

FEATURES

- Easy to read numbers
- On-board power supply
- Field calibration adjustments
- Ordering choice of LCD or LED display
- Compact size

APPLICATIONS

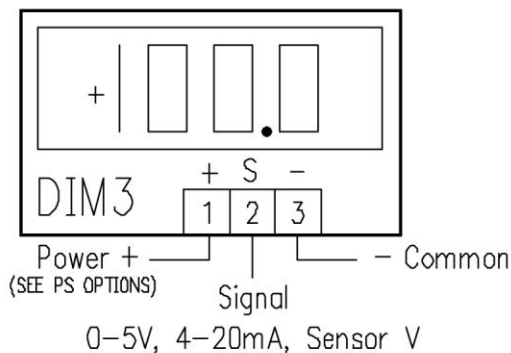
- Temperature indication
- Humidity indication
- Percentage of operation display
- Differential pressure indication

DESCRIPTION & OPERATION

The DIM3 is a 3½ digit panel meter that can be ordered in either a LCD or LED version. The DIM3 will display 000 to 1999 with the decimal available in any of the four possible positions. The DIM3 has larger digits that are easy to read at a distance. It has an on-board power supply for standalone sensor operation.

The displays used on the DIM3 are the Datel’s DMS-30 series digital panel meter. A sub-board is attached to the back of the meter that houses the power supply and input scaling circuitry. Standalone sensors can be powered from the DIM3’s supply by indicating the sensor type when ordering. The meter is factory calibrated, however zero and SPAN potentiometers are available for field adjustments. Please see field calibration and adjustments for instructions.

WIRING CONFIGURATION



LCD Version



SPECIFICATIONS

SIZE:	2.17”L x 0.92”H x 1”D
MOUNTING:	Mount through 2.12”W x 0.88”H Rectangular opening with a retaining clip or bezel option. (See Physical Configuration).
POWER:	+5VDC standard +15V to 24VAC/DC optional
INPUT SIGNAL:	0-5VDC, 0-10VDC, 0-15VDC 4-20mA, non-isolated AD590 sensor RTD sensor (100, 1K, 2K, & 10KΩ) STAEFA sensors (all)
INPUT IMPEDANCE:	>1 Meg Ω Ohm sensor inputs 200KΩ for voltage inputs 250Ω for 4-20mA input
LCD DISPLAY:	Datel part # DMS-30PC 0.4 high 3 ½ digit LED model
OUTPUT:	3 ½ digit display 0.000 – 1.999 standard 00.00 – 19.99 optional 0.000 – 1.999 standard 0000 – 1999 optional
ADJUSTMENTS:	Zero & span ± 20%
ACCURACY:	0.1% with linear input signal
AMBIENT TEMPERATURE:	0 to 50°C

ORDERING INFORMATION

DIM3-XXX/XX/XXX/XXX/XXX-XXX



POWER SUPPLY OPTION CODES

LCD	Liquid Crystal Display
LED	Light Emitting Diode (RED)

POWER SUPPLY OPTION CODES

05	5VDC
06	6VDC
24	9-24VAC or DC

INPUT OPTION CODES

1-5V	1-5VDC input signal
5V	0-5VDC input signal
10V	0-10VDC input signal
15V	0-15VDC input signal
mA-50	4-20mA input w/50Ω load
mA-249	4-20mA input w/249 Ω load
AD590	Analog Devices AD590 sensor
RTD ○	RTD sensor ○
SCS □	STAEFA sensors □
CUST	Custom sensor ★

- - Specify RTD type, and temperature coefficient when ordering
- - Specify STAEFA sensor type when ordering
- ★ - Specify custom sensor signal and range when ordering

