

# 882IS/882IS Plus

Intrinsically Safe Digital Weight Indicator



## Standard Features

- 0.8 in, seven-digit, seven-segment LCD display with white LED backlight
- Stainless steel NEMA 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
- Numeric keypad (882IS Plus only)
- Duplex fiber optic interface
- Power ON/OFF; battery save mode
- I/O module option: one serial port, optional analog outputs, optional fieldbus cards
- Time & date (requires I/O module)
- FM Entity Approved for use in hazardous locations per Rice Lake Weighing Systems control drawing file number 180948

## Approvals



Measurement  
Canada  
Approved  
pending

Rice Lake Weighing Systems® warrants that all Rice Lake Weighing Systems intrinsically safe (IS) equipment and systems installed by a qualified electrician 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 by a 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),  
1,000,000 expanded  
The maximum number of allowed graduations will vary by application

### Display Increments:

1, 2, 5

### Display:

Seven-digit, seven-segment LCD display 121 x 24 dot matrix messaging area with white LED backlight

### 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:

**882IS:** Zero, Gross/Net, Tare, Print, Units Conv, Start, Stop

**882IS Plus:** Zero, Gross/Net, Tare, Print, Units Conv, Start, Stop, Full numeric keypad

### Front Panel:

Ten-button plus power button flat membrane panel

### Front Panel 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

### Electrical Operating Temperature:

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

### Rating/Material:

Stainless steel IP66 enclosure

### Optional Battery:

Operating times: 4 x 350 Ω = 60 hrs.  
1 x 350 Ω = 80-100 hrs. Charging times: 8-10 hrs

### Weight:

6.1 lb (2.8 kg)

### Warranty:

One-year limited warranty

### Intrinsic Safety:

#### FM/cFM:

Class I, II, III, Division 1, Groups ABCDEFG T4  
Class I, Zone 0 AEx/Ex ia IIC T4 Ga  
Zone 20 AEx/Ex ia IIIC T135°C Da  
Ta = -10°C to +40°C (14°F to 104°F)

#### ATEX/IECEx:

II 1 G Ex ia IIC T4 Ga  
II 1 D Ex ia IIIC T135°C Da

### Approvals:

UL/cUL Listed\* IECEx  
FM Entity NTEP  
ATEX Measurement Canada (pending)

\*UL is only applicable to 882IS I/O and battery charger

**Part Number/Price**

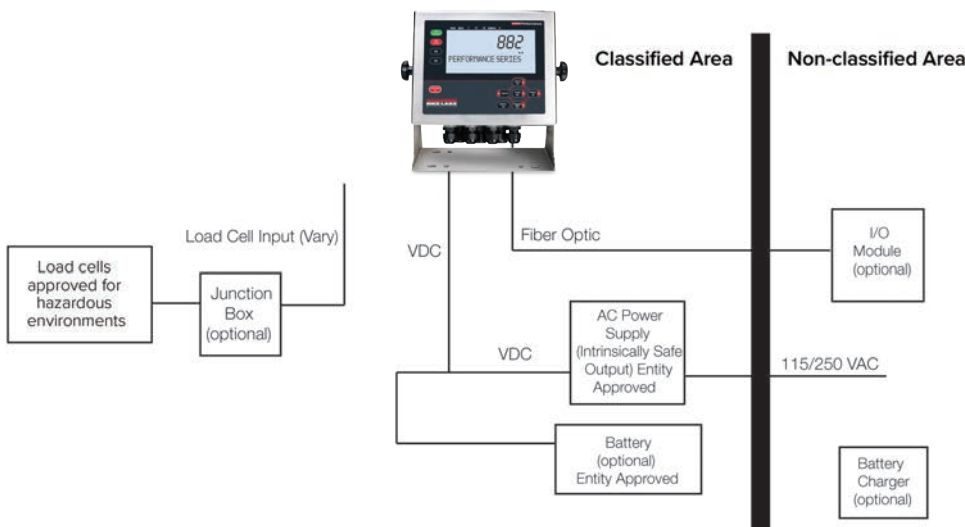
Part #	Description	Price
<b>882IS</b>		
195091	882IS 7.5VDC with standard tilt stand	Consult
185288	882IS with battery and charger (North American plug)	Consult
194231	882IS with battery and charger (EU plug)	Consult
194232	882IS with battery and charger (UK plug)	Consult
185290	882IS with power supply	Consult
194235	882IS indicator with power supply and metric thread adapter	Consult
<b>882IS Plus</b>		
195092	882IS Plus 7.5VDC with standard tilt stand	Consult
185291	882IS Plus with battery and charger (North American plug)	Consult
194233	882IS Plus with battery and charger (EU plug)	Consult
194234	882IS Plus with battery and charger (UK plug)	Consult
185293	882IS Plus with power supply	Consult
194236	882IS Plus indicator with power supply and metric thread adapter	Consult

