



Certificate of Conformance  
07-007



WIRELESS WEIGHING FROM MSI

# MSI-9300 Porta-Weigh Plus RF Digital Crane Scale

Network Solutions for Industrial Weighing and Process Control



**HI-TORQUE MSI-9300HT RF Digital Crane Scale**  
(See separate specification sheet for available configurations)

### Product Description

The MSI-9300 Porta-Weigh Plus RF Digital Crane Scale is designed to provide a rugged weight indicator and wireless data system for overhead weighing applications. The MSI-9300 merges CellScale technology with MSI's superior Crane Scale architecture providing both local and remote display capabilities. Combined with CellScale accessory products, the MSI-9300 offers advanced data-gathering networking suitable for process control, safety monitoring and weight related data collection.

The MSI-9300 circuitry is shock mounted and water proof making a robust overhead weighing system for use indoors and outdoors. The large

1.2in (30mm) ultra bright LED digits are readable at distances up to 50ft (15m). Display brightness can be set to automatically adjust to ambient lighting conditions for optimum viewing and battery conservation.

Single or multiple crane scales can be controlled and monitored from single or multiple locations. Wireless, real-time, data transmission of weight and product information can be networked and communicated to CellScale family indicators and modems at distances up to 1000ft (300m) outdoors. Operating range increases if optional long range antennas are used on other networked components. Both fixed and

handheld indicators are available as well as modems for wireless connection to computers and scoreboards.

The MSI-9300 Porta-Weigh Plus is available in a standard range of capacities up to 50 tons. Larger and special designs are available for any capacity. A host of standard scale features and options are available. For applications involving fixed hooks and/or power assisted rotation, see the MSI-9300HT product specification sheet. See also specification sheets for MSI-9000, MSI-9020, MSI-9850, MSI-9750A and MSI-3750CS for complete capabilities and networked weighing system solutions.

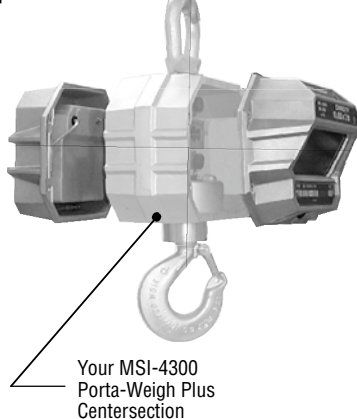
### Network Component Options



MSI features Industry's most versatile, portable and handheld RF Digital Indicators for CellScale Network Weighing Solutions. Each provides CellScale's rich feature set to any crane scale application and allow users to monitor and control multiple crane scales from remote locations. In addition, the MSI-9850 and MSI-9750A both support multi scale display on individual networks (up to 8 simultaneously), data logging, bar code scanner interface and inter-network radio messaging.

The MSI-9020 CellModem provides a wireless CellScale link with peripheral serial devices including scoreboards, printers, programmable logic controllers and personal computers. CellScale Virtual Monitor (CVM) software is available to enable your personal computer to act as a full-featured digital scale indicator with data logging and information publishing features.

### Optional MSI-9300 Retrofit Kit

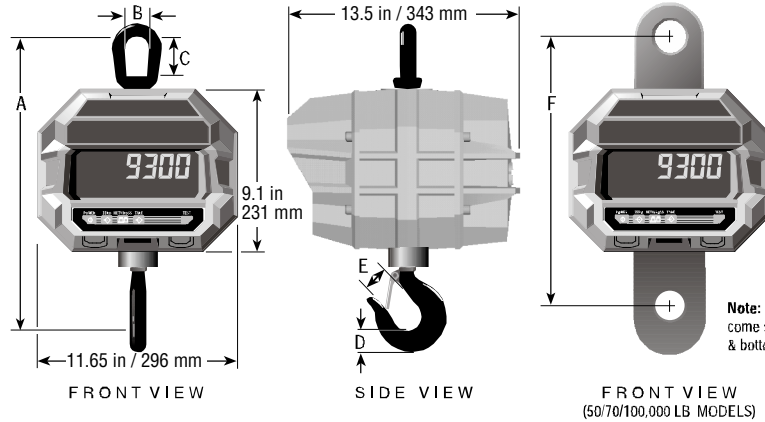


**MSI-9300 Retrofit Kit** integrates CellScale technology with existing MSI-4300 Porta-Weigh Plus crane scales. The retrofit kit replaces the existing front and back castings of the MSI-4300. After conversion, the new MSI-9300 adapts easily into any CellScale network.

