# IQ PLUS® 710

## DIGITAL WEIGHT INDICATOR



**RICE LAKE®**
WEIGHING SYSTEMS
To be the best by every measure®

**www.ricelake.com**

# IQ plus® 710. It's your process, you make the choices.

## What do you want to do today?

With traditional indicators, it was up to you to fit your process to the technology available. The IQ plus 710 makes it possible to fit the technology to your process—with ease. Want to automate a new or existing manual process? Go ahead! Use any of the four standard macro keys to do it for you.

Want more? Link the 60 available prompts with your macro functions and the IQ plus 710 will automatically prompt your operators through a series of operations, or just tell them what it's doing at the time. Need a process to stop and wait for operator verification or add an ingredient? Go ahead! After all, it's *your* process.

Still not enough for you? Link macros and prompts with the IQ plus 710's unique programmable setpoints to automate your system. Now you can see what stage your process is in—because the IQ plus 710 tells you!

## Multilingual capabilities.

Having earned a reputation as a global industrial instrument, the IQ plus 710 can be easily programmed with any 26-character alphabet to satisfy international language requirements. This capability ensures process and platform consistency required by today's multi-national corporations.
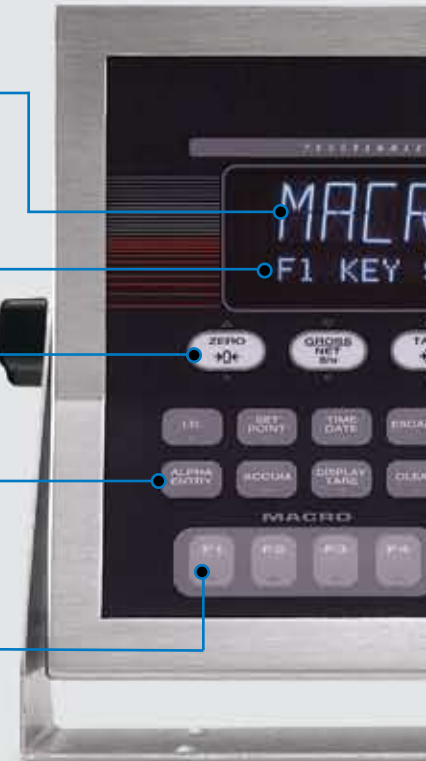
**Vibrant blue VFD characters** are easy to read in light and dark environments.

**Configurable prompts** guide users through processes or announce process status.

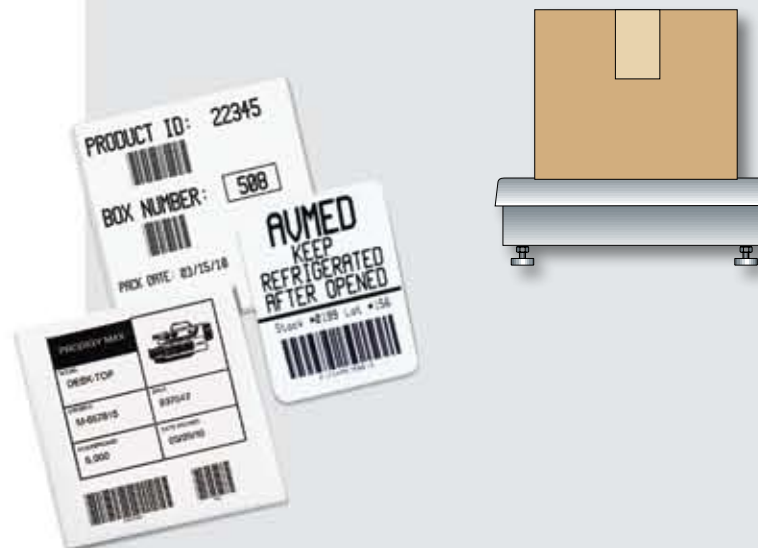**Five primary keys** eliminate toggling to accomplish common weighing functions.

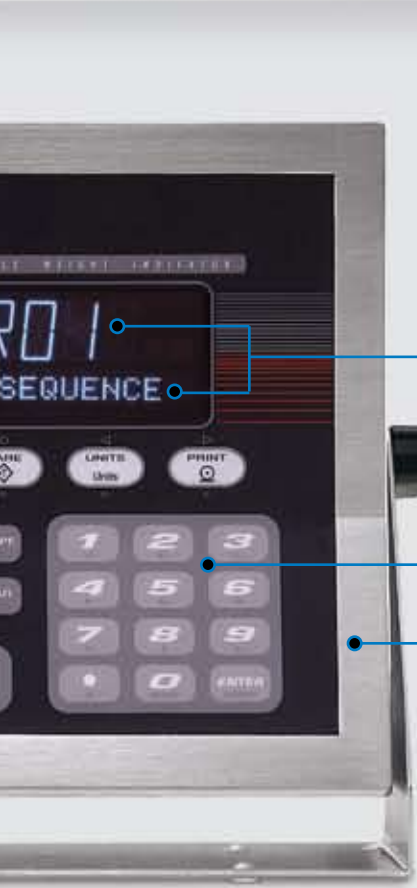**Function keys** enable quick completion of common tasks.