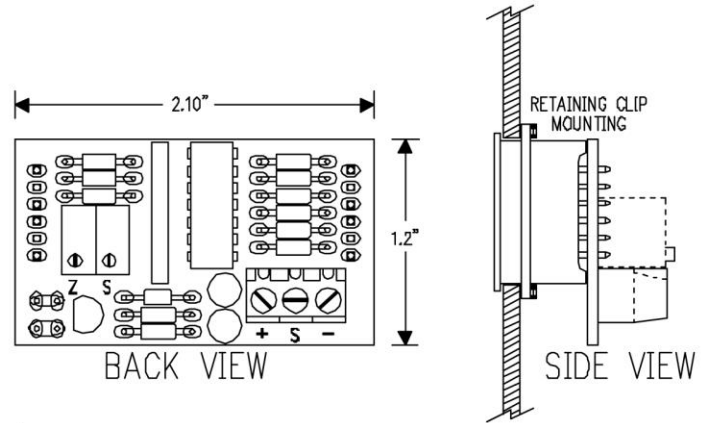
DISPLAY OUTPUT RANGES

DP0	000 – 1999	No decimal point
DP1	00.0 – 199.9	Displays 10 th 's
DP2	0.00 – 19.99	Display's 100 th 's
DP3	.000 – 1.999	Display's 1000 th 's

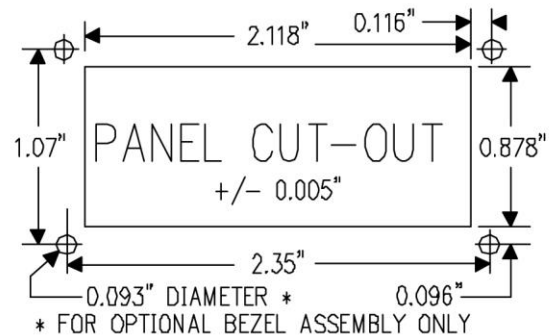
ORDERING CODE EXAMPLES

- DIM3-LCD/ 05/ mA/ DP1/ 000.0-100.0
- DIM3-LED/ 05/ 10VDC/ DP2/ 00.00-19.99
- DIM3-LED/ 24/ RTD-1K/ DP1/ 39 TO 101°F
- DIM3-LED/ 24/ AD590/ DP1/ 39 TO 101°F
- DIM3-LCD/ 05/ T-30X/ DP1/ 39 TO 101°F

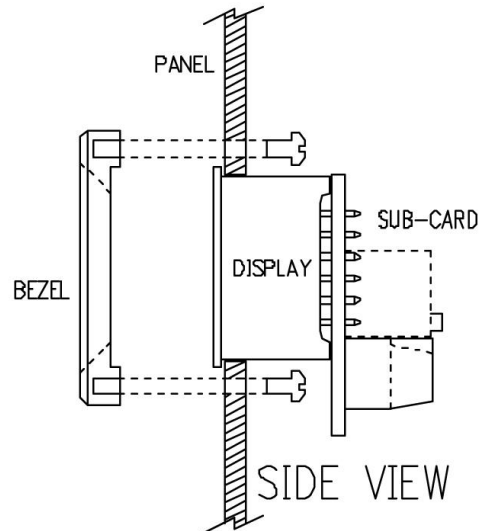
PHYSICAL CONFIGURATION



PANEL CUTOUT DETAIL

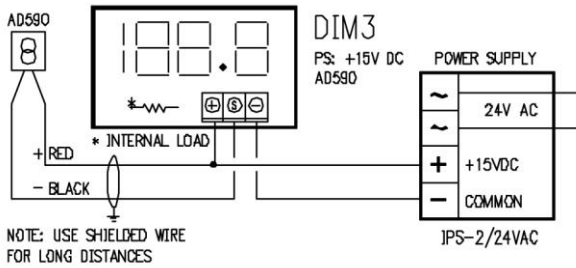


BEZEL MOUNTING DETAIL



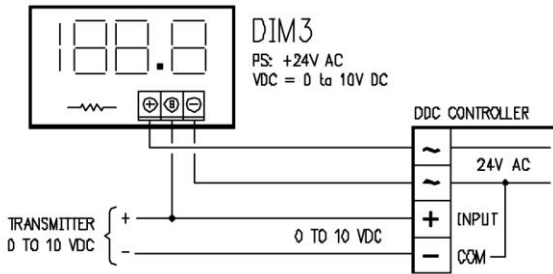
Optional Bezel mount Datal # DMS-BZL1 & DMS-BZL2. SEE panel cutout detail for mounting screws placement.

