



WIRELESS WEIGHING FROM MSI

MSI-9850 RF Digital Indicator

Network Solutions for Industrial Weighing and Process Control

Product Description

The MSI-9850 RF Digital Indicator is the latest addition to the CellScale product family. Combined with one or more CellScale devices, the MSI-9850 functions as a wireless remote terminal that provides complete control over scale and data functions. Each MSI-9850 can log on to 64 different networks allowing it to serve multiple CellScales and/or MSI Crane Scales with simple one-button network/channel (sensor/scale) changes. All CellScale features are supported, including Inter-Network Radio Messaging, Data Logging, Totalizing and Statistics.

The MSI-9850 features a large primary weight display that is easily read from a distance and an information display to provide network/channel detail. The information display also supports multiple CellScale channels allowing users to display up to 8 simultaneously. With a touch of a button, users can choose which channel to view on the primary weight display. Operation is straightforward through the alphanumeric keypad.

The MSI-9850 can remotely calibrate the CellScale and provides a simple user interface to the advanced features of the CellScale. All calibration data is stored in the CellScale allowing any MSI-9850 to be used with a CellScale based wireless weighing system without recalibration. Enhanced data acquisition, sophisticated data logging, and complete display of multiple sensors / scales can be initiated and managed with the MSI-9850.

Compact industrial packaging and flexible mounting allows the MSI-9850 to easily integrate with your existing equipment and provide outstanding performance in the most demanding applications. See also specification sheets for MSI-9000, MSI-9020, MSI-9750A, MSI-3750CS and MSI Crane Scales (MSI-6260CS, MSI-9300, MSI-9300HT and MSI-9260) for complete capabilities and networked wireless solutions.

Specifications

Housing

Rugged milled aluminum, O-ring gasketed, NEMA 4, IP65 with standard antenna; NEMA 6, IP67 with optional long range antenna

Weight

2.8kg (5.0lb)

Temperature

Operating / Storage (Internal AC/DC Power):
-20°C to +70°C (-4°F to 158°F)
Operating / Storage (DC Power):
-20°C to +85°C (-4°F to 185°F)

Approvals (pending)

NTEP, OIML, CE, Factory Mutual

Power Input

Internal AC/DC Power Supply: 85-265 VAC, 47-440Hz/130-300 VDC. Includes a separate, independent 7-25 VDC power input and remote switches (requires optional power/switch interface cable)

Radio Link

Frequency Hopping Spread Spectrum @ 2.4 GHz providing 64 networks of scales and peripheral devices. Functions in the ISM band, license free. 10mW (low power), 63mW (medium power) or 250mW (high power) average output

Radio Link Effective Range

Typically 150m (500ft) indoors, 300m (1000ft) outdoors with standard antennas. The MSI-9850 operating range increases if Long Range Antennas are applied

Antenna

1/2 wave standard antenna

RFI/EMI Shielding

Exceeds NIST HB44 and CE Standards

Keypad

33 keys – 12 key alphanumeric, 4 cursor keys, 7 control keys and 10 user programmable keys. Password protected lock features

Weight Display

- 6 digit, 30mm (1.2in) high numeric weight LED's
- 4 alphanumeric 13mm (0.5in) high data LED's
- 6 LED function select annunciators
- 10 backlit LED annunciators
- Low battery LED indicator
- Automatic brightness control

Information Display

- 36mm (1.4in) x 67mm (2.6in) backlit LCD; capable of 8 lines, 21 characters each
- Backlight selectable On, Off or Automatic

Connectors

RS-232: Turck compatible pico connector, 2m (6.5ft) adapter cable to IBM compatible DE-9 connector included

Standard Features

Scale / Channel Monitoring

Monitors all scale channels, easy 1 button network and/or channel changes. Supports multiple display of CellScale Channels (up to 8 simultaneously)

Calibration

Remotely calibrates CellScale systems

Real Time Clock

Supports date/time stamping in U.S.A. and European formats

Data Logging

Captures weighment data automatically or manually

Bar Code Scanner Interface

Permits bar code scanners to connect directly to the MSI-9850

Inter-Network Radio Messaging

Receives and transmits RF messages to any virtual Comm Port (MSI-9020 CellModem) or directly to the master CellScale Comm Port 1

Data I/O

- 2 Comm Ports, baud rates 300 to 230.4K
- Comm Port 1 is RS-232, RS-422, RS-485 selectable
- Comm Port 2 is dedicated RS-232

Totalizing, Statistics and Product ID's

Stored in the CellScale, displayed on the MSI-9850 (Function Key or Automatic). Each ID code retains full statistics on totaled weighments. Up to 32 alphanumeric product ID's can be accessed and programmed

Set Point Outputs

4 relay driver outputs for 5V - 24V external relays (5V provided by the MSI-9850)

Internal Audible Alarm

Push-button Functions

Fixed keys:

Power: On/Off

Zero: Zeros weight on scale

Net/Gross: Switches display between Net and Gross weights

Tare: Tares applied load and displays the weight in Net mode

Alpha: Upper and lower case alpha character entry

Enter: Store parameters, enter menus, selects highlighted item, permits editing or selection of alternate functions

