

# Instrumentation/Process Control

## IQ 700IS

## Intrinsically Safe Digital Weight Indicator



### STANDARD FEATURES

- Bright Light Emitting Diode (LED)
- Stainless steel NEMA 4X enclosure
- Front panel digital calibration
- Automatic zero and span temperature compensation
- Excitation for four 350Ω load cells at 5VDC
- Gross/Tare/Net computation
- Time and date
- Tilt stand
- Setup parameters printout
- Bidirectional 20mA current loop communication port

### APPROVALS



Measurement  
Canada  
Approved



FM Entity Approved for use in hazardous locations per Rice Lake Weighing Systems' control drawing file number 72717.

### SPECIFICATIONS

#### LOAD CELL EXCITATION:

- 1 - 350Ω load cell @ 4.56VDC
- 2 - 350Ω load cell @ 4.28VDC
- 3 - 350Ω load cell @ 4.06VDC
- 4 - 350Ω load cell @ 3.82VDC

#### LOAD CELL CURRENT:

57 mA (4 x 350Ω load cells)

#### LOAD CELL CABLING:

6-wire with remote sensing

#### ANALOG SIGNAL INPUT RANGE:

0.7 mV/V - 3.2 mV/V

#### ANALOG SIGNAL SENSITIVITY:

0.3 μV/graduation

#### CONVERSION RATE:

10 updates/second

#### INTEGRATION TIME:

20 mSec typical

#### RESOLUTION:

10,000 displayed graduations (NTEP),  
80,000 expanded  
The maximum number of allowed graduations will vary by application

#### DISPLAY INCREMENTS:

1, 2, 5, 10, 20, 50, 100

#### UNDERRANGE COUNT CAPACITY:

(-) 400 graduations, typical

#### LEAD ZERO BLANKING:

Standard per NBS Handbook H-44

#### DISPLAY:

Six digits, Light Emitting Diode (LED); 0.6 in (15.2 mm), 7-segment display digits

#### POLARITY INDICATION:

" - " sign

#### DECIMAL POINT:

Configurable to 0, 0.0, 0.00, 0.000, 0.0000

#### LB/KG SWITCHING:

Configurable for front panel operation with conversion for tare and setpoint values

#### FRONT-PANEL CONTROL SWITCHES:

Zero, Gross/Net, Tare, Tare Recall, Print, lb/kg conv

#### 5-POINT LINEARIZATION:

Allows up to 5 entry points when selected

#### NUMERIC KEYBOARD:

0-9 keys plus ENT (Enter) and CE (Clear Entry) keys

#### FRONT-PANEL LED ANNUNCIATORS:

Center Zero, Gross, Net, Motion, lb, kg

#### AZM: (ZERO TRACK)

"Gross" mode only; operable over ±5 grads, ±1.0 grads, ±3.0 grads (or Off)

#### PAZ AND AZM APERTURE:

Configurable to ±1.9% Full Scale or 100% Full Scale

#### MOTION BAND:

Configurable to ±1 or ±3 graduations, 1 second delay (or Off)

#### POWER INPUT:

115/230 VAC; 50/60 Hz,  
6VDC battery option

#### OPERATING TEMPERATURE:

14°F to 104°F (-10°C to 40°C)

#### RATING/MATERIAL:

NEMA 4X polished stainless steel housing

#### WEIGHT:

9.5 lb (4.31 kg)

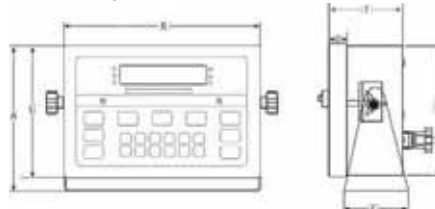
#### APPROVALS:

NTEP Certified per H-44 at 10,000 Divisions, Class III/III.L, CC# 89-023A2  
Measurement Canada approved, S.WA-4131 Add.1.  
Factory Mutual approved, #0Z0A2.AX

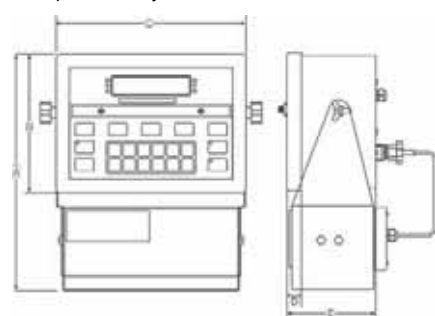
#### WARRANTY:

One-year limited warranty

Without battery



With optional battery and tilt stand



DIMENSIONS WITHOUT BATTERY			
<b>A</b>	7.36 in (186.9 mm)	<b>E</b>	3.94 in (100.1 mm)
<b>B</b>	9.12 in (231.6 mm)	<b>F</b>	4.14 in (105.2 mm)
<b>C</b>	6.62 in (168.1 mm)	<b>G</b>	6.35 in (161.3 mm)
<b>D</b>	.70 in (17.8 mm)		
WITH OPTIONAL BATTERY AND TILT STAND			
<b>A</b>	11.35 in (288.3 mm)	<b>D</b>	0.70 in (17.8 mm)
<b>B</b>	6.62 in (168.1 mm)	<b>E</b>	4.25 in (107.9 mm)
<b>C</b>	9.12 in (231.6 mm)		

NOTE: The following load cells can not be used with IQ 700 IS or Condec™  
UMC 600 IS: RL71000HE, RLBEAM, RL32155 and RL8000, RL8000KM