# 880 Performance™ Series

## PANEL MOUNT AND UNIVERSAL INDICATOR/CONTROLLER



RICE LAKE
WEIGHING SYSTEMS

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**www.ricelake.com**

# Power to Perform

Designed with the user process in mind and built for communication, Rice Lake's Performance™ Series indicators/controllers are packed with power, yet simple in design. Intuitive multifunction menu keys allow navigation in any application and the NEMA Type 4X, Type 12 and 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. With two different enclosure types to choose from, Rice Lake's 880 Performance Series exceeds your expectations wherever you need it.

## Exceptional Stability

Adaptive filtering eliminates interference from vibration or noise, speeding up the communication process. You can be confident that the displayed output is not only accurate, but also responsive despite environmental interference.

## Expansive Communication

The expanded communication capabilities allow Performance Series indicators to deliver a wide variety of connectivity options. Connect directly to a PC through the USB device port. Analog output adds even more communication capacity for devices that need an analog signal. Six available option cards can be added for communicating through fieldbus protocols including: EtherNet/IP, Profinet, Modbus TCP, DeviceNet, EtherCAT and Profibus DP.

**OPTION SLOTS**

EtherNet/IP™
Profinet®
Modbus TCP®
DeviceNet®
Profibus® DP
EtherCAT®
Analog Output
4-Channel Relay

*Actual size
140 W x 102 H x 126 D mm*

*USB (device)*

*Modular Controller Box*

## 880 Performance

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 clip 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 Performance Plus

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.

## Strong Communicator

Data compatibility is assured with customizable demand formats for gross, net, accumulator and setpoints; and customizable stream format. Onboard communication includes:

- RS-232 or RS-485
- USB (device)
- Ethernet TCP/IP (Server and Client)

## Growth Potential

The 880 Performance Series easily adapts to almost any application. Use the option slot to enhance functionality with:

- Analog output with 0-10 VDC, 0-20 mA, 4-20 mA; configurable negative value tracking
- Dry contact four-channel relay board increase the number of available outputs
- Fieldbus protocols including EthernNet/IP, Profinet, Modbus TCP, DeviceNet, EtherCAT and Profibus DP

## Advanced Design

Efficient construction incorporates next-generation technology in an intelligent, compact form.

- NEMA Type 4x, NEMA Type 12 and IP69K stainless steel enclosure endures harsh environments
- Bright, six-digit, 14-segment LED display
- Panel mount display can be mounted externally from the controller
- Panel mount provides external pluggable connections

## Concentrated Power

The 880 Performance Series is packed with top-end performance.

- Selectable up to 960 Hz A/D sample rate
- Batch engine with 20 setpoints and 12 setpoint types (sequenced or free-running)
- Programmable with iRite for custom applications
- Four digital I/O can be used as operator inputs or control outputs
- Powered by AC or DC

# 880 Performance™ Series
## PANEL AND UNIVERSAL MOUNT INDICATOR/CONTROLLER

## STANDARD FEATURES

- LED display, 14 mm, six-digit, 14-segment
- RS-232 or RS-485 serial port
- USB device port connects directly to a PC
- 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 70 m (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 1000 characters for header text, gross, net, accumulator and setpoints
- Local/remote operation
- Multi-range or multi-interval weighing
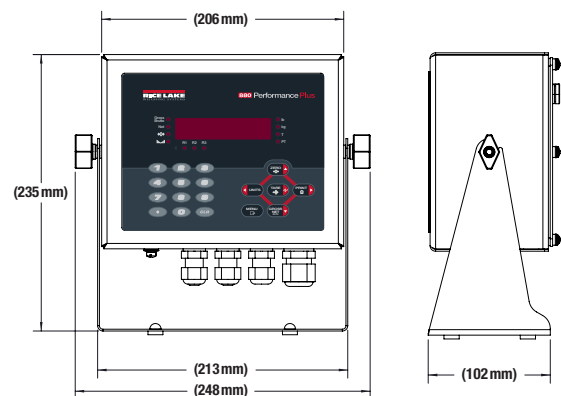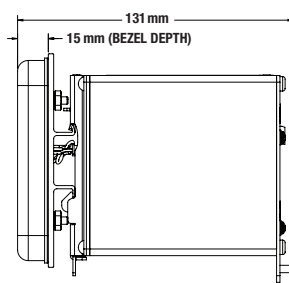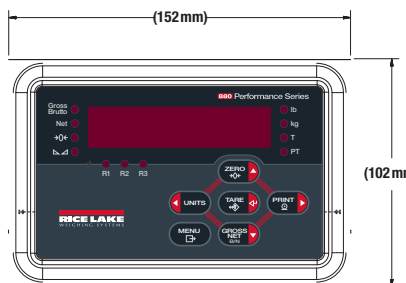- Filter settings for light, medium and heavy noise

## OPTIONS/ACCESSORIES

- Metrological hardware sealing kit
- Adapter plate for converting 310 A and 520 panel mounts
- Panel mount kit for universal enclosure
- Truck in/out program for 100 vehicle IDs

## SPECIFICATIONS

| | |
|---|---|
| **POWER:** | Line voltages: 100-240 VAC<br>Frequency: 50-60 Hz<br>DC voltages: 11-30 VDC<br>Power consumption: AC: 15 WDC: 20 W |
| **EXCITATION VOLTAGE:** | 10 VDC, 16 x 350Ω |
| **ANALOG SIGNAL INPUT RANGE:** | -45 mV to 45 mV |
| **ANALOG SIGNAL SENSITIVITY:** | 0,3 µV/graduation minimum at 7,5 Hz;<br>1,0 µV/graduation typical at 120 Hz (manual only)<br>4,0 µV/graduation typical at 960 Hz (manual only)<br>1,0 µV/graduation recommended |
| **A/D SAMPLE RATE:** | 7,5 to 960 Hz, software selectable |
| **RESOLUTION:** | Internal: 8 million counts/8.000.000 23 bit<br>Display: 999.999 |
| **SYSTEM LINEARITY:** | ± 0.01% full scale |
| **DIGITAL I/O:** | Four I/O onboard (max), 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, 14 mm, six-digit, 14-segment with decimal or comma |
| **KEYS/BUTTONS:** | Flat membrane panel, tactile feel |
| **TEMPERATURE RANGE:** | Certified: -10℃ to 40℃<br>Operating: -10℃ to 50℃ |
| **WEIGHT:** | Panel: 1,2 kg<br>Universal: 5,4 kg |
| **RATING/MATERIAL:** | Display bezel NEMA Type 4X, IP69K<br>Panel display: stainless steel<br>Controller box: aluminum<br>Universal: stainless steel |
| **WARRANTY:** | Two-year limited warranty |
| **EMC IMMUNITY:** | EN 50082 Part 2 IEC EN 61000-4-2, 3, 4, 5, 6, 8, and 11 |

## APPROVALS

CC Number 13-080
Class III/IIIL
n_max: 10,000

TC 8463
T 8464
Class III
n_max: 10,000

*Measurement Canada Approved*
AM-5931C
Class III/IIIHD
n_max: 10,000

CE

c UL us
LISTED
I.T.E.
73Y8

c RU us
Panel Mount

(152 mm)

(102 mm)

131 mm
15 mm (BEZEL DEPTH)

(206 mm)

(235 mm)

(213 mm)
(248 mm)

(102 mm)

SALES AND TECHNICAL ASSISTANCE

## RICE LAKE
### WEIGHING SYSTEMS