## **Specifications**

#### **Enclosure:**

NEMA Type 4, IP65 milled anodized aluminum with O-ring gaskets

NEMA Type 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 and RF Modem

#### **Real-Time Clock:**

USA or European format programmable

#### **Power Input:**

9-30 VDC (Internal 85-265 VAC power supply optional)

#### Operating Temperature:

-4° F to 158° F (-20° C to 70° C)

#### Scale Inputs:

Up to two sensor inputs and six terminal connections Excitation:

#### 5V (+5V 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, 1,000 ft (300 m) outdoor with standard antennas. See optional antennas for longer range.

### Standard Antenna:

1/2 wave 2 dBi, 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:**

# Math Channels:

Eight math channels programmable for arithmetic formula processing

#### **Internal Setpoints:**

Three 60V at 350 mA internal programmable solid state relay contacts

#### Warranty:

One-year limited

#### **Approvals:**

NTEP CC 05-077 Measurement Canada Cert # AM-5781



MSI-9000 CellScale<sup>™</sup>

#### **Standard Features**

- 2.4 GHz frequency hopping spread spectrum
- Two scale inputs and excitation with remote sensing (see accessories for mating connector)
- Power/switch cable, 13ft (4 m) for 9-30 VDC input with two programmable switch inputs
- RS-232, RS-422 and RS-485 I/O with 13ft (4m) interface cable
- Three internal solid state relays for set-point control
- Real time clock
- NEMA Type 4, IP65 enclosure (NEMA Type 6, IP67 with long range antenna)

# Approvals

Measurement Canada Approved

# MSI-9000 CellScale™

# Part Number/Price

Part #	MSI Part #	Description	Est. Weight	Price
38361	502514-0001	MSI-9000, two-channel A/D 9-30 VDC (consult factory for other configurations)	7 lb (3.5 kg)	\$2,750.00
Optio	ns/Access	ories (Contact MSI for application consultation)		
Part #	MSI Part #	Description		Price
Consult	Consult	NTEP Certified (contact factory for specifications)		Consul
Consult	Consult	Internal AC/DC power supply (85-265 VAC, 47-440 Hz/130-300 VDC) includes a separate, independent 9-30 VDC power input		\$295.00
137467	Consult	External 85-265 VAC, 47-440 Hz/130-300 VDC power supply for indoor and outdoor installations		\$495.0
144331	Consult	Five dBi gain vehicle/cab mount whip antenna, includes 17 ft/5.2 m coaxial cable		Consul
Consult	Consult	Single or dual 4-20 mA output. Provides programmable current output for direct connection to PLC's and other data acquisition equipment. Note: See 4-20 mA option specification sheet for available product configurations		450.00 500.00
144091	Consult	Non-terminated 4-20 mA cord set, 13 ft/4 m (longer lengths available by special order)		\$95.0
143343	Consult	Setpoints output cable, 13 ft/4 m for access to internal SS relays		Consu
Consult	Consult	Non-terminated serial cable for communication port connection, 13 ft/4 m (longer lengths available by special order)		95.0
Consult	Consult	Pre-wired load cell cable (various lengths for single and dual channel available)		Consu
Consult	Consult	Second A/D module (4 scale inputs - adds second 12-Pin connector)		595.0
Consult	Consult	CellScale Virtual Monitor (CVM) application software (enables PC to emulate scale indicator., contact factory for assistance)		Consul
Consult	Consult	Modem only equipped version (CellScale A/D removed)		450.0
Consult	Consult	Non-RF equipped version (CellScale RF modem removed)		850.0
137096	Consult	MSI-9002 breakout/summing box; 4 in (1 out or 4 in (2 out)		\$710.0
137370	Consult	MSI-9008 multiplexer; 8 in (1 out (expands single channel into 8)		\$1,095.0
Consult	Consult	Wi-Fi Ethernet Connectivity (802.11b - contact factory for assistance)		345.0
143297	Consult	12-Pin mating connector for single or dual scale input		\$52.5
Consult	Consult	Long range antenna, 300-500 m omni-directional with 9 dBi gain, includes 10 ft/3 m coaxial cable		Consul
143466	12147	Antenna, 9 dBi		\$415.0
144330	13205	Antenna, 9 dBi corner reflector		Consu
144329	13204	Antenna, 14 dBi corner reflector		Consul
144334	13209	Antenna cable, 3 m		Consu
143977	12750	Antenna, YAGI, 15 dBi		Consu
144332	13207	Vehicle antenna cable		Consu
148624	501705-0001	Serial cable DB9		\$105.0
150990		RF Remote option (must be ordered with PN 153549 to work properly)		\$865.0