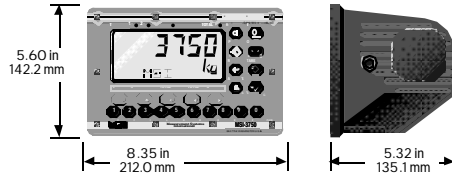
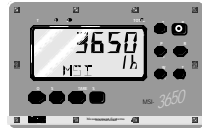


# MSI-3650 and MSI-3750 SPECIFICATIONS

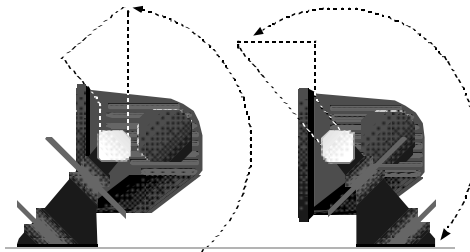
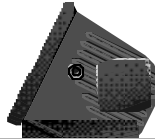
MEASUREMENT SYSTEMS INTERNATIONAL

## TECHNICAL SPECIFICATIONS



**3650 AND 3750 DIMENSIONS**

**DESKTOP  
VIEWING POSITION**



**MOUNTING BRACKET POSITIONS**

# MSI-3650 and MSI-3750 SPECIFICATIONS

## Accuracy

- HB-44 Class III/IIIL (COCs pending)

## Maximum Resolution

- 100,000 displayed counts
- 1,048,576 counts internal (20 bit)

## Standard Industrial Resolution

- Up to 10,000 displayed counts, Class III or Class IIIL

## Load Cells

- Will drive up to eight 350Ω load cells

## Sensitivity

- 0.3 microvolt per displayed digit minimum. Suitable for load cells from 0.5mV/V to 7mV/V

## Drift

- Zero: <5PPM/°C (with AZM) Span: <15PPM/°C

## Capacity

- Any capacity can be specified up to 999,999 units

## Over Capacity

- Indicates "ERROR OVERLOAD" when the set capacity is exceeded by 9 'd'

## Increments (d)

- Multiples or submultiples of X1, X2, X5 down to X0.0001

## Units

- Standard units include: grams, ounces, kilograms, pounds, metric tons and short tons. By special order decanewtons and troy ounces. Units can be enabled or disabled individually

## Display

- 6 digit 0.9"/23 mm high numeric LCD (weight display)
- 8 digit 0.45"/11 mm high alphanumeric LCD (message / units display)
- 21 segment analog bar graph, also used for level indications on the MSI lift truck scale
- Annunciators for measurement modes
- Sunlight visible LED indicator for Totalization, Setpoints 1 and 2
- Photocell activated fiber-optic LED backlighting

## Filtering

- 6 pole digital filtering. User-selectable Low, Med or High (high vibration resistance)

## Power

- 90 to 140 VAC 48 to 65 Hz <3VA (standard)
- 180 to 280 VAC 48 to 65 Hz <3VA (optional)
- Battery operated with 2 standard D Cells (optional)
- DC operated from 10 to 56 V (optional)

## Battery Operating Time

- Typically 100 hours with single 350Ω load cell. Battery life will decrease with multiple units. Battery life will be extended with high impedance load cells

## Temperature Range

- -10° C to +40° C NTEP/OIML certified range
- -20° C to +60° C Operating (-4°F to 140°F)
- -40° C to +80° C Storage (-40°F to 176°F)

## Enclosure

- NEMA 4, IP65 Alodined and powder coated cast aluminum

## Pushbutton Functions

Power: On/Off

Zero: – zero out residual weight on scale

Net/Gross: – switch between Tared (Net) and Gross weight

Tare: – tare out empty container weight and read in Net weighing mode

Print: – digital output of formatted data to external devices

Setup: – for selection of user-programmable functions

### 3650 only:

Total: – adds the current weight to a total register or turns on Auto-Total

View Σ: – displays accumulated weight for the current ID#

User: – for programming user defined functions

Test: – display and function test, also provides battery condition in %

### 3750 only:

Features alphanumeric key entry and five programmable function keys which can serve any of the following functions:

Total: – adds the current weight to a total register or turns on Auto-Total

View Σ: – displays accumulated weight for the current ID#

ID #: – push to change the ID code

Setpoints: – allows setting the setpoint values

Units: – change weight units

String 1: – push to enter a 20 character print string for current ID code

String 2: – push to enter a second 20 character print string for current ID code

Peak Hold: – turns Peak Hold on and off

Scale Input: – changes the scale input (dual load cell option required)

Statistics: – show statistics for the current ID code (statistics option required)

Grand Total: – gives the Grand Total of all ID codes (statistics option required)

Clear Latch: – clears any latched setpoints

Disabled: – renders key inactive

## Auxiliary Digital Input

Any key can be duplicated external to the meter. This is a high speed interrupt-driven signal.

## Programmable Features

- Automatic or Manual Tare entry
- 8 Setpoints with messaging capability (standard on 3750, optional on 3650)
- Peak Hold – for capturing maximum readings
- Automatic or Manual Totalizing with weighments counter
- 12 programmable ID Codes (see below for expanded ID memory option)
- Each ID code has an 8 character name, two 20 character print strings, and stores independently units, tare and total with weighments counter
- Automatic Power-Down, for power saving in battery applications
- Backlight On, Off or Automatic
- Lock –The user can lock any or all features to prevent tampering with setups (3750 only). There are three locking modes on the MSI-3650
- RS-232 Option will output on demand, on a change, regular time interval, on a setpoint, on Total, by computer control or continuously
- RS-232 I/O provides full output formatting to interface with computers, printers, scoreboards and most any other serial device

## Calibration

Fullly digital

## Warranty

One Year

## OPTIONS

### • RS-232 I/O and Setpoints (standard on 3750):

The RS-232 I/O and Setpoints option enhances the indicators by providing 8 setpoints with messaging and an interface for printers, scoreboards or computers. Full output formatting is provided allowing easy interface to any label or ticket printer. The Real-time clock provides full time and date stamping of any and all printed data. The RT Clock can provide scale throughput monitoring in combination with the Total functions. Use the RT Clock as a clock/calendar when the scale is off. RS-232 cable is not included.

### • 2nd Isolated RS-232/RS-485 and Setpoint Relay Option:

Isolated two way RS-232 communications can interface the indicators with a remote printer, scoreboard, or computer. RS-485 output provided for networking or driving long cables (up to 4000' or 1300m). The setpoint relay option provides up to 8 setpoint outputs for interfacing to external devices such as warning lights, process relays, or sirens. 7 SPDT (form C) 1A/115VAC 2A/30VDC relays are provided internal to the indicators for direct setpoint interfacing. The 8th output is a TTL compatible Logic output. Connections are made through liquid tight feedthrough connectors to spring terminal blocks.

### • Statistics Package (3750 only):

Adds complete statistics calculations for up to 12 ID codes (additional ID codes available with expanded memory). Each ID Code stores and computes Standard Deviation, Coefficient of Variance, Max, Min, and Avg. In addition, a Grand Total and Grand Average is kept of all ID Codes.

### • Expanded ID Memory:

Expands standard memory to up to 240 ID codes (up to 190 with statistics package).

### • Audible Setpoints Indicator:

Coupled with the internal setpoints, an overload alarm can sound at any weight. Can also be used for accept or an out-of-limits indicator for blind checkweighing (AC power only).

### • Dual Load Cell Input (3750 only, and not available with statistics or expanded ID memory options):

Simultaneously controls two independently calibrated load cells (A and B). Allows user to view individual values, sum or difference (A, B, A+B, or A-B).

### • Mounting Bracket:

For Wall or Bulkhead Mounting. 180° Swing

### • NTEP/OIML certification (approvals pending).

