

INTRINSICALLY SAFE DIGITAL WEIGHT INDICATOR









800-472-6703 **www.ricelake.com**

The Hazardous Environment Instrumentation Solution

Designed for hazardous locations that are potentially explosive, the 882IS digital weight indicator is built to safely operate in these settings without sacrificing performance. With cFMus, ATEX and IECEx approvals, the 882IS is the industry's choice for flammable and combustible applications such as fuel refineries, chemical plants, distilleries, textile manufacturing and more.

Safe, Accurate Weight Readings in Hazardous Locations

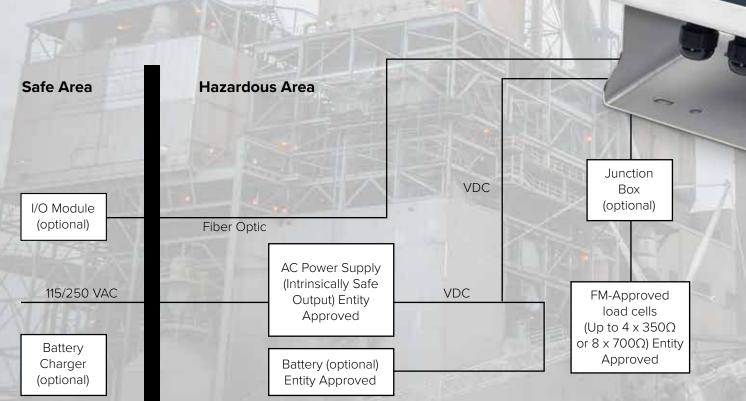
The intrinsically safe, auto-ranging power supply enables wiring to a single AC conduit line and seal from the safe area. An FM approved, rechargeable battery is also available for isolated power or movable applications.

The 882IS utilizes a backlit LCD display to maintain brilliant visibility for user-friendly operation, even in dimly lit areas. Its stainless steel enclosure provides superior protection from the elements.

Enhanced Connectivity

Expand flexibility with an optional safe area I/O Module, featuring a serial port, Ethernet TCP/IP and optional analog output or fieldbus cards for communication with printers, computers and other peripherals. A duplex fiber-optic port allows for electrically-isolated communication with the I/O Module.

To complete the IS entity approved system, Rice Lake offers FM/ATEX-approved load cells and junction boxes that interface with the 882IS indicator.



PERFORMA



SPECIFICATIONS

LOAD CELL EXCITATION:

3.0 VDC at $87.5\,\Omega$ 4.6 VDC at $700\,\Omega$

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:

 $0.6\,\text{mV/V} - 4.0\,\text{mV/V}$

ANALOG SIGNAL SENSITIVITY:

 $0.2 \,\mu\text{V/graduation minimum}$ $1.5 \,\mu\text{V/graduation recommended}$

CONVERSION RATE:

60 updates/second

RESOLUTION:

10,000 displayed graduations (Legal for Trade), 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

LINIT SWITCHING

Configurable for two units of measurement with front panel operation with conversion for tare and setpoint values

DISPLAY 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 flat membrane panel

FRONT PANEL ANNUNCIATORS:

Center Zero, Gross, Net, Motion, lb, kg, oz, g

MOTION BAND:

Configurable to \pm 1 or \pm 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: $4 \times 350 \Omega = 60 \, hrs. \ 1 \times 350 \Omega = 80-100 \, hrs.$ Charging times: $8-10 \, hrs$

WEIGHT

6.1 lb (2.8 kg)

WARRANTY:

One-year limited warranty

882IS

INTRINSICALLY SAFE DIGITAL WEIGHT INDICATOR



882IS/882IS Plus Hazardous (Classified) Location Electrical Equipment Per U.S., Canadian, ATEX and IECEx Requirements

Certificate No: FM18US0195X, FM18CA0092X, FM18ATEX0047X, IECEX FMG

18.0018X

Approval Standards: FM/cFM:

INTRINSICALLY SAFE

Class I,II,III, Division 1, Groups ABCDEFG T4

Class I, Zone O 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

Equipment Ratings: II 1 G Ex ia IIC T4 Ga

II 1 D Ex ia IIIC T135°C Da

Model IS6V2 (Battery) Hazardous Location Electrical Equipment Per U.S., Canadian, ATEX and IECEx Requirements

Certificate No: FM18US0195X, FM18CA0092X, FM18ATEX0047X, IECEx FMG

18.0018X

Approval Standards: FM/cFM:

INTRINSICALLY SAFE

IS for 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

Equipment Ratings: II 1 G Ex ia IIC T4 Ga

II1 D Ex ia IIIC T135°C Da

Model mb-EPS-100-240-X2 (Power Supply) Hazardous Location Electrical Equipment Per U.S., Canadian, ATEX and ICEx Requirements

Certificate No: FM18US0195X, FM18CA0092X, FM18ATEX0047X, IECEX FMG

18.0018X

Approval Standards: FM/cFM:

Class I,II,III, Division 1, Groups ABCDEFG T4 with IS outputs for

Class I,II,III, Division 1, ABCDEFG

Class I, Zone 1, AEx/Ex mb [ia Ga] IIC T4 Gb Zone 21, AEx/Ex mb [ia Da] IIIC T135°C Db Ta = -10°C to +40°C (14°F to 104°F)

ATEX/IECEx

Equipment Ratings: II 2(1) G Ex mb [ia Ga] IIC T4 Gb

II 2(1) D Ex mb [ia Da] IIIC T135°C Db

FEATURES

- · Seven-digit, seven-segment LCD display with white LED backlight
- · Stainless steel NEMA IP66 enclosure
- T4 temperature rating
- · Front panel digital calibration
- Numeric keypad (882IS Plus only)Duplex fiber optic interface
- Duplex liber optic litterface
- Power ON/OFF; battery save mode
- I/O module option: one serial port, optional analog outputs,
 actional fieldbug code.

optional fieldbus cards

 FM Entity Approved for use in hazardous locations per Rice Lake Weighing Systems control drawing file numbers 180948, 182301, and 186430

OPTIONS

- · Battery option, IS6V2 VDC
- Battery charger, 6 VDC
- Power supply, 882IS mb-EPS-100-240-X2, dual output 6.8 VDC 200mA
- · Cable, M12 power 22 in hazardous location (for battery version)
- Cable, M12 power 10 ft hazardous location
- Cable, M12 power 50 ft hazardous location
- Cable, M12 power 100 ft hazardous location
- · Tilt stand, 882IS battery option
- · Module, 882 smart I/O interface

APPROVALS









Measurement
Canada
Approved

pending

*UL applicable for 882IS I/O module and battery charger

RICE LAKE