**APPLICATION 1
VOLTAGE SIGNAL INDICATION**



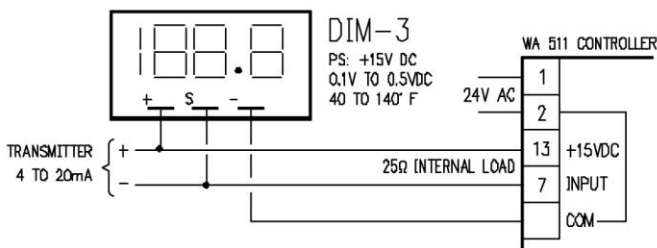
The DIM3 can be factory configured for an AD590 temperature sensor. Both the AD590 and DIM3 are powered by a 15 or 24VDC supply. The AD590's current signal is converted to a voltage by a 10KOhm .1% internal dropping resistor on the DIM3.

**APPLICATION 3
4 TO 20MA SIGNAL INDICATION**



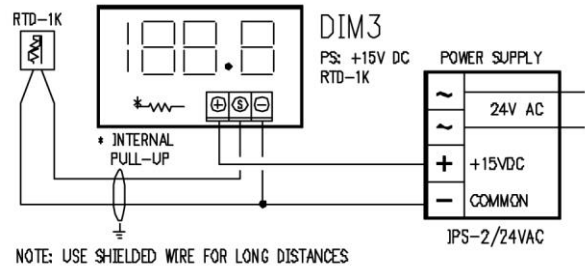
The DIM3 can be factory configured for a variety of voltage inputs. Standard input voltage signals are 1 to 5VDC, 0 to 5VDC and 0 to 10VDC.

**APPLICATION 5
2 Wire
4-20MA TRANSMITTER SIGNAL INDICATION**



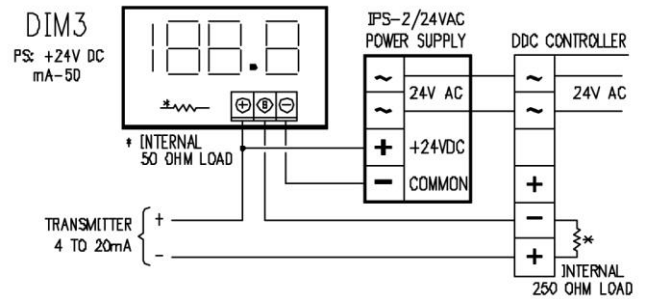
The DIM3's input can be factory configured to accept the voltage drop from the WA 511 controller's 4 to 20mA input internal load resistor (24.9V). The DIM3 power supply is configured to accept 15VDC from the controller.

**APPLICATION 2
TEMPERATURE SENSOR INDICATION**



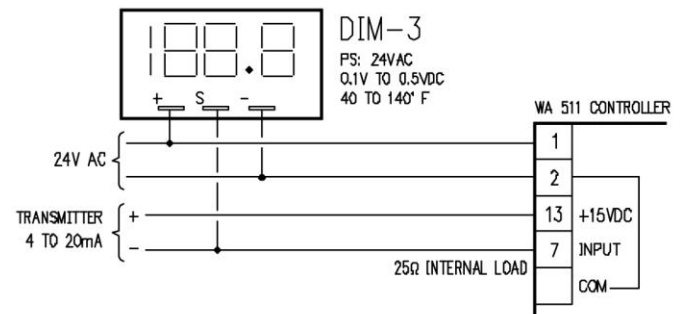
The DIM3 can be factory configured for an RTD-1K temperature sensor, with an internal pull-up resistor referenced to the 5 volt supply for standalone operation. The DIM3 can also be factory configured for 5V, 15V or 24V DC power supply operation.

**APPLICATION 4
4 TO 20MA SIGNAL INDICATION**



The DIM3 can be factory configured for 4 to 20mA input signals with 50V, 100V, or 250V load resistance. The DIM3 DDC controller are connected in series with transmitter.

**APPLICATION 6
4 Wire
4 TO 20MA SIGNAL INDICATION**



The DIM3's input can be factory configured to accept the voltage drop from the WA 511 controller's 4 to 20mA input internal load resistor (24.9V). The DIM3 power supply is configured to accept the same 24V AC as the controller.