

**RICE LAKE**<sup>®</sup>  
WEIGHING SYSTEMS

# Weight Indicator Guide





At Rice Lake Weighing Systems, our goal is to be the best by every measure. When all else is equal, three things will make your experience with us distinctly different:

### *Service. Selection. Speed.*

Our roots are firmly planted in the principles of quality and customer service. Through three generations of family ownership, these ideals remain unchanged. As an international leader in the manufacture and distribution of weight-related products and process-control equipment, our experts know digital weight indicators and are here to guide you to the right one.

Rice Lake's digital weight indicators are available as standard models or with custom programming and enclosures to handle everything from the most basic to the most complex of tasks. Industries such as retail, livestock, bulk weighing, shipping and logistics, as well as harsh or hostile environments can benefit from the durability and reliability of a Rice Lake indicator.

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## 24/7 Emergency Contact Information

Your service doesn't stop when the office is closed and neither does ours. Simply call 800-472-6703 and press 1 to reach on-call personnel outside of our normal business hours.

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# 1280 Enterprise Series™

Programmable with iRite™  
Color Touchscreen



The 1280 Enterprise Series programmable indicator provides fast operation and easily expands to grow with your business. The 1280 has more than 150 built-in functions and custom applications can be created with Rice Lake's iRite® software. Multitasking is simple with the 1280's highly customizable graphical display, quad core processor and its ability to power up to eight scales.

The 1280 has a durable color touchscreen available as either a 7- or 12-inch LCD display that can be used even when the operator is wearing gloves. A built-in web server provides remote access, systems integration and data monitoring. The 1280 can communicate with handheld devices, printers, PLCs or PCs connected to the same network.

The 1280 is built with industrial-grade components and stainless steel enclosures. The panel mount model features IP69 and NEMA Type 4X ratings. Universal and wall mount models have an IP69 rating.



## FEATURES

- Graphical color display adjusts for ambient light conditions
- Built-in web server for remote access, systems integration and data monitoring
- Customize applications and data collection with event-based programming using iRite™ software
- Customizable 7- or 12-inch touchscreen display
- Three different enclosure types: universal with tilt stand, panel mount and wall mount
- On-screen keyboard available during entry mode or use an external keyboard
- Multi-language operation and text entry
- Up to eight scales supporting analog load cell scales, total scales, serial scales, iQUBE<sup>2</sup> scales and program scales
- Six option card slots for A/D scales, I/O, ports, analog input, analog output and fieldbus interfaces
- Multi-range/interval weighing functions
- Eight digital I/O for control and pulse count
- 100 setpoints, 18 configurable setpoint kinds
- 22 softkeys with 10 user-defined
- Two RS-232 and RS-485 serial ports
- Standard USB, Ethernet TCP/IP and Wi-Fi® Direct



**Built-in  
Web Server**



# i Series

Programmable



The i Series programmable digital weight indicators are designed to increase productivity in a wide variety of environments and applications. Functional and easy to use, the i Series indicators can manage any weighing process and are expandable for seamless system integration.

## FEATURES

- Configurable softkeys for an enhanced human machine interface
- Programmable display prompts guide operators through functions
- Backlit, graphical LCD display

*Additional features include: programmability, local/remote, configurable print/stream formats, linear 5-point calibration, truck in/out modes and 16 x 350 ohm load cells per A/D card.*

*920i and 720i have batch and free-running setpoints.*

## 920i



The 920i programmable digital weight indicator automates complex industrial processes without sacrificing user-friendly operation. It features multiple scale channels and accommodates many scale types, including serial scale, total scale and digital diagnostic junction box.

- Custom program can store ID numbers, transactions, formulas, label formats and PLUs
- Customizable display with 10 screens and softkeys
- Expandable with up to 14 option card slots
- Four onboard serial ports or USB

## 720i



The 720i programmable digital weight indicator is built with high-end features at a mid-level price point. It is available with programmable or batching firmware, and features truck in/out selections and advanced truck weighing features.

