



**NEWPORT®
BRAND**



\$195

Basic Unit

STANDARD FEATURES

- ☑ Isolated Transmitter Excitation Supply
- ☑ Zero and Span Adjustments of 2,000 Counts Each
- ☑ ±1,999 -Count Display Span
- ☑ 120 dB CMR, 56 dB NMR
- ☑ Bright, 14.2 mm (0.56") LED Display
- ☑ EMI/RFI Filter for ac Power
- ☑ Removable Screw-Clamp Connector
- ☑ Miniature DIN Case with 24 x 72 mm Bezel

OPTIONS

- ☑ 4-20 mA, 1-5 V, 0-10 V Signal Ranges
- ☑ Red or Green LED Display
- ☑ 24, 100, 115 or 230 Vac Power
- ☑ 25 x 75 mm (0.98 x 2.96") Bezel Adapter
- ☑ NEMA-4 Splash-Proof Lens Cover

For Sales and Service
In U.S.A. and Canada

1-800-872-3963SM
1-800-USA-DYNE

International Customers Dial
(614) 965-9340
24-Hour FAX (614) 965-9438

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3½ Digit Mini-Size Process Meter with Isolated Excitation



DESCRIPTION

BUILT-IN EXCITATION SUPPLY

Model 205-E is a low-cost 3½ digit (±1,999-count) process meter with a built-in, galvanically-isolated excitation supply to power two- or four-wire transmitters, bridges or active transducers. In many cases, this built-in supply can eliminate the need for a more expensive external supply. Output levels of 24 Vdc at 20 mA or 10 Vdc at 30 mA are jumper-selectable.

LARGE DISPLAY, SMALL CASE

The 205-E provides a full-size 14.2 mm (0.56"), red or green LED display, yet is housed in a miniature case with a 24 x 72 mm (0.94 x 2.83") bezel. The case fits into a standard ¾ DIN cutout, 22.2 x 68 mm (0.87 x 2.68") and requires a depth of less than 120 mm (4.72") behind the panel, including plug-in screw-clamp connectors (standard).

EASY TO SCALE

The 205-E may be shipped fully calibrated to meet a customer's specific requirements (205-FSE); however, zero and span are easily changed in the field. On-board components allow five signal ranges to be selected via push-on jumpers. Precision potentiometers are readily accessible behind the lens to provide zero and span adjustments of 2000 counts each. Accuracy is 99.9% of reading.

MULTIPLE AC POWER OPTIONS

The 205-E incorporates a power supply, which is available for 24, 100, 115 or 230 Vac power. All power options provide EMI filtering, so that power line noise does not affect the reading.

DESIGNED FOR SAFETY

Many design features are incorporated to ensure compliance with the latest worldwide safety specifications. To minimize the possibility of electrical shock, there are no openings which would allow electrical contact with a probe 4 mm (0.16") in diameter. Proper creepage distances are observed for power and signal as specified by IEC-348, Class 1. The power transformer uses separate bobbins for the primary and secondary windings. Type-Y AC line filter capacitors and removable screw-clamp connectors comply with VDE and UL specifications. Noryl SE-1 plastic is used in the case for mechanical strength and flame retardance.

SPECIFICATIONS

ACCURACY AT 25°C

Maximum Error: ±0.05% of reading ±1 count

Zero Tempco: ±0.01% of offset/°C

Span Tempco: ±0.02% of reading/°C

Full-Scale Step Response: 1 sec

Warmup to Rated Accuracy: 30 min

NOISE REJECTION

NMR, SIG HI to SIG LO: 56 dB, 50/60 Hz

CMR, SIG LO to PWR GND: 120 dB, DC to 60 Hz

CMV, SIG LO to PWR GND: 1500 Vp per HV test, 354 Vp per IEC spacing

ANALOG-TO-DIGITAL CONVERSION

Technique: Dual-slope, average-value

Signal Integration Period: 100 msec

Read Rate: 2.5/sec

TRANSMITTER EXCITATION SUPPLY

Output Voltage: Selectable 10 or 24 Vdc

Output Current, Max: 30 mA at 10 V, 20 mA at 24 V

Line Regulation: $\pm 0.01\%/V$ of AC power

Load Regulation: $\pm 0.5\%$

Tempco: $\pm 0.02\%/^{\circ}C$

Ripple at 50/60 Hz: $\pm 0.01\%$

DISPLAY

Type: 7-segment, LED

Color: Red (standard), green (optional)

Digit Height: 14.2 mm (0.56")

Decimal Points: Three positions jumper-selectable behind the lens

Overrange Indication: Three least-significant digits blank

POWER OPTIONS

AC Voltage: 24, 100, 115 or 230 Vac $\pm 15\%$

AC Frequency: 49-63 Hz

Power Consumption: 2 W

ENVIRONMENTAL

Operating Temperature: 0 to 60°C

Storage Temperature: -40 to +85°C

Relative Humidity: 95% at 40°C (non-condensing)

