

320IS Plus

Intrinsically Safe Digital Weight Indicator



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.

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:

3.0VDC @ 87.5Ω
4.6VDC @ 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:

0.6mV/V - 4.0mV/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, 0.8in (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, Start, Stop, Accum, Tare Display

FRONT PANEL:

24-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 - 7.9VDC, 100 - 175 mA
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.
Charging Times: 10 hours for dead battery, 14 hours for initial charge

WEIGHT:

6.1 lb (2.8 kg)

APPROVALS:

NTEP pending (TUV, C (UL),
FM Entity 03-078A1)
Measurement Canada Approved: AM-5560

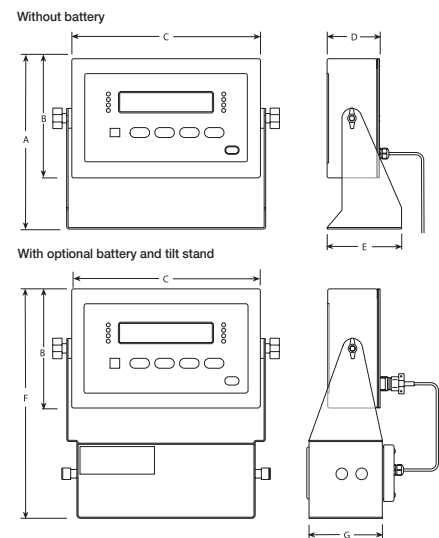
WARRANTY:

One-year limited warranty

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
- Power ON/OFF; battery save mode
- I/O Module Option: two serial ports, two analog outputs, four digital inputs, four relay contact outputs.
- Eight setpoint (requires I/O module)
- Factory Mutual (FM entity approved for classes I, II, and III; Divisions 1 and 2; Groups A, B, C, D, E, F, and G
- Time & Date (requires I/O module)

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



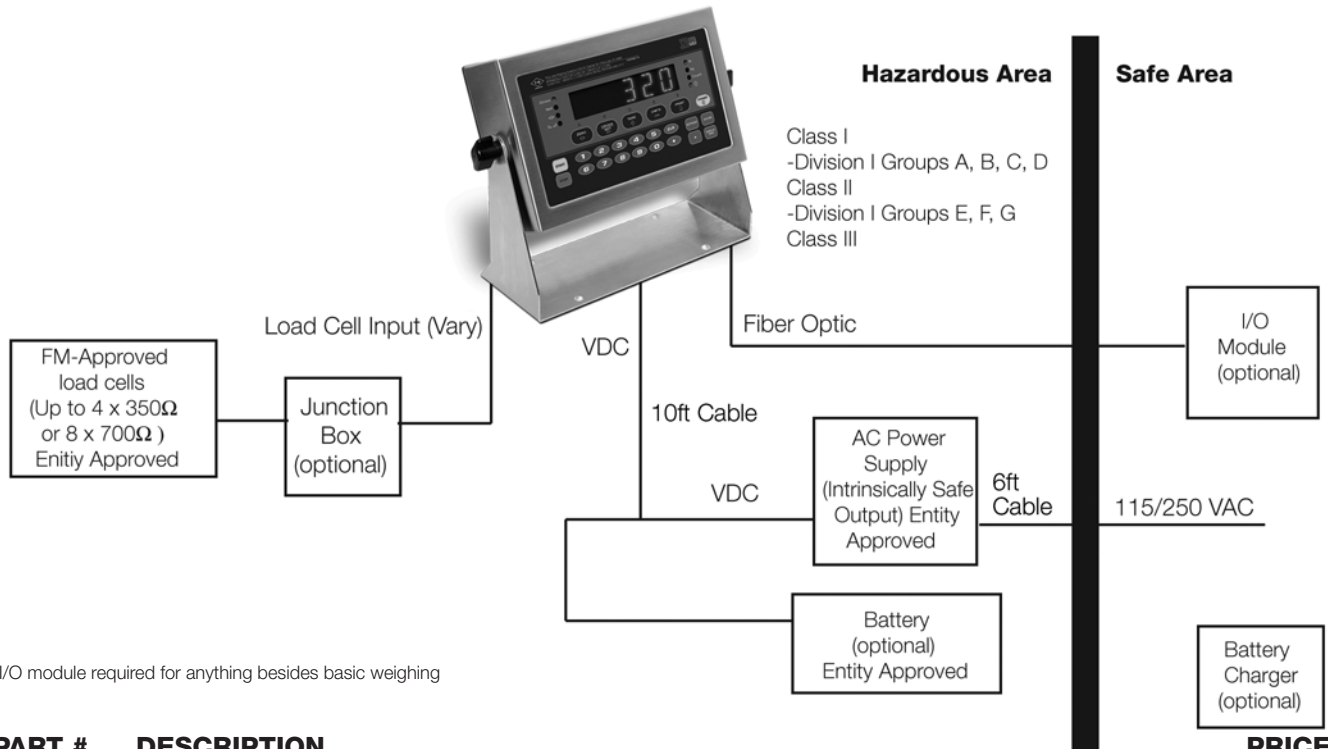
| DIMENSIONS WITHOUT BATTERY | | | |
|---|---------------------|----------|--------------------|
| A | 8.56 in (217.4 mm) | D | 2.64 in (67.1 mm) |
| B | 6.00 in (152.4 mm) | E | 3.75 in (95.2 mm) |
| C | 9.50 in (241.3 mm) | | |
| WITH OPTIONAL BATTERY AND TILT STAND | | | |
| F | 11.56 in (293.6 mm) | G | 4.75 in (120.7 mm) |
| OPTIONAL I/O MODULE | | | |
| 12.90 in x 11.63 in x 6.25 in (327.7 mm x 295.4 mm x 158.8 mm) | | | |
| OPTIONAL POWER SUPPLY | | | |
| 7.00 in x 5.13 in x 3.125 in (177.8 mm x 130.0 mm x 79.375 mm) | | | |

