320IS Intrinsically Safe Digital Weight Indicator



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 350 Ohms or eight 700 Ohms 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: 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

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

APPROVALS





Measurement Canada Approved



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.

SPECIFICATIONS

Load Cell Excitation:

3.0 VDC at 87.5 Ω 4.6 VDC at 700 Ω

Load Cell Current:

 $34\,\text{mA}$ (4 x $350\,\Omega$ load cells) or (8 x $700\,\Omega$ 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

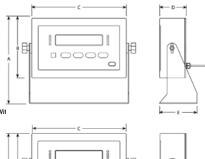
Integration Time:

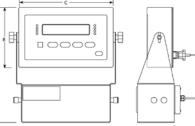
20 m Sec typical

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 (20 mm) 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, Ib, 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: $4 \times 350 \Omega = 35-40 \text{ hrs}$ $1 \times 350 \Omega = 40-50 \text{ hrs}$ $8 \times 700 \Omega = 35-40 \text{ hrs}$ Charging Times: 10 hours for dead battery, 14 hours for initial charge

Weight:

6.1 lb (2.8 kg)

Warranty:

One-year limited warranty

Approvals:

NTEP CC 03-078 Class III/IIIL 10,000d (TUV, C (UL), FM Entity) Measurement Canada AM-5560

DIMEN	ISIONS		
Withou	t Battery		
Α	8.56 in (217.4 mm)	D	2.64 in (67.1 mm)
В	6.00 in (152.4 mm)	E	3.75 in (95.2 mm)
С	9.50 in (241.3 mm)		
With 0	ptional Battery and Tilt Stand		
F	11.56 in (293.6 mm)	G	4.75 in (120.7 mm)
Optiona	al I/O Module		
12.90 x	11.63 x 6.25 in (327.7 x 295.4 x 158.8)	mm)	
Optiona	al Power Supply		
7.00 x !	5.13 x 3.125 in (177.8 x 130.0 x 79.375)	mm)	

With optional battery and tilt stand

320IS Intrinsically Safe Digital Weight Indicator

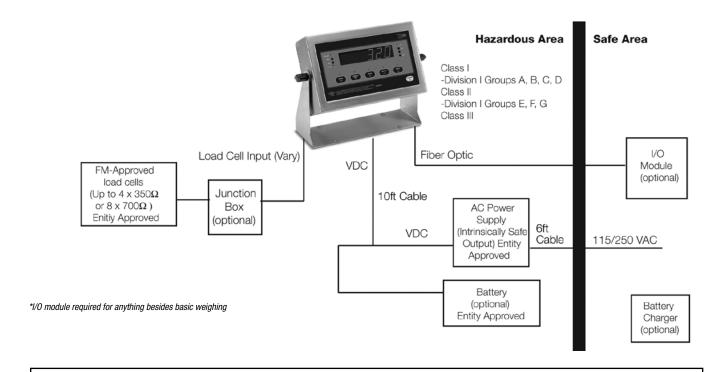
PART NUMBER/PRICE

PART #	DESCRIPTION	PRICE
91233	1233 320IS Intrinsically-Safe Digital Weight Indicator five button keypad with battery pack and charger & tilt stand	
91234	320IS Instriniscally-Safe Digital Weight Indicator five button with A/C power supply	Consult
86241	320IS indicator only	Consult
Hazardou	s Environment Cable	
32817	EL147IS hazardous environment cable	Consult
72241	Hazardous environment 3 conductor	Consult
78026	Fiber optic, duplex cable 100 ft	Consult
78027	Fiber optic, duplex cable 200 ft	Consult

OPTIONS/ACCESSORIES

PART #	DESCRIPTION	PRICE
72713	Power supply, IS-EPS-100-240 VAC	Consult
72725	IS-6V battery option with cable adapter	Consult
74001	Battery charger, 115VAC	Consult
74002	Battery charger, 115/230VAC	Consult
80869	Fuse, 1.25A, 250V TR5 time-lag (replacement part for the I/O Module)	Consult
72726	Tilt stand (required for battery model)	Consult
*89239	I/O module, stainless steel NEMA 4 enclosure, safe area option (requires fiber optic cable, AC power required)	Consult
83388	Timer relay kit includes din rail, timer relay for latching and mount	Consult
74612	Installation manual	Consult
78076	I/O module manual	Consult

^{*} Includes relays



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.



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.