

# IQ

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DIGITAL WEIGHT INDICATORS



ANOTHER **REVOLUTION**™ SOLUTION  
SCALEWARE



**RICE LAKE WEIGHING SYSTEMS**  
Industrial Solutions on a Global Scale



# THE ULTRA-VERSATILE 800. EASY TO USE, HARD TO BEAT.



## Anywhere You Weigh...

Whether it's shipping and receiving, in-plant operations, inventory control, vessel weighing, or process weighing, the IQ plus 800 is the ideal solution. The stainless steel NEMA 4X enclosure is adjustable to any angle and incorporates a comfortable "telephone" style keypad. The bright VFD display reads easily, even in environments with poor visibility.

The 800 powers up to 16 350-ohm load cells on one or two scale input channels. Each scale can be set up independently, giving you unlimited capacity flexibility to meet your specific operational requirements.

Combine the fundamental "horsepower" of the 800 with its many standard features and options, and you have everything required to create an affordable, custom-tailored industrial weighing system.

## Increase Truck Scale Profitability...

Manage your truck scale operation with a new level of efficiency. Six configuration choices allow you to select from operator-entered tare, weigh-in/weigh-out, reverse weighing with value swapping, stored tare recall, and more. The 800's powerful memory allows storage of up to 200 six-digit truck ID numbers and tare weights, automating your operation.

Create any ticket formats you wish using up to 300 available character locations. Company names, weight, time and location data can be placed anywhere on the ticket. Enter straight from the convenient front-panel keypad, or from a PC. Time and date may be automatically printed on each transaction.

## Intelligent Automation for Increased Profitability...

Whether you need a simple checkweighing alarm or batch control, the IQ plus 800 can get you there without the high cost of additional controllers and custom software consultants. 20 standard batch steps offer a wide array of preset and programmable features, including: free-running setpoints, relative setpoints, % relative, weight bands, preacts, pauses, jogs, timers, and many others. Custom setpoint names can be assigned as product or ingredient names via the EDP port, simplifying operator interaction.

Three digital inputs and four digital outputs are standard. With the addition of the 12 digital output option, a total of 16 TTL outputs are available.

The optional universal Remote I/O link offers sophisticated control of your weight process, while providing localized control of the individual weighing workstation.

*Setpoint naming feature provides operator with instant, error-free process information.*

# Redefining Application Flexibility

Available on both the 800 and 810, our exclusive Rattletrap® vibration control eliminates interference from agitators, mixers, and other forms of industrial vibration. Now you can depend on stable, accurate weight information regardless of motion on or around your scale.



**RATTLE TRAP**



# THE ULTRA-POWERFUL 810. UNLIMITED POSSIBILITIES.

## Expandable Power...

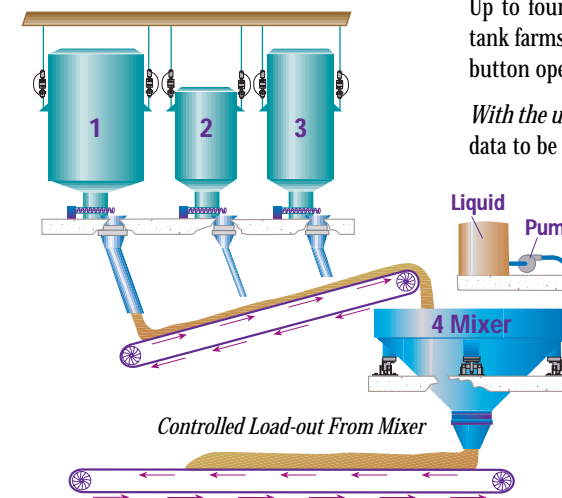
The system muscle of the IQ plus 810 begins with its ability to command 16 350-ohm load cells on up to four separate scale channels. The power grows as a seemingly endless array of options gives you the ability to handle complex processing requirements without the added cost of a PLC or software consultants.



## Multiscale Control...

Up to four independent scales can be operated from a single indicator. Ideal for tank farms, the 810 provides a bright, bold operator interface and offers easy, push-button operator access for displaying any tank's weight.

With the universal Remote I/O link option, the 810 allows precise, high-speed weight data to be utilized in operations with process networks.



## Making Multiple Batch Control a Reality...

Automated multiple-component batching systems are now possible using only one multiscale IQ plus 810 with standard programmable batch control software and versatile hardware options.

This multi-ingredient batching operation illustrates the versatility of the 810. Three product hoppers, set up as individual scale inputs, are given commands to release ingredients sequentially in designated amounts onto the conveyor, which in turn feeds the fourth scale, the mixer hopper. Individual scale weight accumulators are available to provide total weight dispersed over each scale.

Conveyor motion is activated by the IQ plus 810, as well as mixer activity and timed dispatch of a liquid ingredient into the mixer hopper. Our unique RATTLETRAP® feature filters vibration out of the digital signal, providing accurate, stable weighments.

## The 800 Series Now Brings A New Level Of Performance To Allen-Bradley Remote I/O Networks!



The powerful IQ plus 800 and 810 are now available with optional Remote I/O link technology, allowing easy integration of fast, accurate weight control with Allen-Bradley PLC® or SLC™ automation systems.



