

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

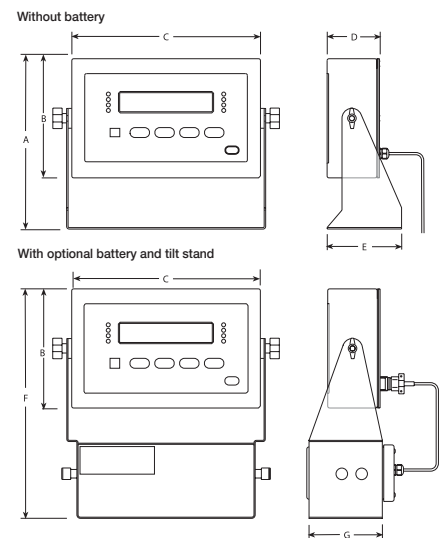
WARRANTY:

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.



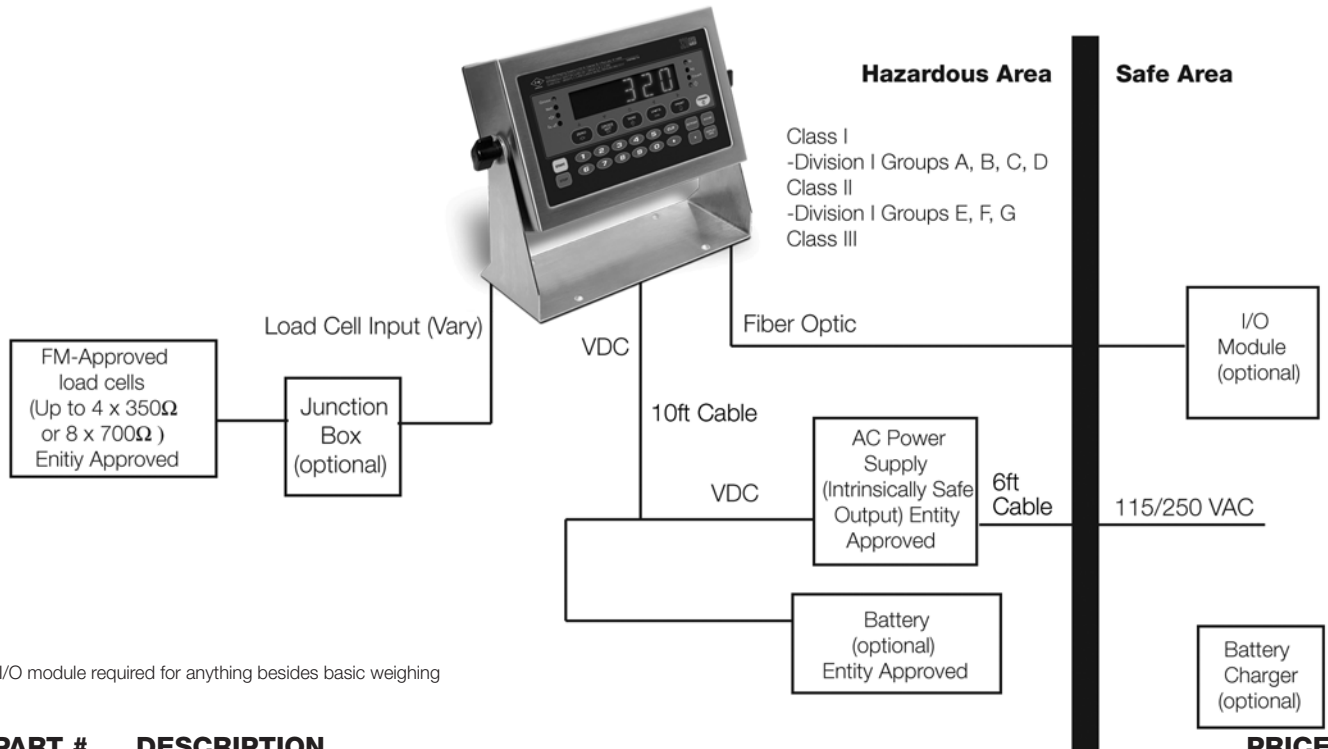
DIMENSIONS WITHOUT BATTERY			
A	8.56 in (217.4 mm)	D	2.64 in (67.1 mm)
B	6.00 in (152.4 mm)	E	3.75 in (95.2 mm)
C	9.50 in (241.3 mm)		
WITH OPTIONAL BATTERY AND TILT STAND			
F	11.56 in (293.6 mm)	G	4.75 in (120.7 mm)
OPTIONAL I/O MODULE			
12.90 in x 11.63 in x 6.25 in (327.7 mm x 295.4 mm x 158.8 mm)			
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-100-240VAC	Consult factory
72725	IS-6V battery option with cable adapter	Consult factory
74001	Battery charger, 115 VAC	Consult factory
74002	Battery charger, 115/230VAC	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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