

MODEL 2002

MULTI-FUNCTION WEIGH METER

APPLICATIONS

- Process Weighing
- Level Monitoring and Control
- Weighing System Interface to Distributed Control System
- Gross, Tare & Net Weighing
- Washdown
- Hazardous Environments

FEATURES

- Bright, bold 1 inch high display with up to 120,000 active counts
- PDR digital filter for signal stabilization
- 20 bit Sigma-Delta A/D with conversion rate of 60/second
- Selectable five-point calibration
- Signal sensitivity at 0.1uV/graduation
- Powers 8 x 350 Ohms or 16 X 700 ohms load cells
- Non-volatile memory storage of all parameters
- Peak hold display of gross or net weight
- Remote operation via computer
- Nine digital outputs for setpoint control via relays
- Six digital inputs for enabling remote "push-button" control of weighing operations such as zero, tare, gross/net, units or print
- Selectable primary and secondary weight units
- Meets NTEP, UL and CSA standards
- NEMA 4 stainless steel enclosure with universal mounting stand
- ISO 9001 Certified manufacturing facilities

OPTIONS

- Time & Date clock board with battery back-up
- Isolated analog output (0-10 VDC or 4-20 mA) 16 bit D/A
- Integral relay module supports eight inputs/outputs
- 12 VDC or 220 VAC operation
- Z-Purge ready enclosure
- Windows® based EZ-LINK software



Model 2002 Performance Specifications

FEATURES

Display	Large 1 inch seven segment LED display; decimal point and minus sign available at each digit								
Status Indicators	6 status LED's for gross, net, motion, center of zero, lb, and kg								
Keypad	19-key sealed keyboard with audible tactile feedback membrane; Divided into 3 sections: numeric keypad, function keys, and control keys								
Resolution	20 bit A/D <ul style="list-style-type: none">• 1,048,576 internal graduations• 120,000 display digits (dd)								
Measurement Rate	60 updates per second (maximum)								
System Linearity	Within 0.01% of Full Scale (FS)								
Push Button Zero Aperture	0 - 100 % FS; programmable								
Auto Zero Track Band	0 - 60 dd in 1/4 dd increments; programmable								
Auto Zero Track Delay	0 - 25 seconds in 0.1 second increments								
Motion Detect Band	0 - 60 dd in 1/4 dd increments								
Motion Detect Delay	0 - 25 seconds in 0.1 second increments								
Calibration Method	Digital: keypad operation; selectable five-point calibration for linearization								
Excitation Voltage	10 VDC; (240mA) 8 X 350 Ohms or 16 X 700 Ohms load cells								
Digital Filter	Programmable Dynamic Response; filter selection from 0-18								
Remote Sense	Selectable: 4 or 6 wire								
Display Update Rate	Adjustable: 0 - 20 seconds in 0.1 second increments								
Peak Hold	Gross weight or net weight peak hold display mode								
RFI Protection	Signal, excitation, and sense lines protected with TNET filters; Multi-layer board								
Digital Inputs/Outputs	6 inputs: TTL or switch closure, active low 9 outputs: TTL outputs 1 - 8 drive 24mA at low level and 8mA at hi level, output 9 is open collector								
Computer Serial Port	Full duplex: 150 - 9600 baud								
Printer Serial Port	Simplex: 150 - 9600 baud								
Printer Parallel Port	Centronix compatible parallel port								
Serial Port Configuration	Selectable: RS-232, 20mA current loop or RS-485								
Print Formats	3 user - formattable pages								
Data Format	7 or 8 data bits with even, odd or no parity								
Diagnostics	Diagnostics tests for A/D converter, I/O ports, RAM, and display								
Watchdog Timer	Fault tolerant operation (212ms)								
Time and Date	Clock board (battery backed)								
Operating Voltage	115 VAC (12 VDC and 220 VAC optional)								
Frequency	50 or 60 Hz; keypad selectable								
Operating Temp. Range	-18° to +50°C (0° to 122°F)								
Compensated Temp. Range	-10° to +40°C (14° to 104°F)								
Overall Dimensions	<table><tr><td><u>Without mounting stand:</u></td><td><u>With mounting stand:</u></td></tr><tr><td>8.9 inches wide (226.1mm)</td><td>10.9 inches wide (276.9mm)</td></tr><tr><td>8.3 inches high (210.8mm)</td><td>9.7 inches wide (246.4mm)</td></tr><tr><td>3.6 inches deep (91.4mm)</td><td>4.8 inches deep (121.9mm)</td></tr></table>	<u>Without mounting stand:</u>	<u>With mounting stand:</u>	8.9 inches wide (226.1mm)	10.9 inches wide (276.9mm)	8.3 inches high (210.8mm)	9.7 inches wide (246.4mm)	3.6 inches deep (91.4mm)	4.8 inches deep (121.9mm)
<u>Without mounting stand:</u>	<u>With mounting stand:</u>								
8.9 inches wide (226.1mm)	10.9 inches wide (276.9mm)								
8.3 inches high (210.8mm)	9.7 inches wide (246.4mm)								
3.6 inches deep (91.4mm)	4.8 inches deep (121.9mm)								
Weight	7.8 pounds (3.54 kg)								
Enclosure	Stainless steel with universal mounting stand; NEMA 4								
Warranty	1 year limited								

OPTIONS

Analog Output	Isolated analog output; 16 bit D/A; 0-10 VDC or 4-20 mA; 650 ohms load resistance max.; short circuit protected
Relay I/O	Supports 6 outputs and 2 inputs; selectable relay I/O modules; AC/DC voltage ranges @ 3 amps
Enclosure	<ul style="list-style-type: none">• Panel mount; NEMA-4 stainless steel front panel• Z-Purge ready universal mount; for use with air purging system in hazardous areas; Meets Class I, Division 2, Groups C & D and Class II, Division 2, Groups F & G
12 VDC Operation	Battery power
220 VAC Operation	Line power
Accessories	EZ-LINK PC software program; facilitates configuration and Scale Basic programming of 2002; Runs under Windows®