880/880 Plus Performance™ Series Programmable Weight Indicator/Controller

RICE LAKE
WEIGHING SYSTEMS

As of: Thursday, March 6, 2025

Standard Features

- LED display
- USB device port connects directly to a PC
- Ethernet TCP/IP polled or continuous polled or continuous, server/client
- Built-in DIN-rail clips on controller box (panel mount)
- Display and controller can be separated up to 250 ft (panel mount)
- Hardware slot for one option card
- Operator functions through menu key for audit trail, preset tare, accumulator, time and date and setpoints
- Audit trail tracking for configuration and calibration changes. Password protection for user and configuration changes.
- 20 setpoints with latched batch engine or unlatched outputs
- Four onboard digital I/O channels
- Programmable ticket formats up to 1,000 characters for header text, gross, net, accumulator and setpoints
- Five-point linearization calibration
- Local/remote operation
- Multi-range or multi-interval weighing
- Filter settings for light, medium and heavy noise

Approvals

Measurement
Canada
Approved

CE

Options

UK
CA

- Analog output
- Relay board
- Fieldbus connectivity
- Dual serial output (v4.00 and newer)
- 24-channel digital I/O (v4.00 and newer)
- Truck in/out program for 100 vehicle IDs
- Adapter plate for converting 310 and 520 panel mounts
- Panel mount kit for universal enclosure

⚠ WARNING:
Cancer
and
Reproductive
Harm
California
Proposition
65

A Weight Indicator with a Range of Connectivity

Designed with the user process in mind and built for communication, Rice Lake's Performance™ Series weight indicators/controllers are packed with power, yet simple in design. Intuitive multifunction menu keys allow navigation in any application and the NEMA Type 4X/IP69K-rated gasket effectively keeps internal components out of harm's way. Twenty time- and weight-based setpoints provide ultra responsiveness to handle any process control requirement. For customized operation, use Rice Lake's intuitive iRite software to program functionality specific to the application. The innovative 880 and 880 Plus also accommodate a wide range of connectivity—from USB and RS-232/ RS-485 to Ethernet TCP/IP.

Install an option card for additional fieldbus compatibility, analog output, relay board, dual serial outputs or 24-channel digital inputs/outputs. With two different enclosure types to choose from, Rice Lake's 880 Performance Series exceeds your expectations wherever you need it.

880 Panel Mount

The sleek design of the 880 not only looks great, it also fits great into existing and new panels alike. At just under five inches deep, the efficiently designed enclosure fits easily into compact spaces with DIN-rail clips to make mounting quick and effortless. The 880's modular design enables the display to be remotely mounted, especially useful for instances when it is inconvenient to mount the controller on a conventional panel.

880 Plus Universal Enclosure

Equipped with a universal mount, the 880 Plus delivers all of the powerful features of the 880 when a panel mount isn't necessary. The numeric keypad simplifies the user experience, making operations more convenient and flexible.

880/880 Plus Specifications

Power:
Line voltages: 100 to 240 VAC
Frequency: 50/60 Hz
DC voltages: 12 to 24 VDC

Power Consumption:
AC: 15 W, DC: 20 W

Excitation Voltage:
10 VDC (±5 VDC), 16 × 350 ohm or 32 × 700 ohm load cells

Analog Signal Input Range:
-45 mV to 45 mV

Analog Signal Sensitivity:
0.3 μV/graduation minimum at 7.5 Hz; 1.0 μV/graduation recommended

A/D Sample Rate:
7.5 to 960 Hz, software selectable

Resolution:
Internal: 8,000,000 counts
Display: 999,999

System Linearity:
± 0.01% full scale

Digital I/O:
Four I/O onboard, primary keys, pseudo functions, batching functions

(Optional) Analog Output:
Voltage output: 0–10 VDC
Load resistance: 1 k ohm minimum
Current output: 0–20 mA or 4–20 mA
External loop resistance: 500 W maximum

(Optional) Relay Board:
Four channel relay module, dry contact 3 A at 115 VAC, 3 A at 30 VDC

Communication Ports:
RS-232 full duplex or RS-485 half duplex; USB micro A/B connector 2.0; Ethernet TCP/IP

Annunciators:
Gross, net, center of zero, standstill, lb, kg, tare, preset tare, multi-range/interval 1/2/3

Display:
LED, 0.56 in (14 mm), six-digit, 14-segment with decimal or comma

Keys/Buttons:
Membrane panel, tactile feel

Dimensions:
(L × W × H)
Panel: 6.00 × 4.95 × 4.00 in (152 × 126 × 102 mm)
Universal: 9.87 × 4.00 × 9.38 in (248 × 102 × 235 mm)

Temperature:
Certified: 14 °F to 104 °F (-10 °C to 40 °C)
Operating: 14 °F to 122 °F (-10 °C to 50 °C)

Rating/Material:
Panel display: stainless steel, NEMA Type 4X, Type 12 and IP69K
Panel mount controller: Aluminum
Universal: stainless steel, IP69K

