

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
22989	IQ plus 310A NEMA 4 w/tilt stand
22990	IQ plus 310A NEMA 4 w/panel mount
22991	IQ plus 310A NEMA 4
32709	IQ plus 310A, 230 VAC 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" push-button 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:

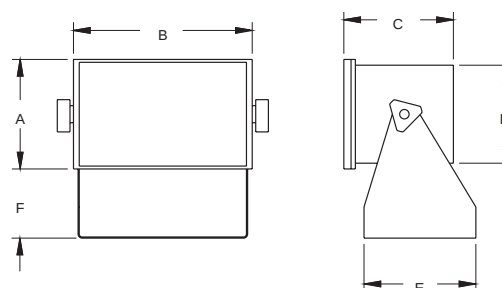
Approximately 9.0 lb (4.1 kg)

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 IIHHD 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)