Setup/Escape: Setup functions or return to previous menus

Clear: Clears last entry

Exit: Exits menu mode

0-9: with Alpha characters

Function Keys: 10 function keys are settable to any of the following functions:

Data String Entry: Permits bar code or keypad entry of assignable data strings (up to four)

Total: Totalizes weighments

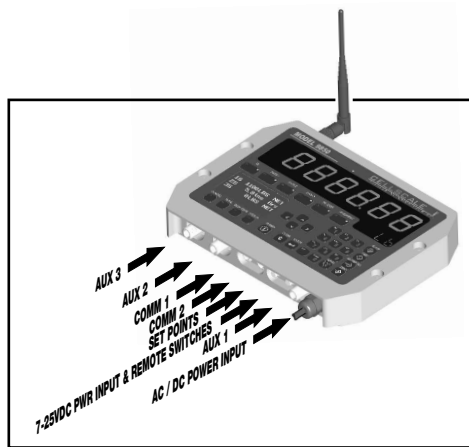
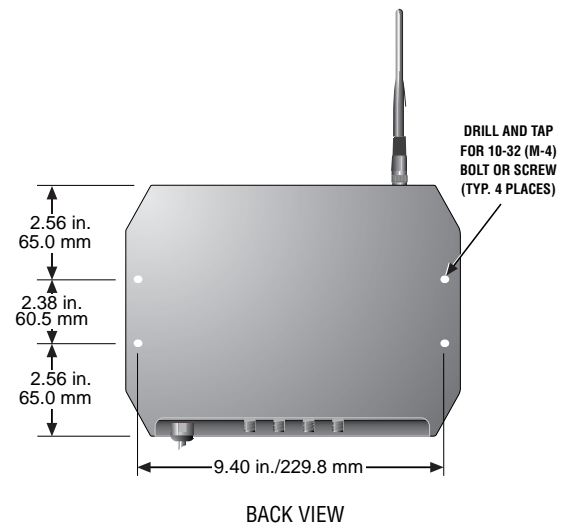
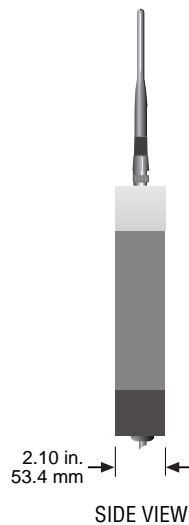
Clear Last Total: Removes last totaled weighment



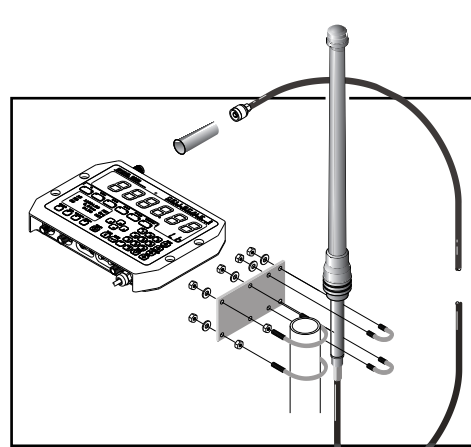
Measurement Systems International

www.msiscscales.com

MSI-9850 Specifications and Dimensions



INPUT / OUTPUT CABLE ATTACH



OMNI-DIRECTIONAL LONG RANGE ANTENNA OPTION

Show: Next channel, last channel, next address, last address, next product ID, last product ID, totals, grand totals (Sum) or statistics

Date and Time: Displays current date and time.

Enter/Edit: Product ID print strings 1 and 2

Send/Edit Print Strings: Sends/edits print strings to selectable targets

Change Units: Changes units of measure
Set Points: Controls and programs CellScale Set Points – 32 Set points with messaging capability

Peak Hold: Turns peak hold function “On” or “Off” – used for capturing maximum readings (for high speed capture rates, consult factory)

Key Disabled: Disables selected function key

Signal Strength Test: Tests for RF signal strength

Display Test Characters: Performs display test of all screens

Data Logging: Enables automatic or manual data logging

Bar Code Scanner Interface: Allows user access to bar code strings

Inter-Network Radio Messaging: Transmit messages to any virtual Comm Port (MSI-9020 CellModem) or directly to the master CellScale Comm Port 1

Options and Accessories

RF Remote Control

Features On/Off, Zero, Tare, Net/Gross, Total, View Sum and programmable function keys

Non Isolated DC/DC Input Power

7-25 VDC power input

Power/Switch Interface Cable

4m (13ft) for the 7-25 VDC source, 2 remote switches, and remote LED output leads

Isolated DC/DC Input Power

9-36 VDC or 18-72 VDC (specify)

Long Range Antennas

- Omni-directional antenna with 9dbi gain, up to 500m (1640ft) range typical. Includes 3m (10ft) coaxial cable
- Directional Yagi antenna with 15dbi gain, up to 6km (10 mile) range typical

Bar Code Scanner

Several options available (consult factory regarding requirements)

Universal Mounting Bracket

External Set Point Relay Output Cable

External Audible Alarm

Eliminates flat panel mounting

Control Kit

Provides a remote I/O relay board (uses standard industrial I/O modules) for interfacing to set points, I/O modules not included

“We weigh quality first”



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