

## 320IS Intrinsically-Safe Digital Weight Indicator



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

**\*Exclusions:** The following load cells cannot be used with the 320IS: RL71000HE, RL8000HE, RL8000KM, RLBEAM, and RL32155.

**CAUTION!** The equipment contained within this Explosive Environment section requires greater attention to specification and installation guidelines. Improper specification, installation or service of these products can result in loss of equipment or serious injury.

### Standard Features

- Bright Light Emitting Diode (LED)
- Stainless steel NEMA 4X/IP66 enclosure
- T4 temperature rating
- Front-panel digital calibration
- Automatic zero and span temperature compensation
- Excitation for four 350Ω or eight 700Ω load cells
- Gross/Tare/Net computation
- Tilt stand
- Factory Mutual (FM) Entity approved
- Duplex fiber optic interface 200 ft
- Power ON/OFF; battery save mode
- I/O Module Option: 2 serial ports, 2 analog outputs, 4 digital inputs, 4 relay contact outputs.
- Factory Mutual (FM) entity approved for Classes I, II, and III, Divisions I and 2, Groups A, B, C, D, E, F, and G

Intrinsically Safe

### Specifications

#### LOAD CELL EXCITATION:

3.0 VDC @ 87.5Ω  
4.6 VDC @ 700Ω

#### LOAD CELL CURRENT:

34 mA (4 x 350Ω load cells) or  
(8 x 700Ω load cells)

#### LOAD CELL CABLING:

4 and 6-wire with remote sensing  
(recommended)

#### ANALOG SIGNAL INPUT RANGE:

0.6 mV/V - 4.0 mV/V

#### ANALOG SIGNAL SENSITIVITY:

0.2 μV/graduation minimum  
1.5 μV/graduation recommended

#### CONVERSION RATE:

60 updates/second

#### INTEGRATION TIME:

20 mSec typical

#### RESOLUTION:

10,000 displayed graduations  
(NTEP), 100,000 expanded  
The maximum number of allowed graduations will vary by application

#### DISPLAY INCREMENTS:

1, 2, 5

#### DISPLAY:

Six-digits, Light Emitting Diode (LED);  
16-segment, 0.8 in (20mm) digits

#### DECIMAL POINT:

Configurable with dead zeros

#### UNIT SWITCHING:

Configurable for two units of measurement with front panel operation with conversion for tare and setpoint values

#### FRONT-PANEL CONTROL SWITCHES:

Zero, Gross/Net, Tare, Print, Units  
Conv

#### FRONT PANEL:

6-button flat membrane panel

#### FRONT-PANEL LED ANNUNCIATORS:

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

#### MOTION BAND:

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

#### POWER INPUT:

5.8 - 7.9 VDC, 100 - 175mA  
Maximum power consumption 0.25  
watts

#### OPERATING TEMPERATURE:

14°F to 104°F (-10°C to 40°C) legal

#### RATING/MATERIAL:

Stainless steel NEMA 4X/IP66  
enclosure

#### OPTIONAL BATTERY:

Operating times: 4 x 350Ω =  
35-40 hrs.

1 x 350Ω =40-50 hrs.

8 x 700Ω = 35-40 hrs.

Charging Times: 10 hours for dead  
battery, 14 hours for initial charge

#### WEIGHT:

6.1 lb (2.8 kg)

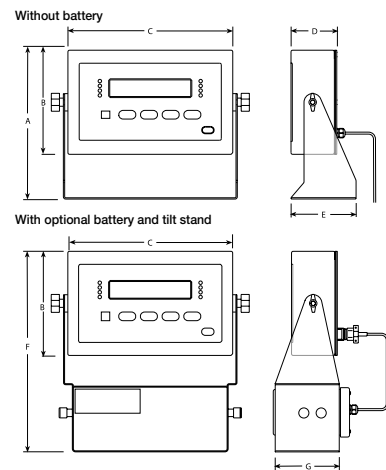
#### APPROVALS:

NTEP 03-078 (TUV, C (UL),  
FM Entity)

Measurement Canada Approved:  
AM-5560

#### WARRANTY:

One-year limited warranty



### DIMENSIONS

#### Without battery

A = 8.56" (217.4 mm)      B = 6.00" (152.4 mm)  
C = 9.50" (241.3 mm)      D = 2.64" (67.1 mm)

E = 3.75" (95.2 mm)

#### With optional battery and tilt stand

F = 11.56" (293.6 mm)      G = 4.75" (120.7 mm)

#### Optional I/O Module

12.90" x 11.63" x 6.25"  
(327.7mm x 295.4mm x 158.8mm)

#### Optional Power Supply

7.00" x 5.13" x 3.125"  
(177.8mm x 130.0mm x 79.375mm)