- Standard truck in/out selections or advanced truck mode
- Store up to 1,000 truck in/out records
- Eight onboard digital I/O
- One option card slot with eight option cards to choose from

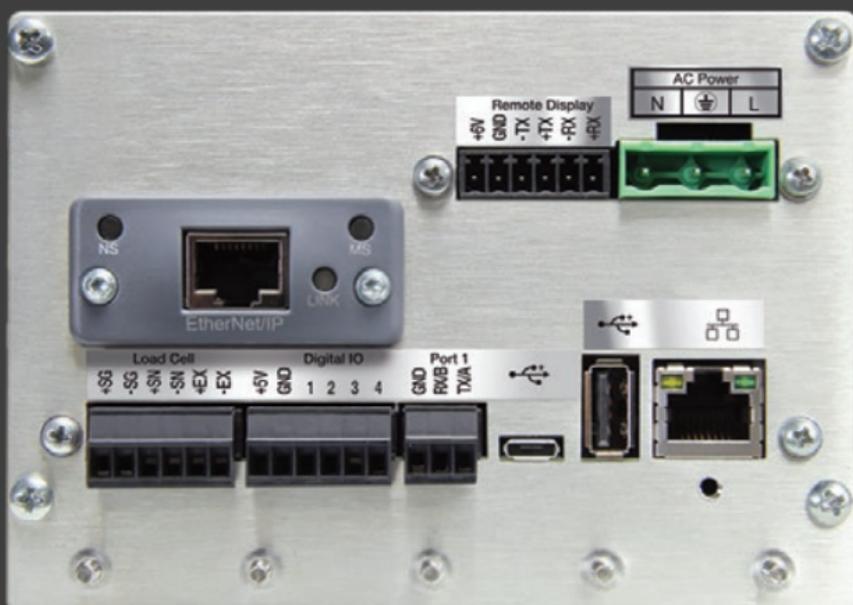
# 880 Performance Series™

Controller



The 880 Performance Series is built for enhanced communication. With two different enclosure types to choose from, Rice Lake's 880 Performance Series exceeds your expectations wherever you need it.

*Additional features include: programmability and option slot for fieldbus communications or expansion with additional serial ports or digital I/O.*



## FEATURES

- Onboard USB (device), Ethernet TCP/IP (server and client) and RS-232 or RS-485
- NEMA Type 4X/IP69K enclosure
- Batch engine with 20 setpoints and 12 setpoint types
- Multi-range or multi-interval weighing
- LED display, 0.56 inch, 7-digit, 14-segment
- Four digital I/O channels
- Custom ticket and stream formatting
- Option cards and iRite programmability expand functionality for network protocols, analog output, relays, dual serial output or 24-channel digital I/O
- Panel mount DIN-rail mounted controller or door mounted display (880)
- Universal enclosure with numeric keypad (880 Plus)



*Modular Controller Box*

### Option Slots

EtherNet/IP™	EtherCAT
ProfiNet®	Analog Output
ModBus TCP®	4-Channel Relay
DeviceNet®	24-Channel I/O
Profibus® DP	Dual Serial Ports



*Actual size 5.50 W x 4.00 H x 4.95in D*

# 682 Synergy Plus

*General Purpose Weighing*



The 682 Synergy Plus digital weight indicator pairs advanced features with the simple operation of a basic weight indicator.

A 304 stainless steel construction and IP69 rating ensure the 682 can withstand high pressure, high temperature washdown environments. Configurable softkeys and a bright LCD screen create a user-friendly interface.

Connections to external devices and networks are available through a variety of communication options while a built-in web server provides remote monitoring and process control. The 682 also has an integrated truck in/out mode specifically designed for use with vehicle scales.

## FEATURES

- Graphical, LCD color display with configurable softkeys
- Numeric, tactile keypad for scale operations
- Formattable tickets
- Battery backed time and date
- Multiple communication options
- Fieldbus communication using Rice Lake's SCT-2200 modules and RS-485 port
- Four onboard configurable digital I/O points, TTL logic
- Built in web server

# 680 Synergy Plus

General Purpose Weighing



The 680 Synergy Plus combines the powerful features of advanced instrumentation with the easy-to-use functions of basic indicators.

Eight setpoints and four digital I/O allow the 680 to perform basic batching and filling operations. A configurable batch engine allows users to design a multi-step procedure and run it automatically from beginning to end.

With multiple onboard communication options, the 680 provides connection to several devices, including printers and computers.

## FEATURES

- Bright seven-digit, seven-segment LED display
- Battery backed time and date
- Full numeric keypad
- Three serial ports: two RS-232, one full duplex RS-485
- Formattable tickets
- Ethernet TCP/IP
- USB device
- Stainless steel IP69K enclosure

# 680HE Synergy

*Hostile Environment*



The 680HE hostile environment weight indicator is made to withstand the demands of corrosive environments. Ideal for applications with a high concentration of corrosive substances such as chlorine, the 680HE has an FRP enclosure and IP66 rating for reliable protection.

The large display size and local/remote capability give the 680HE the option to be used as a secondary display. Configure the display's color as red or green for clear visibility in any environment. The 680HE has multiple communication options to connect to devices such as printers and PCs.

