

# 880/880 Plus Performance™ Series

Digital Weight Indicator/Controller



Board information:  
previous version green CPU board is 5.0" wide  
current version blue CPU board is 5.5" wide

## Standard Features

- LED display, 0.56 in (14 mm), six-digit, 14-segment
- RS-232 or RS-485 serial port
- USB device port connects directly to a PC
- USB host port connects to a keyboard or flash drive
- Ethernet TCP/IP polled or continuous
- AC or DC models
- 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 & 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
- Local/remote operation
- Multi-range or multi-interval weighing
- Filter settings for light, medium and heavy noise

### Options/Accessories

- Metrological hardware sealing kit
- Adapter plate for converting 310A and 520 panel mounts
- Panel mount kit for universal enclosure

## Specification Options

### Analog Output:

16-bit resolution, 0-10 VDC, 0-20 mA, 4-20 mA

### Relay Board:

Four dry contact relays; DC Max: 30 VDC at 3 amps; AC max: 250 VAC at 3 amps per contact

### EtherNet/IP Interface:

According to EN 50325-2

### Profinet Interface:

According to IEC 61784 (CPF-3/3)

### Modbus/TCP Interface:

Up to 8 bytes of I/O data, 100 Mbps full duplex Ethernet

### DeviceNet Interface:

According to EN 50325-2

### Profibus DP Interface:

According to EN 50170  
EtherCAT  
According to IEEE 802.3

## Approvals



Measurement  
Canada  
Approved

## Specifications

### Power:

Line voltages: 100-240VAC  
Frequency: 50-60 Hz  
DC voltages: 12-24VDC  
Power consumption: AC: 15WDC: 20W

### Excitation Voltage:

10VDC, 8 x 350Ω or 16 x 700Ω 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 typical at 120 Hz (manual only)  
4.0 μV/graduation typical at 960 Hz (manual only)  
1.0 μV/graduation recommended

### A/D Sample Rate:

7.5 to 960 Hz, software selectable

### Resolution:

Internal: Eight million counts 23 bit  
Display: 100,000

### System Linearity:

± 0.01% full scale

### Digital I/O:

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

### Communication Ports:

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

### Status Annunciators:

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

### Display:

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

### Keys/Buttons:

Flat membrane panel, tactile feel

### Temperature Range

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

### Dimensions (W x H x D):

Panel: 6 in x 4 in x 4.95 in (152 mm x 102 mm x 126 mm)  
Universal: 9.87 in x 9.38 in x 4.33 in (251 mm x 238 mm x 110 mm)

### Weight:

Panel: 2.5 lb (1.2 kg);  
Universal: 12 lb (5.4 kg)

### Rating/Material:

Display bezel NEMA Type 4X, IP69K  
Panel display: stainless steel  
Universal: stainless steel  
Controller box: aluminum

### Warranty:

Two-year limited warranty

### EMC Immunity:

EN 50082 Part 2 IEC EN 61000-4-2, 3, 4, 5, 6, 8, and 11

### Approvals:

NTEP CC 13-080 Class III/III L, 10,000d  
Measurement Canada AM-5931C Class III/III HD, 10,000d  
OIML R76/1992-GB1-04.02 Class III, 10,000d  
EU Test Certificate TC8463  
UL/cUL Listed (universal)  
UL/cUL Recognized (panel mount)  
CE Marked

