

UNIPULSE CORPORATION

F850 Weighing Controller

F850 is the next step in the evolution of the F-series Weighing Controllers. With its high speed data conversion and versatile configuration, is it any wonder the F850 was given the excellence in product design award by the Ministry of International Trade and Industry (Japan).

The F850 is a versatile controller for Hopper scales, Packing scales and Multi-Ingredient Batching. Add to that, the F850-X1 for In-motion Check-weighing Indicator and F850-X2 for Weigh-in-Motion Truck Axle indicator, and you have a powerful selection for precision weighing and process control accuracy.

Standard SI/FII 2-wire high speed (300kbps) bi-directional serial interface allows up to four controllers to communicate with up to 16 peripherals. The E928 (SI/FII to Open DeviceNet) E920 (serial SI/FII to various PLC's), M350 (printer) LD517 (remote display with accumulator) or E232 (SI/FII to RS232C converter) are easily connected with a total communication distance of over 900 feet (300m).



Models available:

- Model F850
High-speed batching controller
- Model F850-X1
In-Motion Check-weighing Indicator
- Model F850-X2
Weigh-in-Motion Truck Axle Indicator (Max. six(6) axles)

Features:

- High speed A/D conversion and powerful digital processing capabilities of 100 times/sec., for rapid response to input signal
- Preset value up to 100 coded groups of set-point values with sequential running totals for each group.
- Precise head amplifier for outstanding accuracy (0.1 micron V/D. Celsius)
- Bessel type low-pass analog filter (2, 4, 6, 8Hz) and selectable digital filter (2, 4, 8, 16, 32, 64, 128 times per sec.) prevents the influence of vibration
- Feeding, discharge gate control sequence weighing function initiated by start signal
- Self-Check and Watch-Dog timer function in CPU, ROM and internal circuitry to insure reliability
- DIN-sized front panel and large 17mm (0.67 inch) display
- Full digital front panel calibration
- Secondary calibration with a simple resistor connection
- All setting value backed-up to non-volatile RAM and C-MOS RAM by lithium battery prevents data loss from a power failure

Specifications

1. ANALOG

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|------------------------------------|--|
| a. Load cell excitation | DC 10V +/-5% |
| b. Load cell current | 120mA (4-350 ohm load cells) |
| c. Load cell cabling | 4-wire standard, 6-wire with remote sensing |
| d. Zero adjustment range | 0 to approx. 2.0 mV/V (digital adjustment) |
| e. Span adjustment range | 0.3 to 2.0 mV/V (digital adjustment) |
| f. Analog input signal sensitivity | 0.3 micron V/count |
| g. Stability | Zero drift: within 0.1 micron V/D. Celsius
RTI (relative to input)
Gain drift: 5ppm/D. Celsius |
| h. Non-linearity | Within 0.01%/FS |

5. INTERFACE

- a. SI/F 2-wire serial interface Connect Controller to printers and remote displays
(up to 3 units)
- b. SI/FII 2-wire high speed
bi-directional serial interface Connect up to 4 Controllers to E928 (SI/FII to open
(up to 20 units) DeviceNet), E920, E922, E924 or E926 (SI/FII to
PLC; Mitsubishi, Omron, Yokogawa or Fuji),
E232 (SI/FII to RS232C converter), printers and
Remote displays.
- c. RS-232C communication
interface(Optional) Weight data, status and set values can be written
or read by a host computer.
Signal level: Conformable to the RS-232C
Transmitting distance: Approx. 15m
Transmitting method: Synchronous
Transmitting speed: 1200, 2400, 4800 or 9600 bps
selectable
Bit configuration: Start 1 bit
Character length 7 or 8 bits
selectable
Stop 1 or 2 bits selectable
Parity none, odd or even selectable
Code: ASCII/ ANK

6. GENERAL SPECIFICATIONS

- a. Voltage input AC100V, 120V, 200V or 220V, +10%-15% 50/60Hz
- b. Power consumption Approx. 15VA
- c. Operating temperature: -10 + 40D. Celsius (+14 to +104D. Fahrenheit)
Storage temperature: -40 to +80D. Celsius (-40 to +176D. Fahrenheit)
- d. Humidity <85% RH (non-condensation)
- e. Dimension 192W x 96H x 140D mm (7.56 x 3.78 x 5.51 inch)
- f. Panel cutout size 186W x 92H +0.5/-0mm
Panel thickness 1.6mm min.
- g. Weight Approx. 2.2 kg (4.85 lb)