

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.

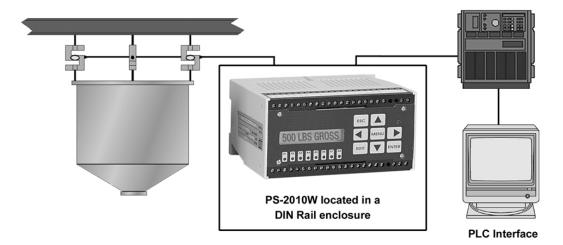
Simple setup and calibration is performed using the integral LCD display and keypad assembly or optional Weigh-View™ PC software. In either case, Plug-n-Weigh® technology eliminates the need for test weights in most applications and greatly simplifies the calibration of systems that do require loading. 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



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SPECIFICATIONS

PERFORMANCE

Resolution 1,048,576 total counts Displayed Resolution 700.000 counts

Conversion Speed 8.3 to 133msec (5-selections)

Displayed Sensitivity 0.05μV per count Full Scale Range $\pm 3.5 \text{mV/V}$ Dead Load Range 100% full scale ±0.003% full scale Linearity **Excitation Voltage** 10Vdc @ 240mA

Software Filter multivariable up to 10,000msec

Temp Coefficient Zero ±2ppm/°C, max Temp Coefficient Span ±7ppm/°C, max Step Response one conversion cycle Input Impedance 10 m-ohms min

Noise 0.4μV/count (min. filt. setting)

ENVIRONMENT

Operating Temperature -10 to 50°C (15 to 122°F) -25 to 80°C (-10 to 175°F) Storage Temperature 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 ±15% @ 50/60Hz

Voltage (DC) 24Vdc @ 1A

12 watts typical, 18 watts max Power

ANALOG OUTPUT

Conversion 16 bit D-A

Current Selectable 4-20mA - 500 ohm max.

REMOTE INPUTS - 4

TTL or dry contact closure Type gross/net, tare, zero' and print **Functions**

Low 0.0 to 0.4Vdc

4.0 to 24Vdc (external pull up) High

SETPOINT OUTPUTS - 8

open collector (current sinking)

Operating Voltage 5 - 35Vdc 1.2Vdc @ 35mA ON Voltage 0.8Vdc @ 1mA

OFF State Leakage 0.04A @ 35Vdc

external supply required Power

COMMUNICATIONS (STANDARD)

full or half duplex ASCII Serial RS-422/485 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 Modbus RTU

0-99 Addressing

ENCLOSURE MOUNTING DIMENSIONS

Standard Unit 5.8 x 3.0 x 4.3 in. LWD DIN rail or wall mount

Weight approx 3 pounds

Single Unit NEMA 4X 11.73 x 9.85 x 6.13 in. LWD with single DIN rail mounting strip Enclosure 13.7 x 11.8 x 6.5 in. LWD with two Double Unit NEMA 4X

Enclosure DIN rail mounting strips

MATERIALS

polycarbonate Enclosure (standard)

NEMA (optional) polyester with stainless steel

twist latches

APPROVALS

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

NOTE:

Modbus is a trademark of Schneider Automation

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





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OUTLINE DIMENSIONS

