


INFINITY® Handbook 44 Scale Meter


NTEP CERTIFICATION #92-152

Shown with LC101 Series
Load Cell Sold Separately

The **INFW** scale 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.

NEWPORT PRODUCT INFO

- [MANUAL - PDF](#) 
- [MECHANICAL](#)
- [PRICE](#)

 [REQUIRES ADOBE ACROBAT - HELP](#)



INFW

- ✓ Selectable Scale Divisions, Selectable Classes I (III, IIII, or IV) and Handbook 44 Certification
- ✓ 6 Digits
- ✓ 2 or 5 Coordinate Linearization of Input Signals
- ✓ Four Isolated Open Collector Outputs
- ✓ Wide Selection of dc Voltage and Current Ranges
- ✓ Ratiometric Inputs
- ✓ Tare-Fixed, Auto or Sequential
- ✓ 1.5 to 11 and 24 Vdc Sensor Excitation
- ✓ 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
- ✓ Peak and Valley Detection and Memory
- ✓ Configurable Via Front Pushbuttons or Via RS-232 or RS-485

OPTIONS

- ✓ Isolated Dual 7 Amp Form C (SPDT) 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®** scale 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.

Standard features include normal or sequential tare, peak or valley recall, tare limit, and a high resolution A/D converter with digital scaling and offset. Other features include dual relay or 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 or five data point method of scale and offset for linearization of input signals 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.



INFZW Split Meter

**Self-Adjusting
Weight Assemblies
TWA5 Load Cell Included**



**Available from
OMEGADYNE, INC.**

SPECIFICATIONS

Accuracy: $\pm 0.005\%$ rdg

Span Temperature Coefficient: ± 15 ppm/ $^{\circ}$ C

Step Response: 1 sec to 99.9%

Warmup to Rated Accuracy: 55 min

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

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

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, ± 50 mV, ± 500 mV, ± 5 V, ± 50 V

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 #) *Prices Shown in U.S. Dollars*

Basic Model	Power/ Display	Control Output	Analog Output	Serial Output	Input Signal	Description
INFW	(*)	(*)	(*)	(*)	(*)	Strain gage/load cell panel meter
INFZW	(*)	(*)	(*)	(*)	(*)	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
		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.*

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

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.
INFW-0000-DC1	Scale meter, 115 Vac power, red LED display, open collector outputs, 0-100 mA input	
INFW-0000-C2	Scale meter, 115 Vac power, red LED display, open collector outputs, 4-20 mA input	
INFZW-2010-DC7	Scale meter with remote display, 115 Vac power, green LED display, open collector outputs, isolated analog output, ±50 mV input	



Part Number Builder

PowerandLEDColor

(1) (2) (3) (4) (5) (6) (7)

INFW - 0 0 0 0 - DC1

Option Descriptions

(1) Meter Type

Select

INFW for SCALE meter

INFZW for SCALE split meter with remote display

(2) Power and LED Color

Select

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

(3) BCD and Control Outputs

Select

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

(4) Analog Output

Select

0 for No analog output

1 for Isolated analog output (AN03)

(5) Serial Outputs

Select

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 ± 50 mV
DC8 for Process or Strain range ± 500 mV
DC9 for Process or Strain range ± 5 V
DC10 for Process or Strain range ± 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.