## FEATURES

- Bright six-digit, 2.5 in tall, seven-segment, two-color LED display
- Battery backed time and date
- Full numeric keypad
- Three serial ports: two RS-232, one full duplex RS-485
- Numeric keyed entry allows for tare and setpoint entry
- Formattable tickets
- Ethernet TCP/IP
- USB device
- IP66 FRP enclosure
- Four onboard configurable digital I/O points, TTL logic

# Legend<sup>®</sup> Series

*General Purpose Weighing*



The 480/482 Legend Series is a valuable solution for a variety of basic applications. These indicators are equipped with an ultra-bright LED (480) or backlit LCD (482) display and basic weighing keys. Keyed tare and built-in gross/net modes provide quick flexibility for everyday needs.

An optional lithium ion rechargeable battery allows for portable applications. The Legend Plus models offer a numeric keypad for convenient data entry.

## FEATURES

- LED or backlit LCD, 0.8 inch, six-digit, seven-segment
- NEMA Type 4X/IP66 stainless steel enclosure
- Create custom gross, net and setpoint print formats
- Two independent serial ports, RS-232 and 20 mA
- Single scale input for light capacity bench scales to heavy capacity industrial scales
- Local/Remote operation
- Eight setpoint steps for latched or continuous operation
- Optional internal rechargeable battery with power-saving modes
- Optional Ethernet TCP/IP and USB interface
- Optional analog output, 0-10 VDC, 0-20 mA, 4-20 mA

# 380 Synergy

*Basic Weighing*



The 380 Synergy Series is ideal for straightforward weighing systems such as portable warehouse scales, material handling applications and more. The 380 Synergy is battery powered, providing up to 100 hours of continuous use.

A five-button keypad simplifies operation while RS-232 and USB ports make it easy to connect to peripheral equipment. Optional date/time and external power supply are also available to meet the needs of a wide range of applications.

## FEATURES

- LCD display, six-digits 1 in (25 mm) tall
- Alkaline battery powered
- Five tactile buttons
- Push button and keyed tare
- Two communication ports: RS-232 (three-wire) and USB 2.0
- Configurable print formats
- 304 stainless steel, IP66 rated enclosure

# 381 Synergy

Basic Weighing



A reliable and cost-effective solution, the 381 Synergy Series with ABS plastic enclosure is ideal for portable weighing with two battery models available.

The AA battery model provides up to 40 hours of operation and has an IP54 rating. Optional external power supply also available.

The nickel metal hydride (NiMH) battery model provides up to 80 hours of operation with an IP66 rating.

## FEATURES

- LCD display provides clear visibility
- Battery powered operation
- Five tactile buttons
- Push-button and keyed tare
- Two communication ports
- Configurable print formats
- ABS enclosure

# SCT-1100

Signal Conditioning  
Transmitter



The SCT-1100 signal conditioning transmitter is ideal for use in PLC systems that require weight data from a scale. Signal conditioning transmitters offer control without the space requirement of a traditional weight indicator.

Utilized as an independent or dependent four-channel digital junction box, the SCT-1100 allows for the direct reading and diagnosis of each individual load cell or all system load cells summed as a whole.

## FEATURES

- Up to four independent scales or four load cell inputs
- Quick menu for real and theoretical calibration
- Red LED display (13 mm) and six LEDs show active functions
- DIN rail mountable
- Reading of net, gross and tare weights, clearing, semi-automatic and pre-settable tare, scale switch, setting of output application thresholds
- Diagnostic information via serial port, message display, printing, setting of APW in counting mode, simulation of key pressure
- Modbus RTU ASCII protocol

# SCT-2200

Signal Conditioning  
Transmitter



The SCT-2200 signal conditioning transmitter offers weight data control for PLCs without the space requirement of a traditional weight indicator. The SCT-2200 converts a scale's load cell signals to analog output, serial output or a specific network protocol.

The SCT-2200 has its own 0.3-inch weight display, with annunciators for unit and weighing status. Push buttons for zero, tare and setpoint entry simplify scale setup, calibration and operation.

## FEATURES

- HUB Mode connects up to 16 transmitters to one fieldbus
- Quick menu for real and theoretical calibration
- Remote access through web browser for weight monitoring and calibration over EtherNet/IP, Profinet and Modbus TCP network
- Red LED display with six-digits (8 mm) and six LEDs show active functions
- DIN rail mountable
- Diagnostic information via serial port, message display, printing, simulation of key pressure, Modbus RTU
- Modbus RTU ASCII protocol

# LaserLT-60 and LaserLT-100

*Remote Displays/  
Large Display Weight Indicators*



The LaserLT-60 and LaserLT-100 clearly display weight data up to 150 feet and can also be used as large-display weight indicators. The incoming data format can be interfaced through a set function or with a manual setup. The LaserLTs have adjustable display brightness, stainless steel enclosures and anti-condensation air valves to regulate humidity.

