VisiPak™

Digital Indicators

Models V508 and V509

Provides a Direct Display of Process Inputs

- **Wide Ranging Display (V508, V509)**
- **3-½ or 4-½ Digit Display**
- **Direct Readout in Engineering Units**
- **Optional Analog Transmitter Output**
- **AC Line Powered**
- **Three Year Warranty**

APPLICATION

The VisiPak V508 and V509 digital process indicators are useful in any application requiring a digital readout from a DC input.

DESCRIPTION

Models V508 and V509 DC input indicators offer selectable 3-1/2 and 4-1/2 digit display, selectable decimal points and wide-ranging zero and span display adjustability. Available options include a transmitter output which provides a 0-1VDC (Option T) or 4-20mA (Option G) output corresponding to the input span. The V508 and V509 operate directly from 120VAC line power.

INPUT SELECTION

V508 DC, wide-ranging display, span adjustable from 100 counts to ±1999 counts, zero adjustable over entire range, field-selectable decimal point position and 3-½/4-½ digit display.

V509 Two-wire Loop (4-20mA), integral 24V two-wire xmtr. supply, provides power to, and displays the output of, a two-wire transmitter; display adjustability similar to model 508.

See Standard Input Tables for ranges. Consult Factory for other ranges.

OPTIONS/ACCESSORIES

T 0-1V Transmitter Output

G 4-20mA transmitter output

U Urethane coating, (environmental protection).

CALIBRATION

Zero and span adjustments are located behind the lens. Zero is adjusted for the desired minimum display with the input at its minimum. Span is adjusted for the desired maximum display with the input at its maximum. Repeat adjustments as needed.

Units with Option T or G have separate transmitter zero and span adjustments through the back of the case. Transmitter zero and span adjustment is similar to the display adjustment.

FACTORY ASSISTANCE:

For additional information on calibration, operation and installation please contact Action's Technical Services Group. Call:

703-669-1318

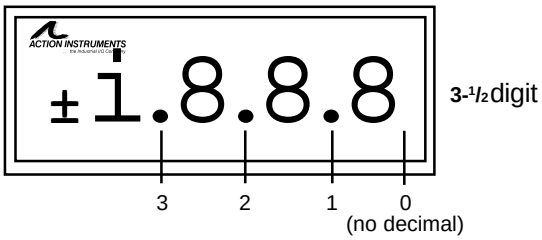
INSTALLATION

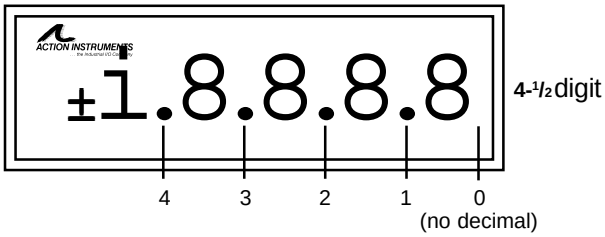
Mechanical: Indicators are installed from the front of the panel into a 1.65 x 3.60" (42 x 91mm) cutout. Cam-locks secure the indicator from behind the panel. To install, remove the front lens and slide the indicator into the panel cutout. Turn the screws on either side of the display CCW until the cams clear the panel thickness. Rotate the screws CW to swing the cam-locks into position and secure the indicator.

Electrical: All connections are made to the rear panel using standard barrier-terminal strip connectors.

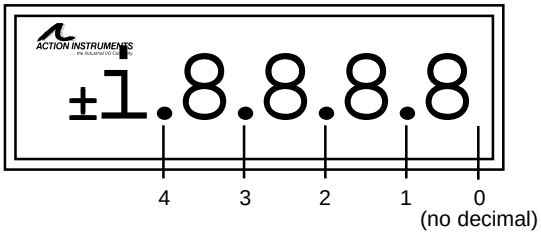
Decimal Position

General (fixed)

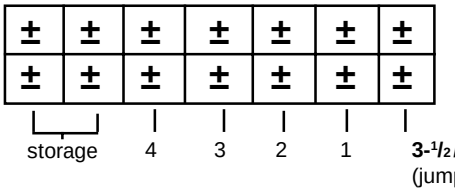




V508 and V509 Decimal and Display Configuration



Decimal position and display selection selection is set by placement of a jumper on the front pin-connector as follows:



3-1/2 / 4-1/2 digit
(jumper ON for 4-1/2 digit)

For no decimal (position '0') place decimal jumper on any of the two storage pins.