**Options/Accessories**

Part #	Description	Price
180831	Battery option, IS6V2	Consult
194191	Battery charger, IS6V2, 100-240VAC NEMA 5-15 (North American plug)	Consult
194189	Battery charger, IS6V2 100-240VAC (EU plug)	Consult
194192	Battery charger, IS6V2 100-240VAC (UK plug)	Consult
180837	Power supply, 882IS mb-EPS-100-240-X2, dual output 6.8 VDC 200mA	Consult
195109	Power supply, 882IS mb-EPS-100-240-X2, dual output 6.8 VDC 200mA, 1/2 in NPT-M20	Consult
179668	Cable, M12 power 22 in hazardous location (for battery version)	Consult
179669	Cable, M12 power 10 ft hazardous location	Consult
179670	Cable, M12 power 50 ft hazardous location	Consult
179671	Cable, M12 power 100 ft hazardous location	Consult
163751	Tilt stand, 882IS	Consult
179678	Tilt stand, 882IS battery option	Consult
177709	Module, 882 smart I/O interface	Consult
78026	Fiber optic, duplex cable 100 ft	Consult
78027	Fiber optic, duplex cable 200 ft	Consult

**Option Cards**

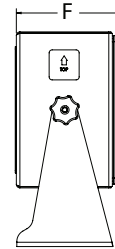
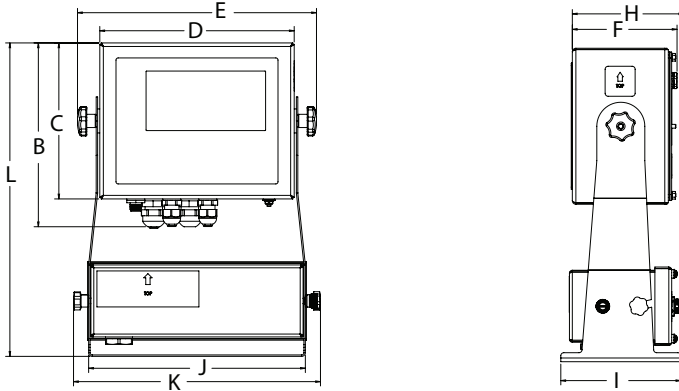
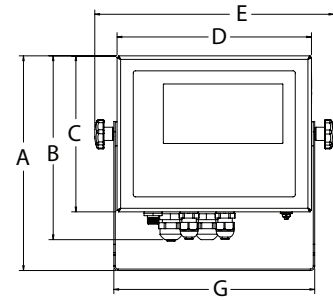
190528	Single analog output (0-10VDC, 0-20 mA, 4-20 mA)	Consult
190530	882 option, Ethernet/IP	Consult
190531	882 option, DeviceNet	Consult
190532	882 option, ProfiNet	Consult
190534	882 option, Profibus	Consult
190533	882 option, Modbus TCP	Consult
190535	882 option, EtherCAT	Consult



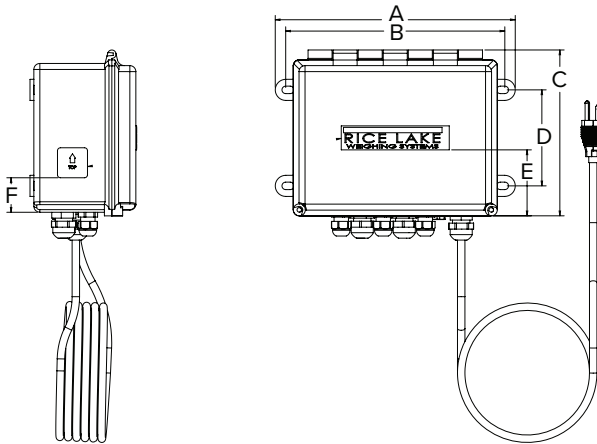
# 882IS/882IS Plus

Intrinsically Safe Digital Weight Indicator

Dimensions			
Without Battery			
A	8.94 in (227.1 mm)	E	9.96 in (253 mm)
B	7.66 in (194.6 mm)	F	4.36 in (110.7 mm)
C	6.50 in (165.1 mm)	G	8.37 in (212.6 mm)
D	8.10 in (205.7 mm)		
With Optional Battery and Tilt Stand			
H	4.64 in (117.9 mm)	K	10.29 in (261.4 mm)
I	5.00 in (127 mm)	L	13.06 in (331.7 mm)
J	9.03 in (229.4 mm)		



Dimensions			
Optional I/O Module			
A	10.00 in (254 mm)	D	4.00 in (101.6 mm)
B	9.13 in (231.9 mm)	E	2.75 in (69.9 mm)
C	6.91 in (175.5 mm)	F	1.50 in (38.1 mm)



Dimensions			
Optional Power Supply			
A	9.25 in (235 mm)	G	0.75 in (19.1 mm)
B	2.63 in (66.8 mm)	H	1.25 in (31.8 mm)
C	1.13 in (28.7 mm)	I	2.00 in (50.8 mm)
D	6.20 in (157.5 mm)	J	1.00 in (25.4 mm)
E	3.11 in (79 mm)	K	3.00 in (76.2 mm)
F	2.00 in (50.8 mm)		