**Macro keys** can be programmed to initiate tasks specific to your process.

## It's not the data, it's what you do with it.

The IQ plus 710 simplifies data management. Two standard serial communication ports allow the flexibility to transmit weight information to a printer, programmable indicator, PC or other data collection devices. Six programmable printer outputs give you the freedom to choose which information you would like to transmit via which communication port. Need to communicate to several IQ plus 710s in your plant? Our standard RS-485 multi-drop feature provides address locations for bidirectional communication.

**Alphanumerics**
offer the use of alpha characters in part numbering, labeling and data capture processes.

**Numeric keypad**
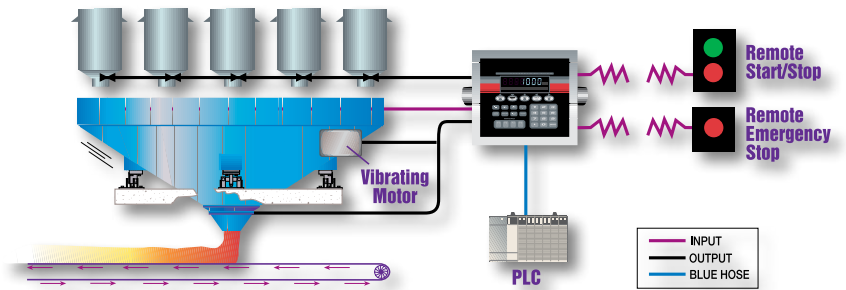allows convenient entry of ID and part numbers.

**NEMA 4X**
heavy-duty, stainless steel enclosure protects electronics in harsh environments.

## Customized labels and tickets.
Formatting control makes it easy to design custom labels and tickets with data such as product descriptions and IDs, lot numbers, inventory numbers, gross, tare and net weights, bar codes, and your company's logo.

## Automation control made easy!
The IQ plus 710 is a fast and affordable solution to automated process control. Whether your application requires adding multiple ingredients to a batch, turning on a motor, or starting a conveyor, the IQ plus 710 can execute a variety of tasks sequentially, on command, or simultaneously. A wide array of preset and configurable setpoints deliver a customized instrument to satisfy your particular needs.

Sixty programmable prompts can be combined with setpoint operation to notify operators what stage their process is in, ask for action, or label ingredients. There simply isn't a more powerful single-scale control product on the market.

Taking automation to the next level, the IQ plus 710 is compatible with Allen-Bradley® Remote I/O and Profibus® networks. This capability allows the IQ plus 710 to integrate your weight data with the world's leading network technologies.



Remote Start/Stop

Remote Emergency Stop

Vibrating Motor
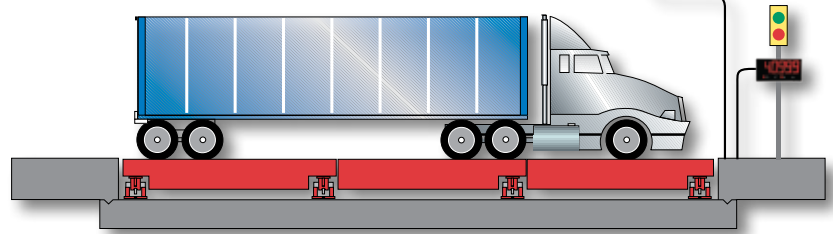
PLC

INPUT
OUTPUT
BLUE HOSE

## Data management at your fingertips.
The IQ plus 710's built-in truck terminal program is designed with the flexibility to run a variety of truck weighing applications. A large memory stores up to 300 ID numbers and associated tare weights. This speeds the throughput of vehicles across the scale. For operations where the same trucks frequently use the scale, IDs and tares can be set to remain in the system until manually erased. In applications where new trucks arrive daily, the IQ plus 710 can be set to auto-erase IDs and tares after each truck's final weigh-out is completed.
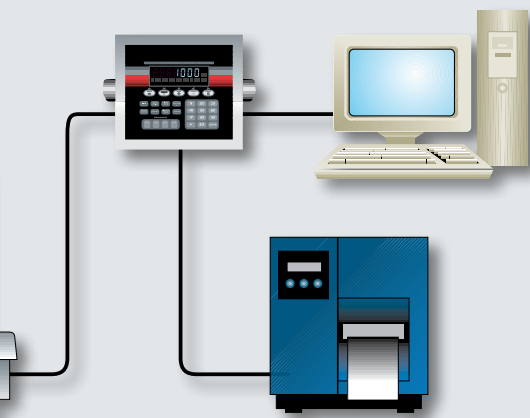
The IQ plus 710 truck weighing program features six basic modes. Three modes allow tare weights to be entered with the built-in keyboard, if desired, and linked to a truck ID—a real advantage when several identical trucks in the fleet have virtually the same empty weights. For operations where trucks arrive full and leave empty, the program features a "value swapping" function that automatically assigns the lower weight as the tare. This versatile program allows the IQ plus 710 to take truck scale data management to new levels of simplicity.