Weight:
Panel: 2.5 lb (1.2 kg);
Universal: 6.5 lb (2.9 kg)
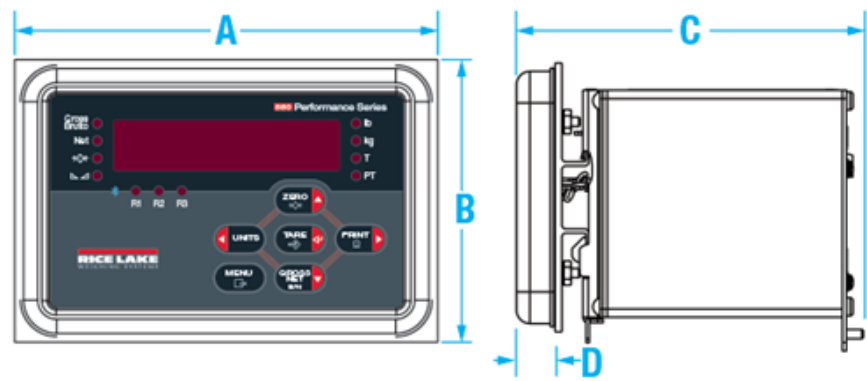
Warranty:
Two-year limited
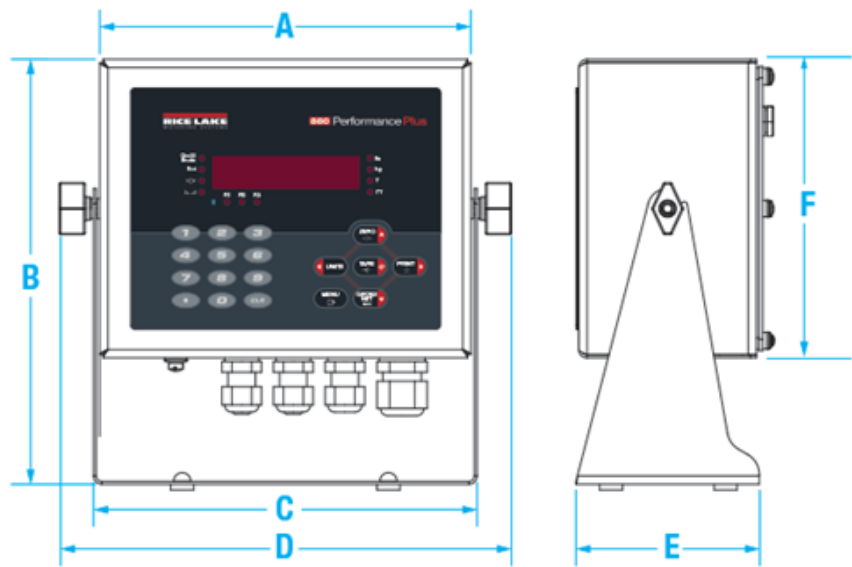
EMC Immunity:
10 V/m

Approvals:
NTEP 13-080 Class III/IIIL, 10,000d
Measurement Canada AM-5931C
OIML R76/2006-A-NL1-18.23 Class III, 10,000d
EU Test Certificate TC8463
CE Marked
cULus Listed (universal)
cULus Recognized (panel mount)

880 Panel Mount Dimensions

A	6.0 in (152 mm)	C	4.95 in (126 mm)
B	4.0 in (102 mm)	D	0.58 in (14 mm) BEZEL DEPTH

880 Universal Dimensions

A	8.10 in (206 mm)	D	9.87 in (248 mm)
B	9.38 in (235 mm)	E	4.0 in (102 mm)
C	8.37 in (213 mm)	F	6.5 in (165 mm)

Parts

Part #	Description

880 Panel Mount AC Powered (*Power cord not included)

Part #	Description
177976	Indicator,880 Panel Mount 5.5, Wider Boards, LED Display, 115-230VAC Power Supply
177979	Indicator,880 Panel Mount 5.5, Wider Boards, LED,115-230VAC with Option Analog Output 1-10VDC, 0-20mA, 4-20mA.
177980	Indicator,880 Panel Mount 5.5, Wider Boards, LED,115-230VAC, with Option Relay Board, 4 Dry Contact Outputs
177982	Indicator,880 Panel Mount 5.5, Wider Boards, LED, 115-230VAC, with Option EtherNet/IP Protocol
177983	Indicator,880 Panel Mount 5.5, Wider Boards, LED, 115-230VAC, with Option ProfiNet Protocol
177984	Indicator,880 Panel Mount 5.5, Wider Boards, 115-230VAC, with Option Modbus/TCP Protocol
177985	Indicator,880 Panel Mount 5.5, Wider Boards, LED, 115-230VAC, with Option Profibus DP Protocol
177986	Indicator,880 Panel Mount 5.5, Wider Boards, LED, 115-230VAC, with Option DeviceNet Protocol
179155	Indicator,880 Panel Mount 5.5, Wider Boards, LED, 115-230VAC, with Option EtherCAT Protocol

