

IQ plus® 310A Digital Weight Indicator



PART #	DESCRIPTION
22986	..... IQ plus 310A w/tilt stand
22987	..... IQ plus 310A w/panel mount
22988	..... IQ plus 310A
36069	..... IQ plus 310A w/Allen-Bradley Remote I/O & tilt stand
22989	..... IQ plus 310A NEMA 4 w/tilt stand
22990	..... IQ plus 310A NEMA 4 w/panel mount
22991	..... IQ plus 310A NEMA 4
36071	..... IQ plus 310A NEMA 4, w/Allen-Bradley Remote I/O w/tilt stand
32709	..... IQ plus 310A, 230 VAC w/tilt stand
36070	..... IQ plus 310A, 230 VAC, w/Allen-Bradley Remote I/O w/tilt stand

It's a fact...industry requires tough, high-speed equipment. The IQ plus 310A is built tough with an all-steel enclosure, available in standard or NEMA 4 versions, for extra long life in industrial environments.

A simple five-button front panel and bright, bold display provide easy operation and monitoring. Two digital inputs offer "remote" pushbutton control of any two of the five front panel keys and keypad lockout.

Fully compatible with Allen-Bradley (A-B) Remote I/O and Profibus DP, the IQ plus 310A provides a fast, simple and affordable networking solution for open access to other measurement and control devices.

With a speed of 50 updates/second typical, the IQ plus 310A can be configured for a variety of applications. Advanced digital filtering and selectable display update rates make the unit ideal for standard and high-vibration applications.

Two standard serial ports provide an interface to peripherals such as printers and computers. Unique formattable data communications allow for positioning of weight data on a ticket.

Applications

- Straight weighing
- Truck scales
- Shipping and receiving
- Mechanical conversions
- Panel mounting

Standard Features

- 50 updates/second
- Selectable display update rate
- 5-button operation
- Selectable units: lb, kg, ton, T, gram, grain, oz
- Steel enclosure with two-part epoxy finish
- Bright, bold Vacuum Fluorescent Display (VFD)
- Full front-panel digital calibration and configuration
- Universal mounting stand
- Two communication ports, (1) simplex, (1) full duplex
Printer port selectable RS-232 or 20 mA current loop, RS-232 for the EDP port
- Two inputs for remote operation of any front-panel key or keypad lockout
- RATTLETRAP® vibration control

Options/Accessories

- 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)
- 30352 Panel mount
- 19355 BCD Output, 115 VAC (external)
- 19366 Load cell port quick connect
- 19367 Serial port quick connect
- 22979 Additional operating manual

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.

EXCITATION VOLTAGE:

10 ± 0.5 VDC, 6 x 350Ω load cells or 12 x 700Ω load cells

LOAD CURRENT:

175 mA maximum (6 x 350Ω load cells)

LOAD CELL CABLE REQUIREMENTS:

4/6 wire selective with jumpers

ANALOG SIGNAL INPUT RANGE:

0.5 mV/V - 3.5 mV/V

ANALOG SIGNAL SENSITIVITY:

0.3 microvolts/graduations minimum

INPUT OVERLOAD PROTECTION:

±12 volt continuous

MEASUREMENT RATE:

50 updates/second typical

SYSTEM LINEARITY:

Within 0.01% of FS

RESOLUTION:

Internal: Approximately 1,000,000 graduations
Display: Selectable up to 60,000 dd

DISPLAY:

Large .55" (14.0mm), 14-segment blue/green vacuum fluorescent, 7 full digit display (VFD). Decimal point available at each digit.

LB/KG SWITCHING:

Front panel pushbutton

FRONT-PANEL CONTROL SWITCHES:

Zero, Net/Gross, Tare, Units, Print

STATUS ANNUNCIATORS:

Tare, entered tare, standstill, net, gross, center of zero, minus sign, lb, kg, entry mode

KEYBOARD:

5-key flat membrane, tactile feel stainless domes

SERIAL OUTPUT:

Both Ports: EDP (Full duplex): RS-232
Printer Port (Simplex): RS-232 or 20 mA. 8 data bits, no parity; 7 data bits, even parity; 7 data bits, odd parity
Baud Rates: 19200, 9600, 4800, 2400, 1200

DIGITAL INPUTS:

2 inputs, TTL or switch closure, Active Low

DIGITAL FILTER:

3 separately programmable digital filter parameters with selections of 1, 2, 4, 8, 16, 32, 64

CALIBRATION METHOD:

Software

MOTION TIME SENSITIVITY:

Fixed at 1 second

POWER:

Line Voltages: 115 or 230 VAC +10%/-15%
Frequency: 50/60 Hz
Power Consumption: 11W maximum, 12 VA maximum
Fusing: 100-120 VAC—2 x 0.25A SB (UL/CSA) 5 x 20mm
220-240 VAC—2 x 0.125 A (IEC127) 5 x 20mm

RFI PROTECTION:

Signal, excitation and sense lines protected

OPERATING TEMPERATURE:

-10°C to 40°C (14°F to 104°F)

RATING/MATERIAL:

Steel with black 2-part epoxy finish

WEIGHT:

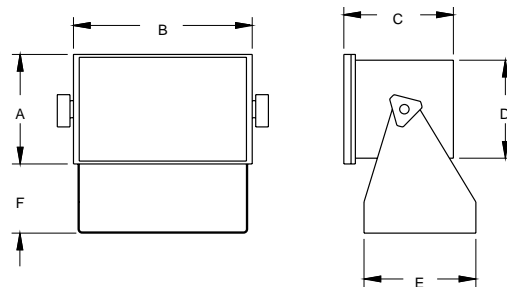
Approximately 9.0 lb (4.1 kg)

APPROVALS:

NTEP certified per H-44, at 10,000 Divisions, Class III/IIIL, CC# 91-132A3. Measurement Canada approved, AM-4838, Class III/IIHHD, III at 10,000 Divisions and IIIHD at 20,000 Divisions. UL and CSA listed.

WARRANTY:

One year limited warranty



DIMENSIONS

A = 4.80" (121.9mm)	D = 4.31" (109.5mm)
B = 7.75" (196.9mm)	E = 4.85" (123.2mm)
C = 5.10" (129.5mm)	F = 3.25" (82.6mm)