*A rugged steel enclosure and multi-copy printing make the high-performance SP2200 ticket printer a smart addition to truck weighing operations.*

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## Simply sophisticated.

**FILL TO 2ND LINE**

Because it's so affordable, the IQ plus 710 is also ideal for applications simply requiring a tough, reliable instrument without all the bells and whistles. (But isn't it nice to know they're there if you need them?) The keypad is easy to understand, and allows you to eliminate features not required by simply turning them off. All functions are clearly displayed in real-world terms, and you can easily create custom prompts to guide operators through processes. In addition, messages are displayed during batching and macro routines.

**962.8 lb** — Net

### RATTLETRAP®
*Vibration Control*

Reaching optimum performance means choosing an instrument that can virtually eliminate interference caused by agitators, mixers and other forms of industrial vibration. The IQ plus 710 utilizes a variety of parameters that work together to reach a balance of accuracy, stability and speed. They're also completely configurable to meet your individual application requirements.

## Complete Automation Through Network Integration.

The powerful IQ plus 710 is available with an optional Remote I/O network interface, allowing easy integration of fast, accurate weight control with Allen-Bradley PLC® or SLC™ automation systems.

Profibus is a quick, easy and cost-effective interoperable interface for multi-vendor use. The IQ plus 710's DP interface provides a high-speed link to other devices on your network. In addition, previously installed units can be retrofit in the field.

## Standard Features

- Large 0.71 in. (1.8 cm) 7-digit, Vacuum Flourescent Display, 2 unit descriptors, 16-5x7 VFD dot matrices for alphanumerics
- NEMA 4X stainless steel enclosure
- Universal mount—360° mounting configuration
- Time and date
- 30 updates per second (selectable)
- RATTLETRAP® vibration control
- 20 programmable setpoint steps
- Eight digital inputs and eight digital outputs, open collector
- Two communication ports
- Front panel or EDP configuration and operation
- 300 truck ID memory with 6 modes of operation
- Power for 8 350-ohm load cells
- Expanded 29-key alphanumeric keypad
- Six 300-character programmable print formats
- 300-character title block for custom tickets
- Menu selection of functions and parameters
- Four programmable macro function keys
- 16-character alpha prompts
- ID numbering
- Consecutive numbering
- Accumulator
- Supervisor password code
- Five-point linearization calibration
- Transmit error status command

## Options/Accessories

- Panel mount kit (flat face only)
- 8-channel relay module
- 0-10 VDC/4-20 mA analog output module
- Allen-Bradley Remote I/O interface kit
- Profibus® DP interface kit

## Specifications

| | |
|---|---|
| **Display Resolution:** | Up to 100,000 display graduations |
| **Conversion Rate:** | Configurable 30, 15, 7, 3 updates per second |
| **Full Scale Input Signal:** | 4.5 mV/V (max) |
| **Noise (referred to input):** | 0.3 $\mu$V p-p with digital filter at 4 |
| **Excitation Voltage:** | 10±0.5 VDC, 8 x 350Ω load cells |
| **Serial Ports:** | 1-EDP port, full duplex RS-232 or RS-485<br>1-printer port, full duplex RS-232/20 mA current loop |
| **Circuit Protection:** | RFI, EMI & ESD protection on inputs and interfaces |
| **Analog Output:** | Optional: fully isolated 0-10V or 4-20 mA |
| **Line Voltages:** | 115 or 230 VAC |
| **Frequency:** | 50 or 60 Hz |
| **Operating Temperature:** | 14° to 104°F/-10° to 40°C |
| **Enclosure Dimensions:** | 9.5 in. W (24 cm) x 8.4 in. H (21 cm)<br>5.25 in. D (13 cm) (flat enclosure)<br>4.95 in. D (12.5 cm) (slope enclosure) |
| **Weight:** | 7.5 lb (3.4 kg) |
| **Warranty:** | 2-year limited warranty |

## Approvals

CC# 98-081
$n_{max}$=10,000
Class III/IIIL

TC5678
$n_{max}$=10,000
Class III

AM 5253
$n_{max}$=20,000
Class III/III HD

Measurement Canada Approved

Rockwell Automation
**Encompass™ Product Partner**
Americas

**PROFIBUS®** PROCESS FIELD BUS

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