MSI-9000
CellScale

RF WIRELESS WEIGHING SOLUTIONS

COMPATIBLE WITH:

MSI-6260CS

MSI-9300 / MSI-9300HT

MSI-9750A

MSI-9850

MSI-9020

MSI Scoreboard

RICE LAKE
WEIGHING SYSTEMS

800-874-4320
www.ricelake.com/msi

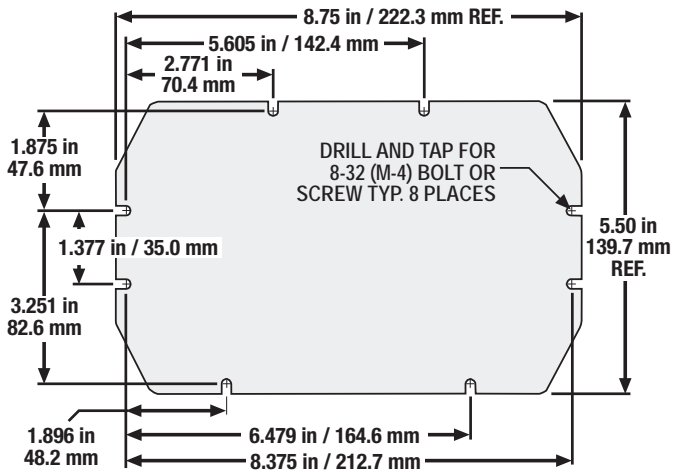# MSI-9000 CELLSCALE

RF WIRELESS WEIGHING SOLUTIONS

The MSI-9000 CellScale™ is MSI's most innovative and technologically advanced product for wireless weighing and networked system solutions for industrial plant applications.

The MSI-9000 CellScale simultaneously processes, monitors and controls single or multiple load sensor inputs and outputs along with real-time communications over a secure FHSS 2.4 GHz RF network. Up to 64 selectable license-free RF networks are available ensuring reliable non-interfering transmissions across nearly all industrial environments.
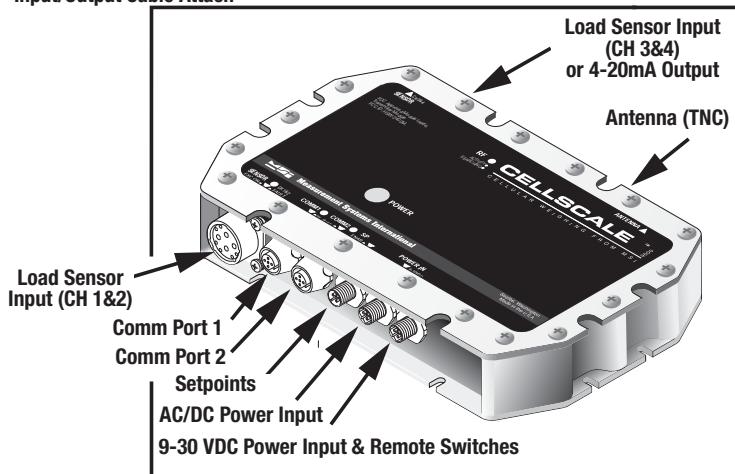
The MSI-9000 functions as the central controller in a CellScale networked weighing system combining advanced analog-to-digital (A/D) processing with superior RF communications packaged in a NEMA 4 /IP65 industrial grade enclosure. A standard CellScale can process two load sensor inputs or with an optional second A/D module, up to four inputs simultaneously with real-time data collection and communication throughout a network of peripheral CellScale weighing components.

Other CellScale weighing components providing versatile wireless weighing system solutions include: MSI-9750A & MSI-9850 RF remote indicators, MSI-6260CS, MSI-9300 & MSI-9300HT RF industrial crane scales, and MSI RF remote scoreboards. The MSI-9020 cell modem also provides simple network connectivity with existing plant information systems and equipment, including: printers, computers and PLCs.