**AVAILABLE**  
RF REMOTE  
CONTROL  
OPTION



## MSI-9300 Specifications and Dimensions



Note: 50/70/100,000 lb models come standard with top shackle & bottom swivel hook.

- Contact factory for higher capacities  
CR = Crosby or equivalent
- \* These dimensions also apply to 50/70/100,000 pound models with hook and shackle
  - \*\* Resolution subject to change for NTEP and OIML approved units
  - \*\*\* Ultimate overload: 490% of kg capacity
  - \*\*\*\* Ultimate overload: 475% of lb capacity / 430% of kg capacity
  - \*\*\*\*\* Ultimate overload: 450% of kg capacity

| CAPACITY   | RESOLUTION** | A*      | B*    | C*   | D*   | E*   | F     | HOOK           | EYE NUT OR SHACKLE | APPROX. SHIP WT. |
|------------|--------------|---------|-------|------|------|------|-------|----------------|--------------------|------------------|
| 500 lb     | 0.2 lb       | 18.3 in | 2.25  | 3.06 | 1.44 | 1.41 | -     | 5 ton alloy    | CR # 7             | 53 lb            |
| 250 kg     | 0.1 kg       | 465 mm  | 57.1  | 77.7 | 37.0 | 36.0 | -     | swivel         | eye nut            | 24 kg            |
| 2,000 lb   | 1 lb         | 18.3 in | 2.25  | 3.06 | 1.44 | 1.41 | -     | 5 ton alloy    | CR # 7             | 53 lb            |
| 1,000 kg   | 0.5 kg       | 465 mm  | 57.1  | 77.7 | 37.0 | 36.0 | -     | swivel         | eye nut            | 24 kg            |
| 5,000 lb   | 1 lb         | 20.5 in | 2.50  | 3.50 | 1.81 | 1.69 | -     | 7 ton alloy    | CR #8              | 62 lb            |
| 2,500 kg   | 0.5 kg       | 521 mm  | 64.0  | 89.0 | 46.0 | 42.9 | -     | swivel         | eye nut            | 28 kg            |
| 10,000 lb  | 2 lb         | 20.5 in | 2.50  | 3.50 | 1.81 | 1.69 | -     | 7 ton alloy    | CR # 8             | 62 lb            |
| 5,000 kg   | 1 kg         | 521 mm  | 64.0  | 89.0 | 46.0 | 42.9 | -     | swivel         | eye nut            | 28 kg            |
| 20,000 lb  | 5 lb         | 28.5 in | 4.00  | 6.25 | 2.62 | 2.41 | -     | 15 ton alloy   | CR # 11            | 105 lb           |
| 10,000 kg  | 2 kg         | 724 mm  | 101.6 | 159  | 66.5 | 61.2 | -     | swivel         | eye nut            | 47 kg            |
| 30,000 lb  | 10 lb        | 30.0 in | 4.00  | 6.25 | 3.00 | 3.19 | -     | 22 ton alloy   | CR # 11            | 125 lb           |
| 15,000 kg  | 5 kg         | 762 mm  | 101.6 | 159  | 76.2 | 81.0 | -     | swivel         | eye nut            | 55 kg            |
| 50,000 lb  | 10 lb        | 41.0 in | 5.00  | 6.00 | 3.62 | 3.63 | 15.0  | 30 ton alloy   | CR 25 ton          | 235 lb           |
| 25,000 kg  | 5 kg         | 1041 mm | 127   | 152  | 92.0 | 92.0 | 381   | swivel***      | shackle # 2130     | 106 kg           |
| 70,000 lb  | 20 lb        | 43.2 in | 5.00  | 6.00 | 4.56 | 3.75 | 15.0  | 37 ton alloy   | CR 40 ton          | 270 lb           |
| 35,000 kg  | 10 kg        | 1097 mm | 127   | 152  | 116  | 95.0 | 381   | swivel****     | shackle # 2140     | 121 kg           |
| 100,000 lb | 20 lb        | 52.1 in | 5.75  | 6.65 | 5.06 | 4.25 | 16.25 | CR 45 ton      | CR 55 ton          | 420 lb           |
| 50,000 kg  | 10 kg        | 1324 mm | 146   | 169  | 129  | 108  | 413   | S1 swivel***** | shackle # 2140     | 189 kg           |