Standard Inputs

DC Input	V508*	
0 to 10mV	1 to 5V	0 to 1mA
0 to 50mV	0 to 1V	0 to 20mA
0 to 200mV	0 to 2V	4 to 20mA
0 to 500mV	0 to 5V	10 to 50 mA
	0 to 10V	
	0 to 20V	
	0 to 200V	

Two-Wire Transmitter Input	V509*
4 - 20mA	

Input Limits

Minimum Input Span	Maximum Input
Voltage: 10mV Current: 100mA	Voltage: 500V Current: 1A

SPECIFICATIONS

Digit Type
V508, V509: 7 Segment LED, selectable 3½ or 4½ digits

Digit Height
0.56" (14.2mm)

Decimal Point Indication (see Decimal Position)
Field-selectable

Display Span (counts)
3-½ digit:
Min: 100: Max: ±1,999
4-½ digit:
Min: 1000: Max: ±19,999

Overrange Indication
Flashing '0000' or '-0000' is displayed to show polarity

Conversion Time (display update)
400mS

Input Impedance
V508:
Voltage:> 100K ohms
4 - 20 mA: 20 ohms
0 - 1 mA: 100 ohms

Accuracy
3-½ digit: 0.1%, ±2 counts, 4-½ digit: 0.02%, ±10 counts

Linearity (referenced to linearity of input)
< 0.01% of full-scale input ± 2 counts

Response Time
500mSec to 0.1% accuracy

Stability (@ max. span)
< 0.025% of span/°C

Loop Output Drive (V509)
R max=(24 - V2-wire)/I max

Loop Supply (V509)
Output Current: 60mA, max.
Output Voltage: 24VDC, ±5%
Ripple: < 0.1%

Transmitter Outputs
Option T (0-1V):
Output Impedance: < 10 ohms
Output Drive: 5mA, max. (250 ohms, min.)
Option G (4-20mA)
Compliance: 5V, typical (250Ω, max.)
Linearity: 0.25% of span

Noise Rejection
CMR: 100dB @ 50/60 Hz
CMV: 600VDC or peak AC

Operating Temperature Range
0 to 60°C (32 to 140°F)
DC Power: 0 to 50°C (32 to 122°F)

Weight:
0.84lbs

Power
Consumption: 3.5W typical, 5.5W max.
Standard: 120VAC ±10%, 50-400Hz
Available: 220, 240VAC (±10%, 50-400Hz)

ORDERING INFORMATION

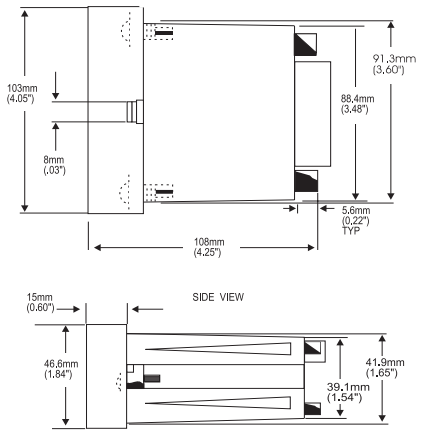
Specify:
1. Model: V508-V509
2. Input Range (see table)
3. Display Range (see table)
4. Options: CS, T, G, U
5. Line Power (see specs)

Terminal Connections

V508/V509
1. AC Power (Hot)
2. AC Power (Neu)
3. Xmtr. (-)
4. Xmtr. (+)
5. N.C.
6. N.C.
7. Input (-)
8. Input (+)

Dimensions

Dimensions are in Millimeters (Inches)



Specifications subject to change without notice