# IQ plus® 810   Digital Weight Indicator

Measurement
Canada
Approved

*(control panel)*

ANOTHER **REVOLUTION**™ SOLUTION

| PART # | DESCRIPTION |
|---|---|
| 19249 | Desktop, 115 VAC |
| 36074 | Desktop, 115 VAC w/Allen-Bradley Remote I/O |
| 19250 | Desktop, 230 VAC |
| 36075 | Desktop, 230 VAC w/Allen-Bradley Remote I/O |
| 19265 | Dual Channel Desktop, 115 VAC |
| 19266 | Dual Channel Desktop, 230 VAC |
| 22176 | JetPak™ Desktop, 115 VAC† |
| 22177 | JetPak™ Desktop, 230 VAC† |
| 23140 | Uncased version, 115 VAC |

*† Not Legal-For-Trade U.S./Canada*

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*NOTE: Because A-B Remote I/O and Profibus DP interface with programs written by non-RLWS parties, please consult factory for latest technical updates before quoting.*

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The IQ plus 810...a digital weight indicator with power. Its unique hybrid digital circuitry provides faster, more accurate and more flexible performance than conventional technology. Providing power for 16 350Ω load cells on up to four individually configured scales*, this unit simplifies multi-scale control. Housed in a NEMA 4 enclosure, the IQ plus 810 incorporates a full numeric keyboard, and a bright display that's easily readable, even in poor lighting. An optional LED bar graph enhances software capabilities and interactive operation.

Our exclusive RATTLETRAP® vibration control eliminates interference from agitators, mixers, blenders, fork truck traffic, and other sources of industrial environment vibration.

Available with optional Allen-Bradley Remote I/O or Profibus DP interface, the IQ plus 810 connects with industrial networks to provide fast, simple, and accurate measurement and control of complex, multi-ingredient batching and blending*.

The IQ plus 810's programmable setpoint software offers a comprehensive array of batch process possibilities. It's self correcting, learning as it works to assure your process integrity. The standard configuration includes 20 setpoint steps, 4 digital outputs and 3 digital inputs, providing more basic power than many custom controllers. With the addition of JetPak™, weigh data processing is performed at least five times faster than conventional meters. At an impressive rate of 100 updates per second, it's ideal for high-speed bag filling, checkweighing, and multi-step batching operations.

## Applications

- Multiple-scale operation up to 4 scales*
- Complex material flow control
- Sophisticated truck in/out management systems
- High-speed bag filling and checkweighing*

## Standard Features

- NEMA 4 zinc die-cast enclosure
- Bright, bold Vacuum Fluorescent Display (VFD)
- Full keyboard for setpoint or fixed tare entry
- Time and date
- 20 updates/second, nominal
- Advanced digital filtering, RATTLETRAP® vibration control
- 20 programmable setpoint steps
- Multi-channel accumulators
- 3 digital inputs, TTL or hard contact closure; 4 TTL digital outputs, expandable to 16
- Multifunctional 200 ID Truck in/out program, seven characters
- Selectable print data and format via EDP port or front keypad
- 2 communication ports: (1) EDP port, full duplex RS-232 or 20 mA optional, (1) printer port, simplex RS-232/20 mA current loop
- Multi-scale control expandable to 4 scale inputs, with individual scale setup*
- Power for up to sixteen 350Ω load cells on single or multiple channels*
- Formattable print tickets for Gross, Net, Truck Weigh-In/Weigh-Out, and setpoint push print ticket
- Models with JetPak™ feature 100 Hz A/D for 100 updates per second, single channel unit*
- Software initiated - Rate of Change, Peak Hold & Password

## Options/Accessories

| | |
|---|---|
| 46030 | Revolution™ Scale Software*** |
| 61138 | Dual Range option (combination truck/livestock scale) |
| 35888 | Allen-Bradley Remote I/O, 115 VAC (external) |
| 36593 | Allen-Bradley Remote I/O, 230 VAC (external) |
| 49974 | PROFIBUS® DP Interface, 115 VAC (external) |
| 49975 | PROFIBUS® DP Interface, 230 VAC (external) |
| 19364 | Panel mount kit |
| 19353 | Wall mount bracket |
| 19363 | 48-segment LED bar graph module |
| 40386 | Dual load cell input module (3rd and 4th scale) |
| 40385 | Expansion board (keyboard connection only)** |
| 19357 | Analog output module, 0-10 VDC/4-20 mA** |
| 19372 | RS-485 serial communication |
| 19374 | 20 mA full duplex EDP port |
| 19362 | 12-channel digital setpoint output module |
| 65389 | 5 VDC power supply for digital output |
| 19369 | Batching start/stop switch box |
| 19365 | 4-channel relay rack kit, relays sold separately |
| 19373 | 16-channel relay rack, relays sold separately (for external mounting) (Requires Part #19362 setpoint expander board) |