Dimensions

- 8.75 in / 222.3 mm REF.
- 5.605 in / 142.4 mm
- 2.771 in 70.4 mm
- 1.875 in 47.6 mm
- 1.377 in / 35.0 mm
- 3.251 in 82.6 mm
- 1.896 in 48.2 mm
- 6.479 in / 164.6 mm
- 8.375 in / 212.7 mm
- 5.50 in 139.7 mm REF.

DRILL AND TAP FOR 8-32 (M-4) BOLT OR SCREW TYP. 8 PLACES

Input/Output Cable Attach

- Load Sensor Input (CH 3&4) or 4-20mA Output
- Antenna (TNC)
- Load Sensor Input (CH 1&2)
- Comm Port 1
- Comm Port 2
- Setpoints
- AC/DC Power Input
- 9-30 VDC Power Input & Remote Switches

Specifications

Enclosure:	NEMA 4 IP65 milled anodized aluminum with O-ring gaskets NEMA 6 IP67 with optional long range antenna
Weight:	3.5 lb (1.6 kg)
Annunciators:	Eight LED status lamps for power, setpoints, comm port, excitation & RF modem
Real-Time Clock:	USA or European format programmable
Power Input:	9-30 VDC (Internal 85-265 VAC power supply optional)
Operating Temperature:	-40°F to 158°F (-20°C to 70°C)
Scale Inputs:	Two sensor inputs and 6 terminal connections
Excitation:	5 V (+5 V relative to ground)
Calibration:	Digital via input comport or RF with other CellScale weighing components. Programmable calibration settings, include: AZM, motion, filter, zero, units, capacity and divisions
Digital Filtering:	Two-stage programmable digital filtering
Totalization, Statistics and Product IDs:	Push-button or automatic with each ID register. Up to 32 alphanumeric ID registers
Radio Link:	FHSS at 2.4 GHz (up to 64 network selections)
Radio Link Effective Range:	Typically 500 ft (150 m) indoor, 1000 ft (300 m) outdoor with standard antennas. (See optional antennas for longer range)
Standard Antenna:	1/2 wave 2dBi, articulated
RFI/EMI Shielding:	Exceeds NIST HB44 and CE Standards
Data I/O:	Two programmable comports supporting RS-232 or RS-422
Push Button Inputs:	Two inputs on power connector and 1 isolated input on setpoints connector
Connectors:	12-pin MIL-C-26482 for load sensor input Turck compatible Pico for RS-232 output
Math Channels:	Eight math channels programmable for arithmetic formula processing
Internal Setpoints:	Three 60 V at 350 mA internal programmable solid state relay contacts
Approvals:	NTEP CC 05-077

Options and Accessories

- Internal AC/DC power supply: 85-265 VAC, 47-440 Hz/130-300 VDC
- External AC/DC power supply: contact factory for further information
- RS-232 interface cable: 13 ft (4 m) with DB-9 connector or unterminated
- Power/Switch cable: 13 ft (4 m) for 9-30 VDC source connection
- Setpoints output cable: 13 ft (4 m) for access to internal relays
- Breakout summing box: 4-in/1-out sensor summing
- 2nd A/D module: Expands load sensor inputs from 2 to 4
- 4-20mA output: Programmable analog output for connectivity with PLC. (contact factory for further information)
- Long-range antennas: Omni-directional, long-range yagi, reflector and vehicle-mount types available. (contact factory for further information)

CellScale Network Components

MSI-9020:	RF Modem for serial connectivity with remote computers, printers, scoreboards other devices.
MSI-9850:	RF digital indicator with full feature industrial weighing capabilities.
MSI-9750A:	RF portable digital indicator with full feature industrial weighing capabilities.
MSI-6260CS, MSI-9300 & MSI-9300HT:	Industrial grade RF digital crane scales.
CellScale CVM:	MSI software package to emulate full function weighing indicator on PC and touchscreen computer.

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