Intrinsically Safe

320IS Plus

Intrinsically Safe Digital Weight Indicator

SPECIFICATIONS (CONTINUED)



*I/O module required for anything besides basic weighing

PART # DESCRIPTION

| PART # | DESCRIPTION | PRICE |
|--------|--|-----------------|
| 91235 | 320IS Plus Intrinsically-Safe Digital Weight Indicator full keypad with battery pack and charger & tilt stand... | Consult factory |
| 91236 | 320IS Plus Intrinsically-Safe Digital Weight Indicator full keypad with A/C power supply | Consult factory |
| 86240 | 320IS Plus indicator only..... | Consult factory |

Hazardous Environment Cable and Fiber Optic Cable

| | | |
|-------|---|-----------------|
| 32817 | EL147IS hazardous environment cable | Consult factory |
| 72241 | Hazardous environment 3 conductor | Consult factory |
| 78026 | Fiber optic, duplex cable 100ft | Consult factory |
| 78027 | Fiber optic, duplex cable 200ft | Consult factory |

OPTIONS/ACCESSORIES

| | | |
|-------|---|-----------------|
| 72713 | Power supply, IS-EPS-100-240 VAC | Consult factory |
| 72725 | IS-6V battery option with cable adapter | Consult factory |
| 74001 | Battery charger, 115 VAC | Consult factory |
| 74002 | Battery charger, 115/230 VAC | Consult factory |
| 80869 | Fuse, 1.25A, 250V TR5 time-lag (replacement part for the I/O Module) | Consult factory |
| 72726 | Tilt stand (required for battery model) | Consult factory |
| 89239 | I/O Module, stainless steel NEMA 4 enclosure, safe area option (requires fiber optic cable, AC power required)... | Consult factory |
| 83388 | Timer relay kit includes din rail, timer relay for latching and mount | Consult factory |
| 85353 | Installation manual | Consult factory |
| 78076 | I/O Module manual | Consult factory |

Rice Lake Weighing Systems® warrants that all Rice Lake Weighing Systems Intrinsically 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 Intrinsically Safe equipment carries a Factory Mutual approval and is documented on various control drawings. Each device is manufactured Rice Lake Weighing Systems factory authorized personnel. 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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