

VPI

VERSATILE PROCESS INDICATOR



FEATURES

- √ Easy setup
- √ **Toll Free Technical Support**
- √ Universal at dedicated meter prices:
 - dc and ac Volts and Amps, Strain,
 - Process, RTC's, Thermocouples
- √ 60 conversions per second for:
 - Fast control response
 - True peak reading
 - Analog outputs that track the Input
- √ Scalable to 5 digits
 - Engineering units to $\pm 99,999$
 - Setup by front panel push buttons
- √ Worldwide Input power:
 - 85 to 264 Vac and 90 to 370 Vdc
- √ Isolated 10 or 24 Vdc output
 - Provides transmitter excitation
- √ Peak hold and auto tare
- √ Automatic, adaptive digital filter
- √ Plug-in screw terminals

PLUG-IN OPTIONS

- √ Dual setpoint Controller
 - 10 Amp, 260 Vac relays or
 - Isolated transistor outputs
- √ Isolated linearized analog outputs
 - 0 to 10 Vdc or 0 to 20 mA
- √ Isolated digital communications
 - RS-232 for interface and meter setup
 - RS-485 to Interface with multiple meters
 - Baud rates from 300 to 19,200
 - Parallel BCD output
- √ Isolated low voltage power supply
 - 9 to 37 Vdc and 5 to 28 Vac inputs
 - Isolated 10 or 24 Vdc output

The VPI is a low cost solution to a wide range of monitoring and control applications. By simple front panel push button setup, one meter with a universal signal conditioner can be programmed to display DC or AC voltage or current, any of 6 popular thermocouple types, 100 Ohm platinum RTD's, strain gauges and process signals. All at the price of a single function meter!

Input signals may be displayed as voltage or current or scaled five full digits from 0 to 99,999 to read directly in engineering units such as ft-lbs, rpm, psi, etc. No calibration equipment is required when changing ranges; all ranges are digitally precalibrated at the factory. Temperature scales (Celsius or Fahrenheit) are selectable from the front panel.

The VPI makes 60 readings per second (50 for 50 Hz operation) for fast control response, true peak reading capability, and an analog output that accurately tracks the signal input. The meter has an adaptive digital filter that can automatically select the best time constant for minimum noise but yet responds rapidly to an actual change in signal level. The peak value of the input signal can be displayed by a push of a button on the front panel. Auto tare allows the meter display to be set to zero for any input signal level.

The VPI provides an isolated 10 Vdc or 24 Vdc output to power strain gauges and transmitters, eliminating the need for an external supply.

The meter has two alarm indicators with the setpoints programmed by front panel pushbuttons. Transistors or dual 10 amp relays may be added to provide control outputs. The outputs can be set to operate above or below the setpoint and in a latched or nonlatching mode. Time delays of the outputs are digitally selectable.

0 to 10V or 0 to 20mA analog outputs are available to drive chart recorders, remote displays or for transmission to a central control room. The outputs are scaled through the front panel push buttons. Adding RS-232 or RS-485 enables the meter to communicate with PLC's or computers. Baud rates can be set from 300 to 19,200. Software provided with these options makes meter setup even easier. Three state, parallel BCD outputs are also available.

Load Cell Central

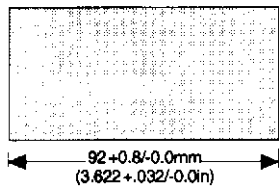
1-800-LOADCEL

SPECIFICATIONS

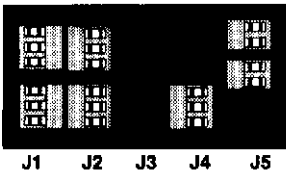
Display		Accuracy at 25°C		Environmental	
Type	5 LED, 7-segment, 14.2mm (.56") high digits and 3 LED indicators	DC Volts, Amps, Ratio	0.01% FS +/-1 Ct.	Operating Temperature	0°C to 55°C
Color	Red or green	Thermocouple	0.2°C max.	Storage Temperature	-40°C to 85°C
Range	-99999 to +99999 and -99990 to +99990	RTD	0.04°C max.	Relative Humidity	95% at 40°C, noncondensing
A to D Conversion		True RMS (1 to 100%FS)	0.05%FS, 10 Hz to 10 kHz	Operating Power	
Technique (Pat. Pend)	Concurrent Slope™	Load Cell Meter	0.01%FS +/-1 Ct.	Voltage (std)	85 to 264 Vac, 90 to 370 Vdc
Rate	60/s at 60 Hz operation 50/s at 50 Hz operation	Span Tempco	0.003% of reading/°C	Voltage (opt)	8 to 28 Vac, 9 to 37 Vdc
Output Update Rate	58/s at 60 Hz 47/s at 50 Hz	Zero Tempco	0.1 Cts./°C	Frequency	DC and 47 to 440 Hz
Display Update Rate	3.5/s at 60 Hz 3/s at 50 Hz	Reference Junction	0.03 degree/degree	Excitation Power Supplies	
		Noise Rejection		Outputs	5 Vdc, 5%, 200mA max. 10 Vdc, 5%, 120 mA max. 24 Vdc, 5%, 50 mA max.
		CMV from DC to 60 Hz	Safety-rated to 250 Vac 4.2 kVp per High Voltage Test	Isolation (power gnd)	Safety-rated to 250 Vac 4.2 kVp per High Voltage Test
		CMR from DC to 60 Hz	130 dB		
		NMR to 50/60Hz Line	90 dB with minimum filtering		

MECHANICAL

PANEL CUTOUT



REAR VIEW

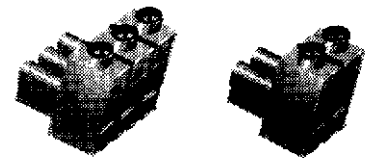


5mm
(0.197in)

TOP VIEW



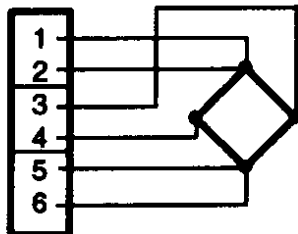
The VPI series uses screw terminal connections that plug into the mating printed circuit board jack.



FRONT VIEW



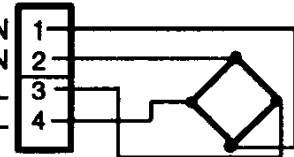
-10 V EXCITATION
-SENSE
-SIGNAL
+SIGNAL
+10 V EXCITATION
+SENSE



VPI-LC

Input Range in mV	Resolution	Output Zero Range	Output Span Range	Error at 25°C
20.000	1 uV	-99,999	0	.01%FS
50.000	2.5 uV	to	to	+/-1Ct.
100.00	5 uV	+99,999	+/-99,999	
250.00	12.5 uV			
500.00	25 uV			

-EXCITATION
+EXCITATION
-SIGNAL
+SIGNAL



VPI-SC

Range	Resolution	Input Ohms	Error at 25°C
200.00 mV	10 uV	1 G	.01%FS
2.0000 V	100 uV	1 M	+/-1Ct.
20.000 V	1 mV	1 M	
200.00 V	10 mV	1 M	
660.0 V	100 mV	10 M	

Load Cell Central follows a policy of continuous improvement and reserves the right to change specifications without notice. © 2015

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