

Intrinsically Safe

320IS

Intrinsically Safe Digital Weight Indicator



Standard Features

- LED display, 0.8 in (20 mm), 6-digit, 16-segment
- Stainless steel NEMA Type 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
- Duplex fiber optic interface
- 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 1 and 2; Groups A, B, C, D, E, F and G

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

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.

Approvals



Measurement
Canada
Approved



Specifications

Load Cell Excitation:

3.0 VDC at 87.5 Ω
4.6 VDC at 700 Ω

Load Cell Current:

34 mA (4 x 350 Ω load cells) or (8 x 700 Ω 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 μ V/graduation minimum
1.5 μ V/graduation recommended

Conversion Rate:

60 updates/second

Resolution:

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

Display Increments:

1, 2, 5

Display:

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

Decimal Point:

Configurable with dead zeros

Unit Switching:

Configurable for 2 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:

Six-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 - 175 mA
Maximum power consumption 0.25 watts

Operating Temperature:

14° F to 104° F (-10° C to 40° C) legal for trade

Rating/Material:

Stainless steel NEMA Type 4X/IP66 enclosure

Optional Battery:

Operating times: 4 x 350 Ω = 35-40 hrs
1 x 350 Ω = 40-50 hrs
8 x 700 Ω = 35-40 hrs
Charging Times: 10 hrs for dead battery,
14 hrs 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
c-UL Listed
FM Entity
Measurement Canada AM-5560

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Part Number/Price

PART #	DESCRIPTION	PRICE
91233	320IS intrinsically-safe digital weight indicator five-button keypad with battery pack and charger & tilt stand	Consult
91234	320IS intrinsically-safe digital weight indicator five-button with A/C power supply	Consult
177500	320IS indicator only	Consult

Options/Accessories

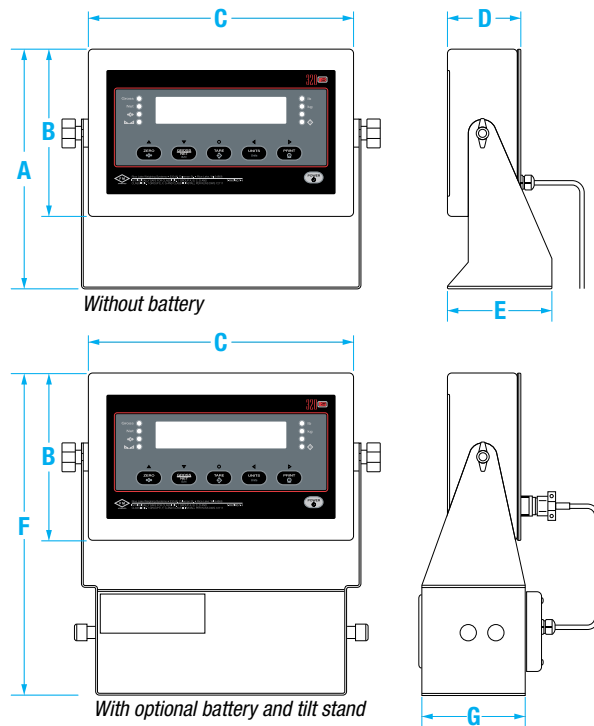
PART #	DESCRIPTION	PRICE
174049	Power supply, IS-EPS-100-240 VAC	Consult
72725	IS-6 V battery option with cable adapter	Consult
74001	Battery charger, 115 VAC	Consult
74002	Battery charger, 115/230 VAC	Consult
80869	Fuse, 1.25A, 250 V TR5 time-lag (replacement part for the I/O module)	Consult
72726	Tilt stand (required for battery model)	Consult
89239*	I/O module, stainless steel NEMA Type 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

Hazardous Environment Cable

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

* Includes relays

I/O module required for anything besides basic weighing



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)
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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)

