

IQ plus[®] 810 Digital Weight Indicator



Measurement
Canada
Approved



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

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.

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 16 350-ohm 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.

Allen-Bradley (A-B) and Profibus DP enabled, the IQ plus 810 interfaces with 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 even 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
- 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*

Options/Accessories

- 46030 Revolution™ Scale software
- 61138 Dual Range option
- 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
- 16418 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.

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

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:

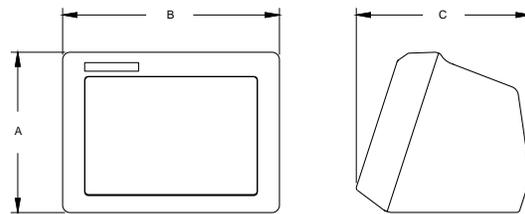
Approximately 15 lb (6.8 kg)

APPROVALS:

NTEP certified per H-44 at 10,000 Divisions, Class III/IIIL,
CC# 92-013A1. Measurement Canada approved, AM-4840;
UL & CUL listed

WARRANTY:

One year limited warranty

**DIMENSIONS**

A = 8.17" (207.5mm)

C = 8.87" (225.3mm)

B = 11.06" (280.9mm)

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