Panel Mount Load Cell Indicator / Transmitter

FEATURES

- Push-button configuration and calibration
- 10-Point load cell linearization
- Selectable 0–10 VDC or 4–20 mA 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

APPLICATIONS

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

CE

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.

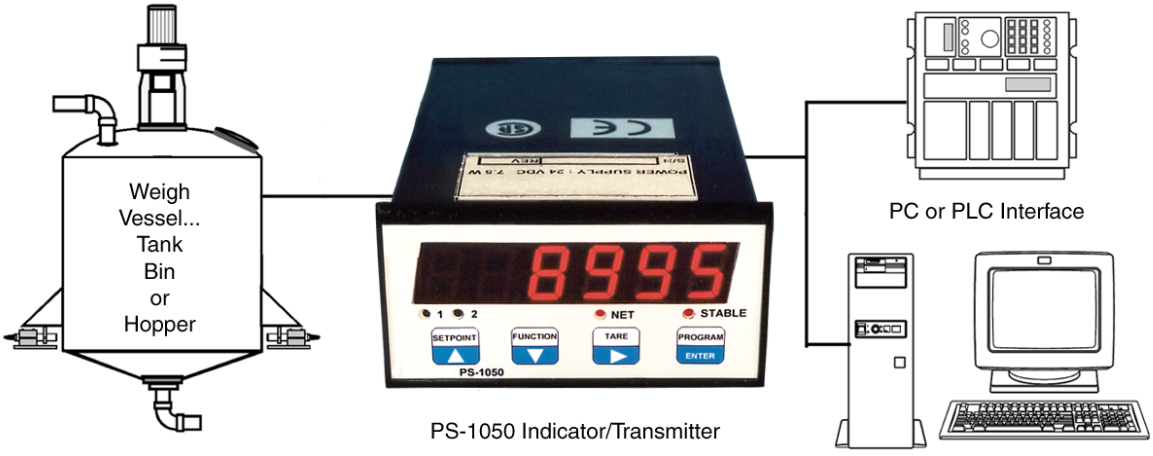
Calibration and configuration parameters also can be downloaded via PC based Pro-View Software. In either case, no dip switch or potentiometer adjustments are required.

An isolated 0–10 V or 4–20 mA 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 Nobel offers the PS-121, 24 VDC Power Supply (data sheet #12155), for PS-1050 operation.

CONFIGURATION



BLH NOBEL
A VPG Brand

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SPECIFICATIONS

PARAMETER	VALUE
PERFORMANCE	
Resolution	60,000 counts
Conversion Speed	50 updates/second (no filtering)
Sensitivity	0.2 µV/count
Full Scale Range	–0.5 mV/V to +3.5 mV/V
Linearity	<0.01% of full scale
Excitation Voltage	5 V fixed, short circuit proof
Load Current	85 mA (six 350 Ω load cells)
Filter	0.5 Hz to 25 Hz selectable
Temperature Creep	<0.0011% of full scale/°C (<0.0006% of full scale/°F)
A/D Converter	24 bits
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 in high
Status LEDs	(4) red LEDs
Keyboard	(4) keys (tactile feedback)
ELECTRICAL	
Input Voltage	24 VDC ±15%
Power	7.5 W
Isolation	Class II
Category	Category II

PARAMETER	VALUE
ANALOG OUTPUT (ISOLATED)	
Type	16 bit D/A conversion
Voltage	0–10 VDC (10 kΩ min load)
Current	4–20 mA (300 Ω max)
Linearity	<0.012 % of full scale
Temperature Creep	<0.0011% of full scale/°C (<0.0006% of full scale/°F)
INPUTS & OUTPUTS	
(2) Logic Inputs	Opto-isolated, 24 VDC PNP (requires ext. power supply)
(2) Logic Outputs	Solid-state relays, (maximum load 24 VDC/100 mA each)
SERIAL COMMUNICATION	
Serial Output	RS-232, RS-422 or RS-485
Baud Rate	2,400, 9,600, 19,200, 38,400, or 115,200 – selectable
Standard Protocols	ASCII, Modbus RTU
Maximum Cable Length	50 feet RS-232, 3,200 feet for RS-422 and RS-485
ENCLOSURE	
Overall Dimensions	96 × 48 × 160 mm (L × H × D) (3.75 × 1.87 × 5.90 in) (L × H × D)
Mounting	Panel mount cutout = 91 × 44 mm (cutout = 3.58 × 1.72 in)
Enclosure	ABS Plastic
Protection (front)	IP20
Weight	300 g (9.6 oz.)
Wiring Connections	Removable terminal blocks pitch = 5.08 mm (pitch = 0.196 in)
APPROVALS	
CE	EN 50082-2, 55011

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

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