# 880/880 Plus Performance™ Series

Digital Weight Indicator/Controller

## Part Number/Price

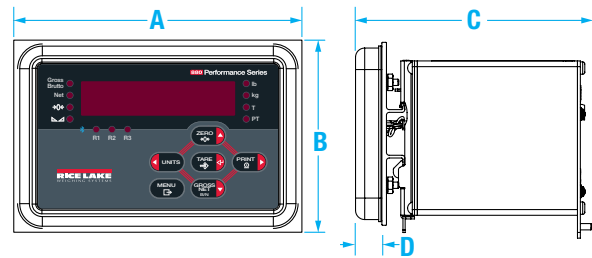
Part #	Description	Est. Weight	Price
<b>880 Panel Mount AC Powered*</b>			
151674	Display only	2 lb	\$315.00
177977	115-230VAC, controller only	4 lb	\$775.00
177976	115-230VAC	4 lb	\$1,050.00
177979	115-230VAC with analog output	4 lb	\$1,350.00
177980	115-230VAC with relay board	4 lb	\$1,350.00
177982	115-230VAC with EtherNet/IP	4 lb	\$1,600.00
177983	115-230VAC with ProfiNet	4 lb	\$1,600.00
177984	115-230VAC with Modbus/TCP	4 lb	\$1,600.00
177985	115-230VAC with Profibus DP	4 lb	\$1,600.00
177986	115-230VAC with DeviceNet	4 lb	\$1,600.00
179155	115-230VAC with EtherCAT	4 lb	\$1,600.00
<b>880 Panel Mount DC Powered*</b>			
177987	12-24 VDC	4 lb	\$1,150.00
177988	12-24 VDC controller only	4 lb	\$875.00
<b>880 Plus Universal AC Powered</b>			
177989 <sup>f</sup>	115 VAC	8 lb	\$1,275.00
178496 <sup>f</sup>	115 VAC, with analog	8 lb	\$1,575.00
178499 <sup>f</sup>	115 VAC, with relay board	8 lb	\$1,575.00
179147 <sup>f</sup>	115 VAC with EtherNet/IP	8 lb	\$1,825.00
179148 <sup>f</sup>	115 VAC with Profinet	8 lb	\$1,825.00
179149 <sup>f</sup>	115 VAC with Modbus/TCP	8 lb	\$1,825.00
179150 <sup>f</sup>	115 VAC with Profibus	8 lb	\$1,825.00
179152 <sup>f</sup>	115 VAC with DeviceNet	8 lb	\$1,825.00
179154 <sup>f</sup>	115 VAC with EtherCAT	8 lb	\$1,825.00
177990 <sup>††</sup>	115-230VAC	8 lb	\$1,275.00
178497 <sup>††</sup>	115-230VAC with analog	8 lb	\$1,575.00
178500 <sup>††</sup>	115-230VAC, with relay board	8 lb	\$1,575.00
<b>880 Plus Universal DC Powered</b>			
178495	12-24 VDC	8 lb	\$1,375.00

\*Power cable not included



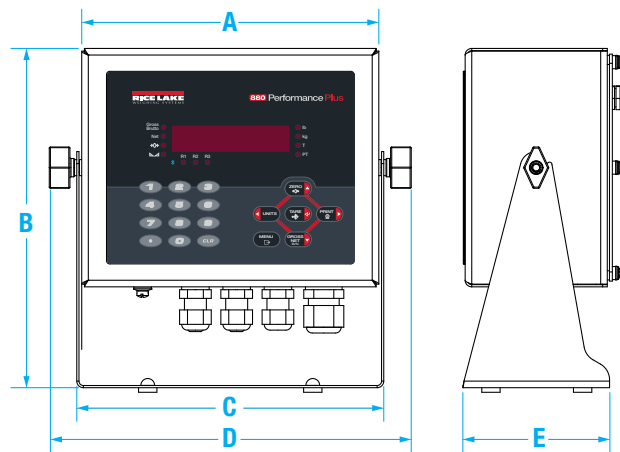
## Options/Accessories

Part #	Description	Price
<b>Option Cards (5.5 in CPU only)</b>		
179156	Analog output, 0-10 VDC, 0-20 mA, 4-20 mA	\$300.00
179157	Relay board, four dry contact outputs	\$300.00
<b>Network Cards</b>		
179158	EtherCAT interface	\$550.00
179159	EtherNet/IP® interface	\$550.00
179160	ProfiNet™ interface	\$550.00
179161	Modbus/TCP® interface	\$550.00
179162	DeviceNet™ interface	\$550.00
179163	Profibus DP interface	\$550.00
<b>Hardware</b>		
153660	Metrological sealing kit	\$10.00
158404	Adapter plate for IQ310 and 520 replacement	\$60.00
101923	Relay box enclosure, does not include relay	\$235.00
177850	Panel mount kit for universal enclosure	\$150.00
180835	Backplate with RJ-45 receptacle	\$90.00
15436	Power cord, pigtail with US NEMA 5-15 plug	\$17.00
105382	Power cord, pigtail with Euro Plug CEE 7/7	\$17.00



### 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) <b>BEZEL DEPTH</b>



### 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)		

## Options/Accessories

Part #	Description	Price
<b>Cables</b>		
152434	Cable, USB A to micro A shielded, 2 meters	\$15.00
156817	Cable, Ethernet TCP/IP CAT.5E shielded RoHS compliant blue RJ45 connectors 1 meter	\$30.00
156818	Cable, Ethernet TCP/IP CAT.5E shielded RoHS compliant blue RJ45 connectors 3 meters	\$37.00
156821	Cable, Ethernet TCP/IP CAT.5E shielded RoHS compliant blue RJ45 connectors 5 meters	\$45.00
<b>Manuals and Software</b>		
77925	Revolution™ scale software	\$35.00
152240	Operators manual	\$25.00
158387	Technical manual	\$25.00
<b>Primary Component Parts (5.5 in CPU only)</b>		
131740	Overlay, panel mount, six-key	\$55.00
163986	Overlay, universal with numeric keypad	\$65.00
131598	Display board	\$200.00
175603*	Power supply, 100-240VAC	\$175.00
175604*	Power supply, 12-24VDC	\$275.00
175109*	CPU board	\$525.00

\* Design change in 2017 to 5.5 in wide controller, see replacement parts catalog for the 5.0 inch wide boards.