

IQ plus[®] 710 Digital Weight Indicator



Sloped face model shown

ANOTHER **REVOLUTION[™]** SOLUTION



Measurement
Canada
Approved



PART #	DESCRIPTION
44545	IQ plus 710, 115 VAC, sloped face
44544	IQ plus 710, 230 VAC, sloped face
45527	IQ plus 710, 115 VAC, flat face, deep enclosure
45528	IQ plus 710, 230 VAC, flat face, deep enclosure
52052	IQ plus 710, 230 VAC, CE marked/OIML approved, sloped face
52051	IQ plus 710, 230 VAC, CE marked/OIML approved, flat face, deep enclosure

For those seeking maximum digital performance, the IQ plus 710 delivers. Designed and built to provide superior programmability and durability, the IQ plus 710 offers an array of advanced features.

Utilizing a large VFD display and full alphanumeric keypad, the IQ plus 710 can store and display 16-character programmable user prompts, 300 truck ID numbers, or part numbers. Four programmable macro function keys (each capable of 30 steps) enable the IQ plus 710 to quickly and accurately complete a variety of functions. Additionally, macros can be linked to setpoints during batching operations, allowing the macro to initiate each batch setpoint. For easy operation, all functions and parameters are selected by menus.

Two independent communication ports provide full EDP and programmable printer ports. Using Revolution[™] Scale Software, print tickets can be programmed with up to six 300-character formats and a 300-character title block. Furthermore, two serial ports allow remote configuration. Five-point linearization calibration ensures the highest accuracy in every application.

Available with optional Allen-Bradley or Profibus DP interface, the IQ plus 710 connects with industrial networks for fast, simple, and accurate measurement and control of complex, multi-ingredient batching and blending.

The IQ plus 710 is encased in a tough, all stainless steel NEMA 4X/IP66 enclosure and is available in a flat face model or sloped face. The flat face is panel-mountable and features a deeper enclosure, allowing it to utilize an A-B I/O, as well as two, 4-channel relay boards, and an analog output option. The sloped face model utilizes the analog output option and either the A-B I/O option or the one 4-channel relay boards.

Applications

- High-performance industrial weighing
- Batch weighing
- Truck weighing applications

Standard Features

- Stainless steel NEMA 4X/IP66 washdown enclosure
- Large 0.75" (19mm) Vacuum Fluorescent Display (VFD) with 16 characters for operator prompting
- Selectable analog to digital measurement rate
- 5-point linearization calibration
- 4 macros, 30 steps each, ability to interconnect macros with setpoints (macro can start batch setpoints)
- 8 digital inputs plus 8 digital outputs
- 60 16-character programmable fields for display prompts.
- Power for eight 350 Ω load cells or sixteen 700 Ω load cells
- Expanded 29-key alphanumeric keyboard
- Full alphanumeric keyboard for entering truck ID, numbering, prompts, etc.
- 300-ID truck in/out programs (6 modes), seven characters
- Batching and continuous mode setpoint functions
- Programmable consecutive numbering
- Two communication ports: (1) EDP port, full duplex RS-232 or RS-485, (1) printer port, simplex RS-232 or 20 mA
- Operate, configure and calibrate via 2 interfaces: front panel (keyboard & display) or EDP serial command port (RS-232, RS-485)
- Six 300-character programmable output formats, independent transmission to EPD or printer port
- 300-character alphanumeric "title block" for custom printouts
- Completely menu driven
- Angled/sloped keypad for user comfort
- Time and date
- Accumulator

Options/Accessories

- 43381 Analog output: selectable 0-10V, 4-20 mA
 - 45409 Allen-Bradley Remote I/O (internal)
 - 49976 PROFIBUS[®] DP Interface kit (internal)
 - 45408 4-channel internal relay board (requires two for 8 relays)
 - 45410 Panel mount kit (flat face only)
 - 19369 Batching start/stop switch box
 - 46030 Revolution[™] Scale Software*
 - 64505 Additional operating manual
- 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 Quench arc suppressor

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

LINE VOLTAGES:

115 or 230 VAC

FREQUENCY:

50 or 60 Hz

POWER CONSUMPTION:

100 mA @ 115 VAC (11.5W)
50 mA @ 230 VAC (11.5W)

FUSING:

115 VAC 2 x 250 mA
230 VAC 2 x 125 mA

ANNUNCIATORS:

Text description

LOAD CELL EXCITATION:

10 +/- 0.5 VDC, 8 x 350Ω load cells or
16 x 700Ω load cells

FULL SCALE INPUT:

4.5 mV/V (max)

INPUT IMPEDANCE:

200 MΩ typical

NOISE (REFERRED TO INPUT):

0.3 uV p-p with digital filter at 4

INTERNAL RESOLUTION:

1,000,000+ internal graduations

EXTERNAL RESOLUTION:

Up to 60,000 displayed graduations

MEASUREMENT RATE:

30, 15, 7 1/2, 3 3/4 per second

FILTERING:

RATTLETRAP® software filtering

ANALOG FILTERING:

2 Hz, 8 Hz, OFF

SERIAL PORTS:

Two channels, RS-232, full duplex. Channel 1 has an additional RS-485 transceiver; RS-485 is used if an RS-485 address is configured. Channel 2 simplex also has a 20 mA active transceiver.

SYSTEM LINEARITY:

Within 0.01% of FS

ZERO STABILITY:

150 nV/°C maximum

SPAN STABILITY:

3.5 ppm/°C maximum

CALIBRATION METHOD:

Software calibration, constants stored in EEPROM

COMMON MODE VOLTAGE:

+/- 4V, referred to earth

INPUT OVERLOAD:

+/- 12V

SENSE AMPLIFIER:

Differential amplifier with selectable 4- and 6-wire sensing

CONSECUTIVE NUMBER:

Selectable start point of "0" or "1" to 999,999

RFI PROTECTION:

Signal, excitation, and sense lines protected by capacitor bypass

REAL TIME CLOCK:

Time and date are standard, accessible by EDP command, battery-backed

DIGITAL INPUTS/OUTPUTS:

8 digital inputs, 8 digital open collector outputs

PRINT TICKETS:

6 programmable print formats — 300 characters each with 50-character title blocks

ANALOG OUTPUT:

Voltage output: 0-10 VDC
Load resistance: 1KΩ minimum
Current output: 4-20 mA
External loop resistance: 500Ω maximum

DISPLAY:

Large 0.75" (19mm) Vacuum Fluorescent Display (VFD)
7-digit, 2 unit descriptors, 16 5x7 VFD dot matrix secondary display

KEYBOARD:

Full 29-key alphanumeric flat membrane panel

OPERATING TEMPERATURE:

Legal: 14°F to 104°F (-10°C to 40°C)
Industrial: 14°F to 122°F (-10°C to 50°C)

RATING/MATERIAL:

NEMA 4X/IP66, stainless steel

WEIGHT:

Sloped: 7.4 lb (3.3 kg) Flat: 7.8 lb (3.5 kg)

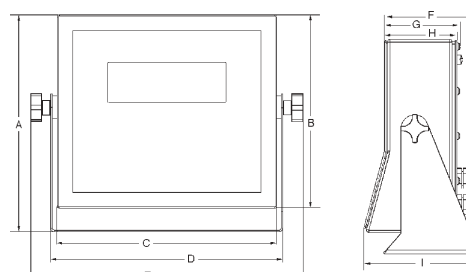
APPROVALS:

NTEP certified per H-44 at 10,000 Divisions, Class III/IIIL, CC#98-081; Measurement Canada approved, AM-5253, Class III/IIHD, III at 10,000 Divisions and IIHD at 20,000 Divisions; CE marked, UL & CUL listed, OIML approved

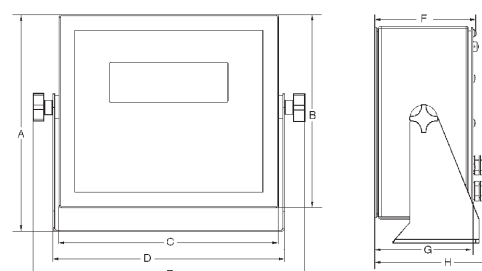
WARRANTY:

Two year limited warranty

SLOPED FACE



FLAT FACE



DIMENSIONS

Sloped face

A = 9.88" (250.9mm)
B = 8.38" (212.9mm)
C = 9.50" (241.3mm)
D = 10.02" (254.5mm)
E = 11.78" (299.2mm)
F = 4.07" (103.3mm)
G = 3.30" (83.8mm)
H = 3.15" (80.0mm)
I = 4.95" (125.7mm)

Flat face

A = 9.88" (250.9mm)
B = 8.38" (212.9mm)
C = 9.50" (241.3mm)
D = 10.02" (254.5mm)
E = 11.78" (299.2mm)
F = 4.36" (110.7mm)
G = 4.25" (107.9mm)
H = 5.25" (133.3mm)

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