STANDARD FEATURES/OPTIONS	IQ plus <sup>®</sup> 800	IQ plus <sup>®</sup> 810
NEMA 4X stainless steel enclosure	STD	OPT (WALL MOUNT)
NEMA 4 zinc die cast enclosure	N/A	STD
Vacuum Fluorescent Display (VFD)	STD	STD
Wall mount kit	STD	OPT
Panel mount kit	OPT	OPT
Time and date	STD	STD
20 updates/second	STD	STD
RATTLETRAP <sup>®</sup> vibration control	STD	STD
20 programmable setpoint steps	STD	STD
3 digital inputs, TTL or hard contact closure	STD	STD
4 TTL digital outputs, expandable to 16	STD	STD
4-channel relay module	OPT (EXT.)	OPT (INT.)
16-channel relay module (externally mounted)	OPT	OPT
0-10VDC/4-20mA analog output module	OPT	OPT
Expansion Board for:		
3rd & 4th scale input channels	N/A	OPT
2nd analog output module	N/A	OPT
2 pulse inputs	N/A	OPT
Revolution <sup>™</sup> software package	OPT	OPT
200 truck ID memory w/6 modes of operation	STD	STD
2 communication ports: (1) EDP port, full duplex RS-232 or 20 mA optional; (1) printer port, simplex RS-232/20mA current loop	STD	STD
Up to 2 scale input capability	OPT	OPT
Up to 4 scale input capability	N/A	OPT
Power for 16 350-ohm load cells on single or multiple channels	STD	STD
Jetpak <sup>™</sup> 100 Hz A/D for 100 updates/second	OPT	OPT
48-segment LED bar graph module	OPT	OPT
Rate of change	OPT	OPT
Peak hold	OPT	OPT
Configurable print formats	STD	STD
ID numbering	STD	STD
Consecutive numbering	STD	STD
Accumulators	STD	STD
Supervisor setpoint key	OPT	OPT
Passwords	OPT	OPT
Allen-Bradley Remote I/O	OPT	OPT

N/A - Not available



*This interactive Windows<sup>®</sup>-based software program allows the operator to set up and calibrate the 800/810 indicator with ease.*



SPECIFICATIONS	IQ plus <sup>®</sup> 800/IQ plus <sup>®</sup> 810
<b>Display:</b>	Large .55" 7-digit, 14-segment blue/green vacuum fluorescent. Decimal point available at each digit.
<b>Status Annunciators:</b>	Lb, Kg, R.O.C., Accum., Push Tare, Keyed Tare, Motion, Center of Zero, Gross, Net
<b>Keyboard:</b>	25-key tactile feel
<b>Bar Graph (optional):</b>	48-segment LED display tracks, net or gross weight functions, or setpoint functions
<b>Internal Resolution:</b>	Selectable up to 740,000
<b>Display Resolution:</b>	Selectable up to 100,000 dd
<b>Measurement Rate:</b>	20 measurements/second
<b>System Linearity:</b>	Within 0.01% of FS
<b>Zero Stability:</b>	10 nV/°C, typical
<b>Span Stability:</b>	3.5 ppm/°C, maximum
<b>AZM (zero track):</b>	Off, $\pm 5$ , 1, or 3 dd ("Gross" mode only)
<b>Operational AZM</b>	
<b>Aperture:</b>	$\pm 1.9\%$ or 100% FS
<b>Motion Band:</b>	Off, 1, 2, 3, 5, 10, 20 dd
<b>Calibration Method:</b>	Software
<b>Excitation Voltage:</b>	10 $\pm$ 0.5 VDC, 16 x 350 $\Omega$ load cells
<b>Analog Filter:</b>	Software selectable: 2, 8 Hz typical/3 pole, off (25 Hz)
<b>Digital Filter:</b>	Software selectable: 1,2,4,8,16,32,64,128 <b>RATTLETRAP</b> 4,8,16,32,64,128
<b>Sense Amplifier:</b>	Differential amplifier with 6-wire sensing
<b>RFI Protection:</b>	Signal, excitation, and sense lines protected up to 455 MHz
<b>Analog Output:</b>	Optional: fully isolated 0-10V or 4-20 mA, <b>14 bit resolution</b>
<b>Digital Inputs:</b>	3 inputs, TTL or switch closure, active low, special purpose setpoint-supervisor input 4 TTL outputs
<b>Digital Outputs:</b>	12 additional TTL outputs (opt.)
<b>Expansion Digital Outputs:</b>	Full duplex, RS-232 or 20 mA CL output (input opt.)
<b>EDP Port:</b>	RS-485 (opt.)
<b>Printer Port:</b>	Simplex, RS-232 and 20 mA CL (output only)
<b>Line Voltages:</b>	115 or 230 VAC
<b>Frequency:</b>	50 or 60 Hz
<b>Operating Temp.:</b>	-10° to 40°C/14° to 104°F
<b>Overall Dimensions:</b>	
<b>IQ plus 800:</b>	10 in. W (254.0 mm) 7.75 in. H (196.9 mm) 6 in. D (152.4 mm)
<b>IQ plus 810:</b>	11.06 in. W (280.9 mm) 8.17 in. H (207.5 mm) 8.87 in. D (225.3 mm)
<b>Weight:</b>	
<b>IQ plus 800:</b>	12 lb (5.4 kg)
<b>IQ plus 810:</b>	15 lb (6.8 kg)
<b>Enclosure Finish:</b>	
<b>IQ plus 800:</b>	NEMA 4X stainless steel
<b>IQ plus 810:</b>	NEMA 4 zinc die cast
<b>Warranty:</b>	Two year limited warranty
<b>Approvals:</b>	NTEP certified per H-44, at 10,000 Divisions, Class III/IIIL, CC# 92-013. Also Canadian Weights & Measures Certified, AM-4840, 20,000 Divisions, Class III/IIHD



IQ+800/IQ+810  
CC# 92-013  
 $\eta_{max}$  = 10,000  
Class III/IIIL



Legal-For-Trade  
AM-4840  
 $\eta_{max}$  = 20,000  
Class III/IIHD

Your Rice Lake Weighing Systems Distributor is:

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Specifications subject to change without notice