MECHANICAL

Dimensions: 24 H x 72 W x 47 mm D (0.94" x 2.84" x 4.6")

Bezel (with TP2 Adapter): 25 x 75 mm (0.98 x 2.96")

Panel Cutout: 22.2 x 68 mm (0.87 x 2.68")

Weight: 200 g (7 oz)

Case Material: 94V-1 UL-rated Noryl SE-1

ANALOG INPUT

Range	4-20 mA	0-0.2 V	1-5 V	0-10 V	0-100 V
Input Resist	13 Ω	1 M Ω	1 M Ω	1 M Ω	1 M Ω
Bias Current	50 pA	50 pA	10 pA	5 pA	1 pA
Max Input	55 mA	250 Vp	250 Vp	250 Vp	250 Vp

OMEGADYNE PX01 Series

Pressure Transducers

Request Doc #3605



Most Popular Models Indicated Prices Shown in U.S. Dollars

To Order (Specify Model Number)

Model	Price	Display	Range
➔ 205-EA1-R-(*)	\$195	Red	4-20 mA dc
205-EA1-G-(*)	195	Green	4-20 mA dc
➔ 205-EV2-R-(*)	195	Red	± 199.9 mV dc
205-EV2-G-(*)	195	Green	± 199.9 mV dc
➔ 205-EV3-R-(*)	195	Red	1-5 Vdc
205-EV3-G-(*)	195	Green	1-5 Vdc
➔ 205-EV4-R-(*)	195	Red	0-10 Vdc
205-EV4-G-(*)	195	Green	0-10 Vdc
205-EV5-R-(*)	195	Red	0-100 Vdc
205-EV5-G-(*)	195	Green	0-100 Vdc
205-FSE-R-(*)	215	Red	Customer specified
205-FSE-G-(*)	215	Green	Customer specified

* Specify power code from power chart below.

To order with INFINITY™ style bezel and adapter, change model No. from 205 to 305, and add \$30 to price.

Comes with complete operator's manual.

Ordering Examples: 1.) 205-EV2-R-C0 dc process meter with ± 199.9 mVdc range, 24 Vdc excitation, red LED display, 115 Vac power, \$195.

2.) 305-EA1-R-C1 dc process meter with INFINITY™ style bezel 4-20mA range, 24 Vdc excitation, red LED display, 230 Vac power, \$195+\$30 = \$225.

Power Selections

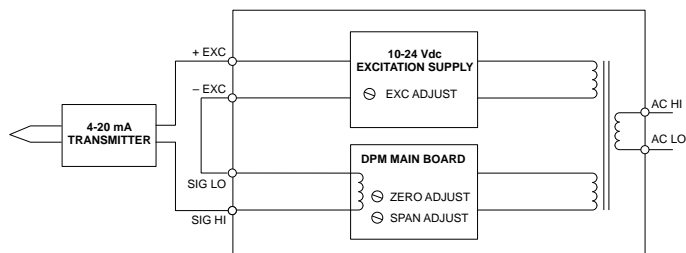
Power Code	Description
-C0	115 Vac, 49-63 Hz
-C1	230 Vac, 49-63 Hz
-C5	100 Vac, 50/60 Hz
-C8	24 Vac, 50/60 Hz

Options

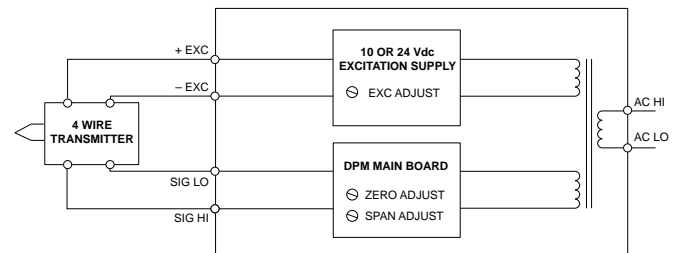
Order Suffix	Add'l. Price	Description
-BL	15	Blank lens without NEWPORT logo

Accessories

Model No.	Price	Description
SPC364	\$30	NEMA 4 splash proof cover lens
TP2	30	25 x 74 mm bezel adaptor
TP3	30	Bezel adapter, 3/4 DIN to 1/2 DIN
RP23	50	19" rack panel for 2 3/4 DIN meters
RP43	55	19" rack panel for 4 3/4 DIN meters



MODEL 205-E WITH ELECTRICALLY-FLOATING EXCITATION SUPPLY AND PROCESS SIGNAL CONDITIONER, CONFIGURED FOR OPERATION WITH A 2-WIRE 4-20 mA TRANSMITTER (POWERED BY 4-20 mA LOOP). EXCITATION RETURN IS TIED TO SIGNAL LOW.



MODEL 205-E WITH ELECTRICALLY-FLOATING EXCITATION SUPPLY AND PROCESS SIGNAL CONDITIONER, CONFIGURED FOR OPERATION WITH A 4-WIRE TRANSMITTER. THE TRANSMITTER SIGNAL MAY BE DC VOLTAGE OR CURRENT.