

320IS

Intrinsically Safe Digital Weight Indicator

**Standard Features**

- LED display, 0.8 in (20 mm), six-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: two serial ports, two analog outputs, four 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.

ApprovalsMeasurement
Canada
Approved

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.

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:

Four- and six-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

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:

Six-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
UL/cUL Listed
FM Entity
Measurement Canada AM-5560

Part Number/Price

Part #	Description	Price
91233	320IS intrinsically-safe digital weight indicator five-button keypad with battery pack and charger & tilt stand	\$1,827.00
91234	320IS intrinsically-safe digital weight indicator five-button with A/C power supply	\$1,827.00
177500	320IS indicator only	\$1,095.00

Options/Accessories

Part #	Description	Price
174049	Power supply, IS-EPS-100-240 VAC	\$845.00
179142	DC extension cable 10 ft	\$100.00
179143	DC extension cable 25 ft	\$125.00
179144	DC extension cable 50 ft	\$150.00
179145	DC extension cable 75 ft	\$200.00
179146	DC extension cable 100 ft	\$225.00
72725	IS-6 V battery option with cable adapter	\$545.00
74001	Battery charger, 115 VAC	\$149.00
74002	Battery charger, 230 VAC	\$535.00
80869	Fuse, 1.25A, 250 V 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 Type 4 enclosure, safe area option (requires fiber optic cable, AC power required)	\$1,295.00
83388	Timer relay kit includes din rail, timer relay for latching and mount	\$370.00
74612	Installation manual	\$35.00
78076	I/O module manual	\$30.00
Hazardous Environment Cable		
32817	EL147IS hazardous environment cable	\$2.85/ft
72241	Hazardous environment 3 conductor	\$2.25/ft
78026	Fiber optic, duplex cable 100 ft	\$135.00
78027	Fiber optic, duplex cable 200 ft	\$270.00

* 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)
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)			