CONSULT FACTORY FOR HIGHER CAPACITIES – See MSI-9300HT Specification Sheet for applications that require fixed hooks and/or use with powered rotators.

### Specifications

#### Accuracy

±0.1% of applied load ±1d

#### Housing

- Marine grade 356 alloy
- Double O-ring gasketed
- NEMA 4, IP66

#### Load Train

- Load Cell: 4340 aircraft quality steel
- Top Lifting Eye and/or Shackle: Crosby or equivalent
- Hook: Crosby thrust bearing swivel hook or equivalent
- Safe Overload: 200% of rated capacity
- Ultimate Overload: 500% of rated capacity (except as noted)

#### Display

- 6 digit, 30mm (1.2in) high weight and data LED
- 14 backlit LED annunciators
- Automatic brightness adjustment

#### Units

Pounds or kilograms selectable

#### Operating Range

Typically 150m (500ft) indoors, 300m (1000ft) outdoors

#### Calibration

Via RF or Input Comm Port. Calibration is accomplished through a PC terminal program. Calibration can be accessed through the MSI-9750A, MSI-9850 and MSI-3750CS meters

#### Radio Link

Frequency hopping spread spectrum @ 2.4

GHz provides 64 networks of scales and peripheral devices. Radio functions in the ISM band, license free in the USA and Europe. 10mW (low power), 63mW (medium power) or 250mW (high power) average output

#### Approvals

NTEP; COC 07-007, 2,500kg - 35,000kg (5,000lb - 70,000lb) capacities

#### Temperature

Operating: -20°C to 70°C (-4°F to 158°F)

#### Power

12 volt rechargeable battery (includes 115-230 VAC, 50/60 Hz universal battery charger)

#### Operating Time

20-30 Hrs depending on brightness settings and average number of segments "On". 40-60 Hrs without RF modem

#### RF/EMI Shielding

Exceeds NIST HB44 and CE standards

#### Comm Port

Used for calibration purposes and system configuration management

#### Real Time Clock

Date/time in USA or European formats. Clock data available via RF interfaces (MSI-9020, MSI-9750A, MSI-9850, MSI-3750CS)

#### Data I/O

Scale data available through RF interface

#### Totalization and Statistics

Push button or automatic. Extensive total and statistics capability is provided when CellScale digital weight indicators are part of the network

### Standard Function Switches

**POWER:** Turns unit On/Off

**ZERO:** Zeros weight on scale

**NET/GROSS:** Switches between NET and GROSS weights

**TARE:** Tares applied load and displays weight in NET mode

**TEST:** Provides on-demand functional tests of display segments, battery and RF network information, and is also programmable for USER desired functions

### Options

- RF Remote Controller - Includes On/Off, Zero, Tare, Net/Gross, Total, View Sum and programmable function keys
- Substitute shackle for bottom swivel hook
- Oversized top and/or bottom shackle
- Oversized bottom swivel hook
- Low headroom adapter
- Anti-heat shielding for high temperature (mill and foundry) applications
- Direct AC or DC power input
- Audible alarm
- Non-RF equipped version (CellScale RF modem removed)
- NTEP Approved Version – Class III certified. Unit comes preset in the NTEP operating mode.

*"We weigh quality first"*



Specifications subject to change without notice.

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