



# CELLSCALE®<sub>9000</sub>

CELLULAR WEIGHING FROM MSI

## MSI-9300 Porta-Weigh Plus • RF Digital Crane Scale Product Specifications

*A stellar solution 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

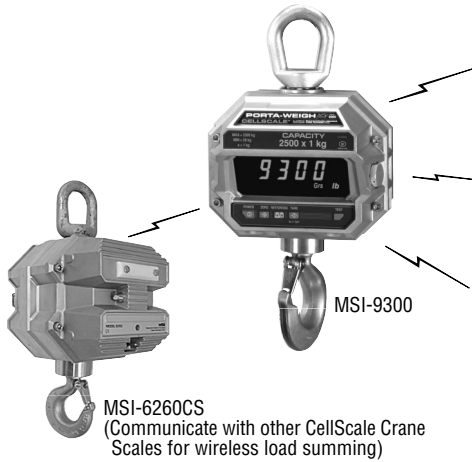
1.2 in (30mm) ultra bright LED digits are readable at distances up to 50 ft (15m). Display brightness can be set to automatically adjust to ambient lighting conditions for optimum viewing and battery conservation.

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 1000 ft (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 power assisted rotation, see the MSI-9300HT product specification sheet. See also specification sheets for MSI-9000, MSI-9020, MSI-9750A and MSI-3750CS for complete capabilities and networked weighing system solutions.

### MSI-9300 in a CellScale Network



**MSI-9300/MSI-3750CS** system configuration provides CellScale's rich feature set to any crane scale application. Monitor and control up to 32 independent crane scales from single or multiple locations. (See separate specification sheet for MSI-3750CS RF Digital Weight Indicator).



**MSI-9300/MSI-9020 CellModem** system configuration provides wireless CellScale link with peripheral serial devices including computers, scoreboards, printers and PLC's. (See separate specification sheet for MSI-9020RF CellModem).



**MSI-9300/MSI-9750A** system configuration provides CellScale's rich feature set through a portable and wireless digital indicator. Supports multiple channel display on individual networks (up to 8 simultaneously), data logging, bar code scanner interface and inter-network radio messaging. (See separate specification sheet for MSI-9750A RF Remote Indicator).

### Optional MSI-9300 Retrofit Kit

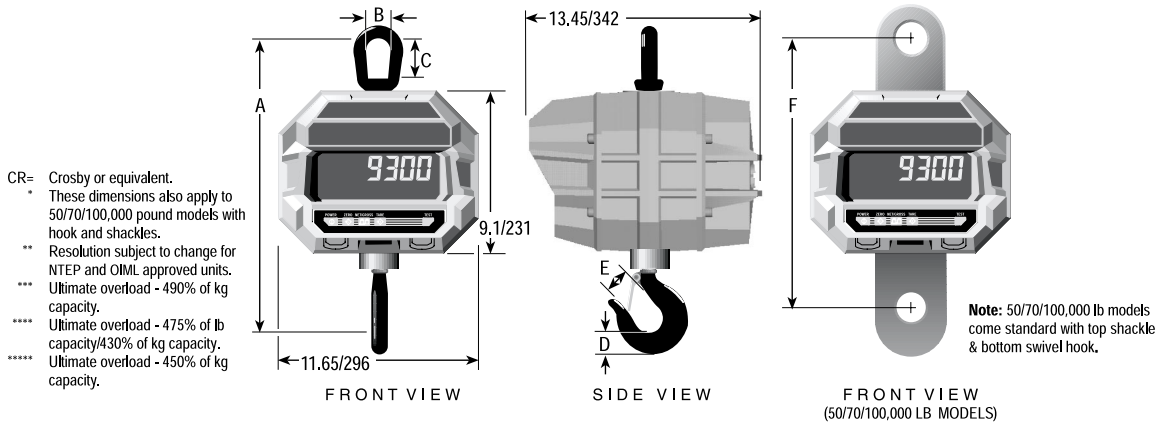


Your MSI-4300 Porta-Weigh Plus Centersection



**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.

# MSI-9300 Specifications and Dimensions



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 powered rotation of lifted material.

## Specifications

### Accuracy

Plus or minus 0.1% of applied load

### Housing

- Anodized cast aluminum
- 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 (1.2 in) high weight and data LED
- 14 backlight LED annunciators
- Automatic brightness adjustment

### Units

Pounds or kilograms selectable

### Operating Range

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

### Calibration

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

### Radio Link

Frequency Hopping Spread Spectrum @ 2.4 GHz provides 32 collocated networks of scales and peripheral devices. Radio functions in the ISM band, license free in the USA and Europe. 10mW (low power) or 100mW (high power)

### Approvals (pending)

NTEP, OIML, Factory Mutual

### 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

### RFI/EMI Shielding

Exceeds NIST HB44 and EC standards

### Comm Port

Used for calibration purposes and system configuration management

### Real Time Clock

Date/time in US or European formats. Backed by a replaceable lithium battery (typical life > 5 years). Clock data available via RF interfaces (MSI-9020, MSI-9750A, MSI-3750CS)

### Data I/O

Any scale data is available via 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" or "Off"

ZERO: Zeros applied load up to 100% of capacity unless prohibited by legal-for-trade settings

### NET/GROSS:

Switches display between NET and GROSS weight readings

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

- 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)



Specifications subject to change without notice.

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