

Panel Mount Load Cell Indicator/Transmitter



FEATURES

- Push-button configuration and calibration
- 10-Point load cell linearization
- Selectable 0-10Vdc or 4-20mA isolated analog output
- Peak hold functions for dynamic/historic measurement
- Keypad entry or conventional dead load calibration
- · Selectable/adjustable digital filtering
- · Serial communication and Modbus RTU protocol

DESCRIPTION

PS-1050 digital/analog transmitters provide signal conditioning, amplification, and a corresponding digital or isolated analog output signal for tank/bin/hopper weighing systems. Front panel configuration and calibration streamlines system installation and operation.

Calibration and configuration parameters also can be downloaded via PC based Pro-View Software. In either case, no dip switch or potentiometer adjustments are required.

An isolated 0-10V or 4-20mA analog output provides factory floor communication for a data logger, remote panel meter, or PLC

input. High level serial communication is available in RS-232, RS-422, or RS-485 format with Modbus RTU protocol. Up to 32 PS-1050's can be connected point-to-point using the RS-485 serial output.

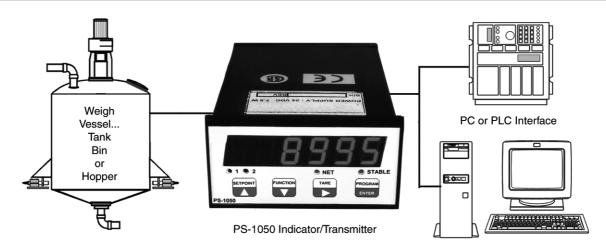
Convenient 1/8 DIN size panel mounting and removable terminal block connectors simplify installation procedures.

BLH offers the PS-121, 24Vdc Power Supply (data sheet #12155), for PS-1050 operation.

APPLICATIONS

- Storage tank, bin, and hopper weighing
- Silo and inventory measurement systems
- · Loss-in-weight feeders
- Floor and bench scale indication

CONFIGURATION



Panel Mount Load Cell Indicator/Transmitter



SPECIFICATIONS

PERFORMANCE

Sensitivity

60,000 counts Resolution Conversion Speed 50 updates/second

(no filtering) 0.2µV/count

Full Scale Range -0.5mV/V to +3.5 mV/V Linearity <0.01% of full scale **Excitation Voltage** 5 volts fixed, short circuit

proof

Load Current 85mA (six 350 ohm load cells) 0.5Hz to 25Hz selectable Filter Temperature Creep <0.0011% of full scale/°C (<0.0006% of full scale/°F)

24 bits

A/D Converter Increment Size x1, x2, x5, x10, x20, x50

Decimal Point 0.0, 0.00, 0.000

Calibration Methods computer interface or via front

panel

ENVIRONMENTAL

Operating Temperature -4 to +40°C (+14 to +104°F) Storage Temperature - 20 to +50°C (-4 to +122°F) Relative Humidity 85% non-condensing

DISPLAY

Type 6-digit red LED, 7 segment 0.55"

high

Status LED's (4) red LED's

Keyboard (4) keys (tactile feedback)

ELECTRICAL

Input Voltage 24Vdc±15% Power 7.5 Watts Isolation class II category II Category

ANALOG OUTPUT (ISOLATED)

16 bit D/A conversion Type Voltage 0-10Vdc (10K ohms min load) Current 4-20mA (300 ohm max) Linearity <0.012% of full scale Temperature Creep <0.0011% of full scale/°C (<0.0006% of full scale/°F)

INPUTS & OUTPUTS

opto-isolated, 24Vdc PNP (2) Logic Inputs (requires ext. power supply) (2) Logic Outputs solid-state relays, (maximum

SERIAL COMMUNICATION

Serial Output RS-232, RS-422 or RS-485 **Baud Rate** 2400, 9600, 19200, 38400, or

115200 - selectable

load 24Vdc/100mA each)

Standard Protocols ASCII. Modbus RTU

Maximum Cable Length 50 feet RS-232, 3200 feet for

RS-422 and RS-485

ENCLOSURE

Enclosure

Overall Dimensions 96 x 48 x 160mm (L x H x D) $(3.75" \times 1.87" \times 5.90") (L \times H \times D)$ Mounting panel mount cutout = 91×44 mm

> $(cutout = 3.58" \times 1.72")$ ABS Plastic

Protection (front) IP20

Weight 300 grams (9.6 ounces) Wiring Connections removable terminal blocks

pitch = 5.08mm (pitch = 0.196")

APPROVALS

CE EN 50082-2, 55011

BLH is continually seeking to improve product quality and performance. Specifications may change accordingly.





Vishay Precision Group

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