

320IS Intrinsic-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: duplex 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
- 300 character serial string
- 4 setpoints-free running (relays included in I/O module)

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)

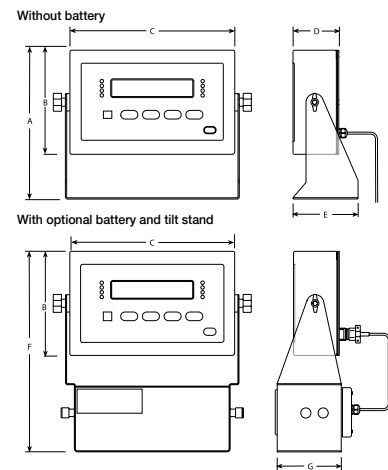
APPROVALS:

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)

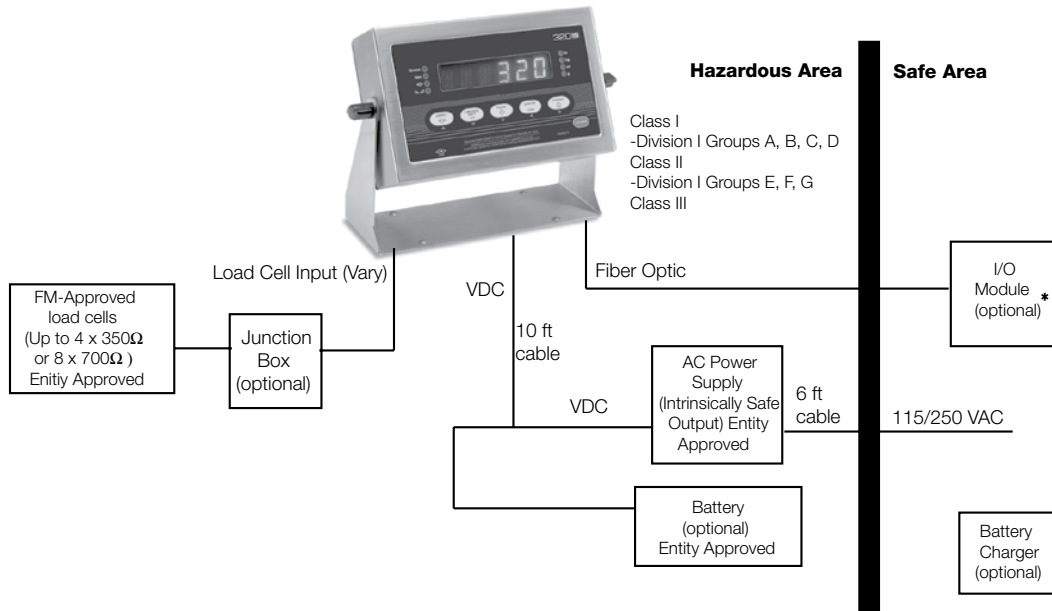
Optional I/O Module

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)

Specifications (continued)



*I/O module required for anything besides basic weighing

PART #	DESCRIPTION	PRICE
91233	320IS Intrinsic-Safe Digital Weight Indicator 5 button keypad with battery pack and charger & tilt stand	\$1,727.00
91234	320IS Intrinsic-Safe Digital Weight Indicator 5 button with A/C power supply	1,740.00
86241	320IS indicator only	995.00
Hazardous Environment Cable		
32817	EL147IS hazardous environment cable	2.65/ft
72241	Hazardous environment 3 conductor	3.75/ft
Options/Accessories		
72713	Power supply, IS-EPS-100-240VAC	745.00
72725	IS-6V battery option with cable adapter	535.00
74001	Battery charger, 115VAC	145.00
74002	Battery charger, 115/230VAC	535.00
80662	Fuse, fast acting 200mA 250V, 5x20mm, Littelfuse (replacement part for the IS-EPS-100-240VAC power supply)	2.50
80869	Fuse, 1.25A, 250V TR5 time-lag (replacement part for the I/O Module)	2.50
72726	Tilt stand (required for battery model)	57.00
*89239	I/O Module, stainless steel NEMA 4 enclosure, safe area option (requires fiber optic cable, AC power required)	995.00
83388	Timer relay kit includes din rail, timer relay for latching and mount	370.00
78026	Fiber optic, duplex cable 100 ft	130.00
78027	Fiber optic, duplex cable 200 ft	258.00
74612	Installation manual	35.00
78076	I/O Module manual	30.00

* Includes relays

Rice Lake Weighing Systems™ warrants that all Rice Lake Weighing Systems Intrinsic Safe (IS) equipment and systems installed by a distributor or Original Equipment Manufacturer (OEM) will operate per written specifications as confirmed by the Distributor/OEM and accepted by Rice Lake Weighing Systems. All systems and components are warranted against defects in materials and workmanship for one year.

All Rice Lake Weighing Systems Intrinsic Safe equipment carries a Factory Mutual approval and is documented on various control drawings. Each device is manufactured Rice Lake Weighing Systems factory. To preserve the warranty and Factory Mutual approval, all repairs or replacement of circuit boards or components housed within the enclosures must be performed by Rice Lake Weighing Systems factory authorized personnel.

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