

DIN Rail Mount Weight Transmitter



FEATURES

- Compact, full function weight indicator - controller
- DIN Rail mount enclosure
- 700,000 count resolution; eight millisecond sample rate
- Dynamic digital filtering with on-line diagnostics
- 8 open collector discrete setpoint outputs with main (coarse) and dribble (fine) operation
- High speed 120 update-per-second setpoint actuation
- 4-20mA current output
- LCD weight and status display
- Remote inputs functions - zero, tare, gross, net, print

OPTIONAL FEATURE

- 24 Volt dc operation (external power supply required)

DESCRIPTION

The Model PS-2010W offers high performance for applications that require a small, simple, full function weight transmitter and controller. Packaged much like a mini-PLC 'brick', the PS-2010W can be DIN rail mounted inside an existing cabinet. The standard RS-485 serial port interfaces easily with PLC/DCS systems using conventional ASCII protocol. A 16 bit resolution 4-20 mA analog current output is available. With 700,000 count resolution at an unfiltered sample rate of eight msec, the PS-2010W is well suited for high speed batch process control, checkweighing, and continuous feeding applications.

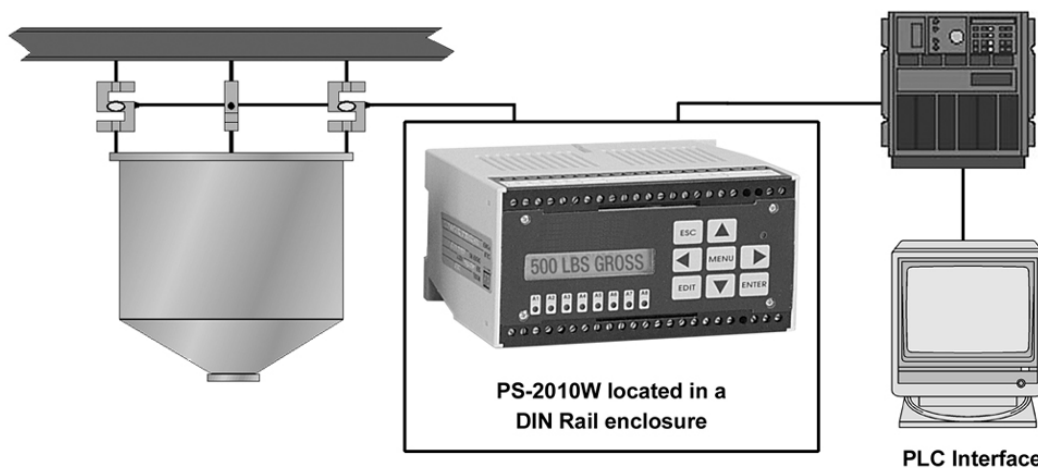
Simple setup and calibration is performed using the integral LCD display and keypad assembly or optional Weigh-View™ PC software. In either case, Plug-n-Weigh® technology eliminates the need for test weights in most applications and greatly simplifies the calibration of systems that do require loading. In addition to Plug-n-Weigh®, the standard unit also includes Dynamic Digital Filtering and full set point features such as main, dribble, and in-flight compensation.

Eight high speed setpoints provide precision control for time critical applications.

APPLICATIONS

- Batch & mix systems
- Reactor vessels
- Ribbon blenders
- Process weighing and control systems

CONFIGURATION



SPECIFICATIONS

PERFORMANCE

Resolution	1,048,576 total counts
Displayed Resolution	700,000 counts
Conversion Speed	8.3 to 133msec (5-selections)
Displayed Sensitivity	0.05 μ V per count
Full Scale Range	\pm 3.5mV/V
Dead Load Range	100% full scale
Linearity	\pm 0.003% full scale
Excitation Voltage	10Vdc @ 240mA
Software Filter	multivariable up to 10,000msec
Temp Coefficient Zero	\pm 2ppm/ $^{\circ}$ C, max
Temp Coefficient Span	\pm 7ppm/ $^{\circ}$ C, max
Step Response	one conversion cycle
Input Impedance	10 m-ohms min
Noise	0.4 μ V/count (min. filt. setting)

ENVIRONMENT

Operating Temperature	-10 to 50 $^{\circ}$ C (15 to 122 $^{\circ}$ F)
Storage Temperature	-25 to 80 $^{\circ}$ C (-10 to 175 $^{\circ}$ F)
Humidity	5 to 90% rh, non-condensing

DISPLAY

Type	single line LCD
Active Digits	16 digit alpha numeric .24" high

ELECTRICAL

Voltage (AC)	117/230Vac \pm 15% @ 50/60Hz
Voltage (DC)	24Vdc @ 1A
Power	12 watts typical, 18 watts max

ANALOG OUTPUT

Conversion	16 bit D-A
Current Selectable	4-20mA - 500 ohm max.

REMOTE INPUTS - 4

Type	TTL or dry contact closure
Functions	gross/net, tare, zero' and print
Low	0.0 to 0.4Vdc
High	4.0 to 24Vdc (external pull up)

SETPOINT OUTPUTS - 8

Type	open collector (current sinking)
Operating Voltage	5 - 35Vdc
ON Voltage	1.2Vdc @ 35mA
	0.8Vdc @ 1mA
OFF State Leakage	0.04A @ 35Vdc
Power	external supply required

COMMUNICATIONS (STANDARD)

Serial RS-422/485	full or half duplex ASCII
Byte Format	7 or 8 data bits - selectable
Parity	odd, even or no parity - selectable
Baud Rates	300, 1200, 2400, 4800, 9600, or 19200 - selectable
Optional Protocol Addressing	Modbus RTU 0-99

ENCLOSURE MOUNTING DIMENSIONS

Standard Unit	5.8 x 3.0 x 4.3 in. LWD DIN rail or wall mount approx 3 pounds
Weight	
Single Unit NEMA 4X Enclosure	11.73 x 9.85 x 6.13 in. LWD with single DIN rail mounting strip
Double Unit NEMA 4X Enclosure	13.7 x 11.8 x 6.5 in. LWD with two DIN rail mounting strips

MATERIALS

Enclosure (standard)	polycarbonate
NEMA (optional)	polyester with stainless steel twist latches

APPROVALS

CSA	Class I, Div. 2; Groups A, B, C, D
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NOTE:

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

OUTLINE DIMENSIONS