880 Panel Mount DC Powered (*Power cord not included)

Part #	Description
177987	Indicator,880 Panel Mount 5.5, Wider Boards, LED Display, 9-36VDC Power Supply

880 Plus Universal AC Powered

Part #	Description
177989	Indicator,880 Universal LED Display, 115VAC with NEMA 5-15 Plug
178496	Indicator,880 Universal 5.5 LED, 115VAC NEMA 5-15 cord, with Option Analog Output
178499	Indicator,880 Universal LED, 115VAC with NEMA 5-15 Cord, with Option Relay Board
179148	Indicator,880 Universal LED Display, 115VAC NEMA 5-15 Plug, with Option Profinet Module
179147	Indicator,880 Universal LED Display, 115VAC NEMA 5-15 Plug, with Option EtherNet/IP
179149	Indicator,880 Universal LED Display, 115VAC NEMA 5-15 Plug, with Option Modbus/TCP
179150	Indicator,880 Universal LED Display, 115VAC NEMA 5-15 Plug, with Option Profibus Module
179152	Indicator,880 Universal LED Display, 115VAC NEMA 5-15 Plug, with Option DeviceNet
179154	Indicator,880 Universal LED Display, 115VAC NEMA 5-15 Plug, with Option EtherCAT Module
177990	Indicator,880 Universal LED Display, 115-230VAC with CEE 7/7 Euro Plug
178497	Indicator,880 Universal LED, 115-230VAC with CEE7/7, with Option Analog Output
178500	Indicator,880 Universal LED, 115-230VAC with CEE 7/7 Cord, with Option Relay Board

880 Plus Universal DC Powered

Part #	Description
178495	Indicator,880 Universal LED Display, 9-36VDC Power Supply

Options

Part #	Description

Option Cards (5.5 in CPU only)

Part #	Description
179156	Ind Opt,Analog Output 0-10VDC, 0-20mA, 4-20mA used in 880 Indicator
179157	Ind Opt,880 Relay Card Four Channel, Dry Contact, 3A @ 115VAC, 5A @ 30VDC.
197343	880 Opt,Digital I/O Option Card
197347	880 Opt,Serial Interface Option Card

Network and Fieldbus Interface Cards

Part #	Description
179158	Ind Opt,EtherCat Model 880 Indicator
179159	Ind Opt,Ethernet/IP Model 880 Indicator
179160	Ind Opt,Profinet Model 880 Indicator
179161	Ind Opt,Modbus TCP Model 880 Indicator
179162	Ind Opt,Devicenet Model 880 Indicator
179163	Ind Opt,Profibus Model 880 Indicator
205566	Ind Opt,Ethernet/IP Dual Port, Model 880 Indicator
205567	Ind Opt,Profinet Dual Port, Model 880 Indicator

Hardware

Part #	Description
153660	Kit,Sealing Metrological 880 Controller
158404	Adapter Plate, 880 Covers IQ310 and 520 Cutout
101923	I/O,Relay Rack Cased 4 Channel OPTO22 Relay Rack, 7 Foot I/O Cable, 6 Cord Grips, Breather Vent. *** RELAYS NOT INCLUDED ***
177850	Panel,Mount Option 880, 882D, 882IS Universal Indicator, Gasketed Non-NEMA Seal.
180835	Backplate ASSY,880 Uni RJ-45 Chassis Mounted Receptacle, Plugged Hole for Alternative Interface
15436	Power Cord,Pigtail 9ft 10in, Black, SVT, 18 gauge/3 conductor, CEE color code
105382	Power Cord,230VAC,CEE7/7 Continental Europe, Molded Plug, 8ft 2in with Pigtail, HO5RN-F, Harmonized
197724	Overlay,Clear Protective Window with Adhesive Edge,Package of Five Each,882
223864	Knob, Star M6x1.0 304 SST
197422	Universal backplate with micro USB receptacle

Cables

Part #	Description
152434	Cable,USB A to micro A Shielded, 2 Meters Long AK67321-2-R
156817	Cable,Ethernet TCP/IP CAT.5E Shielded RoHS compliant Blue RJ45 connectors 1 meter

Part #	Description
156806	Cable, USB 2.0 A to A Black Vers 2.0 RoHS compliant Male to Male 1 meter
156809	Cable, USB 2.0 A to USB-B Black Vers 2.0 RoHS compliant Male Type A to Male Type B Micro 1 meter

Manuals and Software

152240	LIT,Operation Manual 880 Performance Series (English)
158387	LIT,Technical Manual 880 Performance Series Indicator/Controller (English)

Primary Component Parts

131740	Overlay,Membrane Switch Panel 880 Panel Mount
163986	Overlay,880 Universal Desktop Membrane Switch Panel with Numeric Keys
131598	Board Assy,880 LED Disp. 880 LED Display
175603	Board Assy,880/882 Power 115-230VAC, 5.5 inch Wide
175604	Board Assy, 880/882 DC Power Supply, 9-36VDC input, +/- 6VDC output, 5.5 inch Wide
175109	Board Assy,CPU 880 5.5 inch Wide, Wider Format

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