## FEATURES

- Available as a 2.4 in (60 mm) or 4 in (100 mm) display
- Six-digit display with high-intensity LEDs
- Auto Learn identifies and interprets the source weight data string for maximum compatibility with a wide range of indicators
- Configuration for format length, weight location, termination character
- Integrated waterproof keypad
- The removable back wall mount bracket has a 15-degree viewing angle
- Anti-condensation air valve regulates humidity and pressure
- Power from 12 to 24VDC, comes with 110-240VAC internal power supply

## LASERLIGHT 3

*Remote Displays/  
Large Display Weight Indicators*



LaserLight3 has a full-color display for weight, symbols and messages—available as either a remote display or large-display weight indicator.

The vibrant 128 by 32-pixel LED display features a non-glare lens, mirror mode for reverse images, and adjustable intensity for clear visibility day or night. Auto-learning mode enables LaserLight3 to process communication protocols from a wide range of indicators. Mounting options include VESA, flange and pole configurations for application flexibility.

### FEATURES

- High-intensity characters, up to 5-inch height, with color commands for background, foreground and text
- Versatile layout choices include 1-line, 2-line and 4-quadrant format
- Dynamic messaging views can scroll, slide or flash
- Software selectable time/date when the displayed weight is at zero
- Durable IP66 weathertight enclosure with Gore-Tex® breather vent to inhibit internal moisture
- Ethernet TCP/IP, RS-232, RS-485, 20 mA passive loop

CW-90 CW-90X

Checkweighing



The CW-90 and CW-90X checkweighing indicators are designed to help speed up your weighing process and reduce production downtime. The configuration menus of the CW-90 and CW-90X are accessible through the front keypad, eliminating the need to open the back of the indicator and expose the device to moisture or contaminants.

## FEATURES

- Gore™ PreVent® breather vent inhibits pressure buildup from environmental changes
- Storage for up to 50 IDs, expandable with WeighVault™
- WeighVault PC software
  - Target weight
  - Over/under weight
  - Tare weight
  - Unit of measure
  - ID number
  - Description
- CW-90X only
  - IP69K stainless steel enclosure
  - Meets washdown environment and HACCP requirements
  - Piezo keypad withstands knife-point contact and is liquid-resistant



- LED display, 0.8 in, six-digit, 14-segment
- Over/under light indicators
- Two full duplex serial ports
- Four digital I/O points

# Counterpart®

Counting



Counterpart is a configurable indicator with precise internal resolution. It counts any part, from tiny resistors to heavy engine parts, accurately, quickly and easily. Offered in a choice of dual scale or single scale, the Counterpart can be connected to analog scales or serial scale/balance inputs. Easy to transport throughout a plant and ideal for seasonal or permanent installations, the Counterpart is rugged, lightweight and portable.

## FEATURES

- LCD graphical display, transmissive for indoor viewing
- Single or dual channel models with serial scale input
- Four setpoint outputs
- Onboard storage up to 150 IDs, expandable with WeighVault™ PC software option
- Two standard RS-232 ports
- Optional battery power

*Shown with scale, printer and scanner.*



# 882IS Performance Series™

*Intrinsically Safe*



The 882IS and 882IS Plus are intrinsically safe digital weight indicators designed for safe use and powerful operation in hazardous locations. The 882IS has cFMus, ATEX and IECEx approvals. An optional FM approved, rechargeable battery can be used for isolated power or portable applications.

## FEATURES

- LCD display, seven-digit, seven-segment, with 121 x 24 dot matrix messaging area
- Stainless steel IP66 enclosure
- Duplex fiber-optic interface
- I/O module: one serial port, optional analog outputs, optional fieldbus cards, Ethernet TCP/IP
- Power ON/OFF and battery save mode
- Time and date (requires I/O module)
- 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

# 882D Performance Series

*Belt Scale Integrator*



The 882D is specifically designed for belt scales. With advanced programming capabilities and an I/O option, the 882D can be customized to control product dosing or manage metering. A backlit LCD display makes viewing rate, speed and time convenient in almost any lighting condition. The 882D is also protected from weather with an IP66 stainless steel enclosure.

## FEATURES

- LCD display, 0.8 inch seven-digit, seven-segment weight display, 3 x 20 pixelated prompt area
- 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
- Hardware slot for two option cards
- 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
- Setpoints for control and alarms
- Four onboard digital I/O channels
- Four programmable ticket formats up to 1,000 characters
- Speed inputs
- Option slots: analog output, EtherNet/IP™, DeviceNet®, ProfiNet®, Profibus® DP, ModBus TCP®, EtherCAT



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