display
	1					230 Vac power, red LED display
	2					115 Vac power, green LED display
	3					230 Vac power, green LED display
	4					10-32 Vdc power, red LED display*
	5					10-32 Vdc power, green LED display*
		0				Four NPN open collector transistors
		1				Isolated parallel BCD
		2				Two 7 A relays
		3				Two 7 A relays and two 1 A relays**
			0			No analog output
			1			Isolated analog output
				0		No serial output
				1		Isolated RS-232
				2		Isolated RS-485
					(*)	Specify range signal from chart below.*

\*\* 4 Relay option is not available with 10-32 Vdc Power Option

#### INPUT SIGNAL

Range Code	Range	Range Code	Range	Range Code	Range
DC1	0-100 mV	DC5	0-10 Vdc	DC9	±5 Vdc
DC2	0-1 Vdc	DC6	0-100 Vdc	DC10	±50 Vdc
DC3	0-5 Vdc	DC7	±50 mVdc	C1	0-20 mA
DC4	1-5 Vdc	DC8	±500 mVdc	C2	4-20 mA

#### ADD-ON-OPTIONS

Model	Description	Model	Description
BL	Blank Lens	9SC4	9-pin RS-485 connector
FS	Special Calibration	25SC2	25-pin RS-232 connector
9SC2	9-pin RS-232 connector	25SC4	25-pin RS-485 connector

Product Selection (Specify Model Number, see variations below in partnumber builder table)		
Part Number	Description	Qty.
INFS-0000-DC1	INFINITY® strain gage meter, 115 Vac power, red LED display, open collector outputs, 0-100 mV input range	
INFS-0000-C2	INFINITY® strain gage meter, 115 Vac power, red LED display, open collector outputs, 4-20	

INFS-0011-DC1	mA input range INFINITY® strain gage meter, 115 Vac power, red LED display, open collector outputs, analog and RS-232 outputs, 0-100 mV input range
INFS-0200-C2	INFINITY® strain gage meter, 115 Vac power, red LED display, two 7 A relays, 4-20 mA input range
INFS-0211-DC1	INFINITY® strain gage meter, 115 Vac power, red LED display, two 7 A relays, analog and RS-232 outputs, 0-100 mV input range

Part Number Builder								
PowerandLEDColor	(1)	(2)	(3)	(4)	(5)	(6)	(7)	
	INFS	-	0	0	0	0	-	DC1
<b>Option Descriptions</b>								
<b>(1) Meter Type</b>								
<i>Select</i>								
INFS for STRAIN meter								
INFZS for STRAIN split meter with remote display								
<b>(2) Power and LED Color</b>								
<i>Select</i>								
0 for Designates 115 Vac power and red LED display								
1 for Designates 230 Vac power and red LED display								
2 for Designates 115 Vac power and green LED display								
3 for Designates 230 Vac power and green LED display								
4 for Designates 10-32 Vdc power and red LED display								
5 for Designates 10-32 Vdc power and green LED display								
<b>(3) BCD and Control Outputs</b>								
<i>Select</i>								
0 for Four optically isolated open-collector outputs								
1 for Isolated parallel BCD output (BCD1)								
2 for Isolated dual 7 A relays (REL1)								
3 for Isolated dual 7 amp and dual 1 amp relays (REL4), not available with DC power								
<b>(4) Analog Output</b>								
<i>Select</i>								
0 for No analog output								
1 for Isolated analog output (AN03)								
<b>(5) Serial Outputs</b>								
<i>Select</i>								
0 for No serial output								
1 for Isolated RS-232 serial output (RS24)								

2 for Isolated RS-485 serial addressable output (RS24)

**(6) Input Options**

*Select*

**DC1** for Process or Strain range 0-100 mV

**DC2** for Process or Strain range 0-1 V

**DC3** for Process or Strain range 0-5 V

**DC4** for Process or Strain range 1-5 V

**DC5** for Process or Strain range 1-10 V

**DC6** for Process or Strain range 0-100 V

**DC7** for Process or Strain range  $\pm 50$  mV

**DC8** for Process or Strain range  $\pm 500$  mV

**DC9** for Process or Strain range  $\pm 5$  V

**DC10** for Process or Strain range  $\pm 50$  V

**C1** for Process or Strain range 0-20 mA

**C2** for Process or Strain range 4-20 mA

**(7) Add-on Options**

*Select*

**Nothing(leave field blank)** for no options

**,BL** for Blank Lens

**NOTE:** All combinations may not be valid, check spec sheet for valid part numbers.