*I/O relay modules sold separately:*

| | |
|---|---|
| 15969 | 10-32 VDC Input relay module (N/O) |
| 15970 | Dry contact 100 VDC/1.5A output (N/O) |
| 22848 | Dry contact 100 VDC/1.5A output (N/C) |
| 15971 | 115 VAC Output relay module (N/O) |
| 15972 | 115 VAC Input relay module (N/O) |
| 22847 | 115/230 VAC Output relay module (N/C) |
| 36632 | 115/230 VAC Output relay module (N/O) |
| 36631 | 230 VAC Input relay module (N/O) |
| 16478 | Quencharc arc suppressor |
| 42100 | Additional operating manual (Version 3) |

*\* This feature is available on specific models. Optional hardware/software may be required to add this feature to existing field units.*

*\*\* One analog module per channel (dual scale only). Second analog module must be installed on expansion board.*

*\*\*\* Revolution can be downloaded for FREE from the distributor section of our web site at www.rlws.com*

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

ISO 9001 REGISTERED

**LOAD CELL EXCITATION:**
10 ± 0.5 VDC, 16 x 350Ω load cells (on up to 4 channels)*

**LOAD CURRENT:**
460 mA maximum (16 x 350Ω load cells)

**INTERCONNECTION CABLE REQUIREMENTS:**
6-wire selective (jumpers required on sense leads for 4-wire)

**ANALOG SIGNAL INPUT RANGE:**
0.6 mV/V - 3.9 mV/V

**ANALOG SIGNAL SENSITIVITY:**
0.3 microvolts/graduation minimum
Legal-for-trade recommended minimum 1 microvolt/graduation

**INPUT OVERLOAD:**
±12V continuous, static discharge protected

**CONVERSION RATE AT FULL SCALE:**
20/second, typical (standard resolution)
10/second, typical (high resolution)
Added channels reduce conversion rate per channel*

**RESOLUTION:**
Selectable up to 100,000 displayed graduations
Selectable up to 740,000 graduations internal

**UNDERRANGE BLANKING:**
-2 mV signal nominal

**DISPLAY:**
Large .55" (14.0mm) 7-digit, 14-segment blue/green Vacuum
Fluorescent Display (VFD)

**LB/KG SWITCHING:**
Front panel pushbutton

**FRONT-PANEL CONTROL SWITCHES:**
Zero, Net/Gross, Tare, Units, Print, Disp Accum, Disp R.O.C.,
Disp Tare, Time/Date, New ID, Scale #, Set Point, Clear

**FRONT-PANEL ANNUNCIATORS:**
Lb, Kg, R.O.C., Accum, Push Tare, Keyed Tare, Motion,
Center of Zero, Gross, Net

**SERIAL OUTPUT:**
"EDP" port, full duplex RS-232 or 20 mA optional
"Printer" port, simplex RS-232 and 20 mA current loop

**DIGITAL INPUTS:**
3 inputs, TTL or switch closure, active low

**DIGITAL OUTPUTS:**
4 outputs standard, TTL active low, expandable to 16

*\* This feature is available on specific models. Optional hardware/
software may be required to add this feature to existing field units.*

**SETPOINTS:**
20 fully-programmable setpoint steps

**ANALOG FILTERING:**
Software selectable: 2, 8 Hz typical/3 pole, off (25 Hz)

**MOTION TIME SENSITIVITY:**
Fixed at 1 second

**POWER:**
Line voltages: 115 or 230 VAC +10%/-15%
Frequency: 50 or 60 Hz
Power consumption: 12 VA with minimum configuration,
30 VA with all options
Fusing: 0.25A SB (UL/CSA) 5x20mm @ 120V operation
0.125A SB (UL/CSA) 5x20mm @ 240V operation

**OPERATING TEMPERATURE:**
14°F to 104°F (-10°C to 40°C)

**RATING/MATERIAL:**
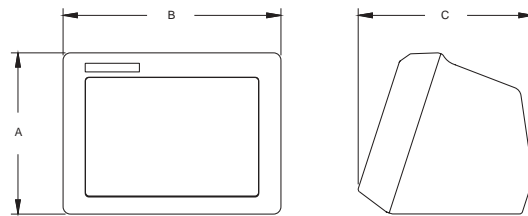NEMA 4 zinc die cast

**WEIGHT:**
Approximately 15 lb (6.8 kg)

**APPROVALS:**
NTEP certified per H-44 at 10,000 Divisions, Class III/IIIL,
CC# 92-013A1. Measurement Canada approved, AM-4840;
UL listed (control panel only)

**WARRANTY:**
One year limited warranty



| DIMENSIONS | |
|---|---|
| A = 8.17" (207.5mm) | C = 8.87" (225.3mm) |
| B = 11.06" (280.9mm) | |