

IQ plus[®] 590-DC Battery Powered Digital Weight Indicator



Measurement
Canada
Approved



ANOTHER **REVOLUTION** SOLUTION

PART #	DESCRIPTION
52486	IQ plus 590-DC, battery powered with 115 VAC wall adapter
52485	IQ plus 590-DC, battery powered with 230 VAC wall adapter
66728	IQ plus 590-DC, battery powered, CE marked (voltage adapter sold separately)

Take full advantage of your weighing system with the new IQ plus 590-DC. Featuring C-cell battery power and a full numeric keypad, this handy unit makes setup and operation a snap! From tare entry to counting, the IQ plus 590-DC allows numeric entry directly from the keypad, saving time by eliminating the need to scroll and toggle.

The IQ plus 590-DC has a superior battery life of over 300 hours, meaning weeks or months of worry free operation! And with a stainless steel NEMA 4X/IP66 enclosure, you can rely on top performance in any environment. It's the perfect solution for outdoor weighing systems, portable warehouse scales, and material handling applications.

The IQ plus 590-DC's prominent LCD display shows up to six numerals in large one-inch digits for easy character recognition. When left idle, the unit prolongs battery life by using a configurable standby mode. This unique indicator even serves as a portable counting scale in piece count mode with sample size or average piece weight entry. Plus, an AC adapter is provided to prolong battery life when power is available.

In environments where vibration is a concern, the IQ plus 590-DC includes RATTLETRAP[®] three-stage digital filtering and selectable measurement rates, ensuring accurate weighments anywhere, anytime.

Applications

- Washdown environments
- Portable scales
- Warehousing
- Floor and bench scales
- Agricultural
- Portable counting

Standard Features

- Full numeric keypad
- Keyboard entry of piece weight, tare weight, calibration, and sample size
- Display tare button
- Powered by 6 "C" cell alkaline batteries for complete portability (batteries not included)
- Revolution[™] Scaleware support
- Three 300-character print ticket formats
- Power for four 350Ω load cells or eight 700Ω load cells
- Supports 4- and 6-wire load cell connections
- EDP port for full duplex, RS-232 communications
- NEMA 4X/IP66-rated stainless steel enclosure
- Large 1" (24.5mm), six-digit Liquid Crystal Display (LCD)
- AC adapter for 115 or 230 VAC power
- Configurable standby mode to prolong battery life
- RATTLETRAP[®] three-stage digital filtering
- Configurable units multiplier
- Configurable analog-to-digital measurement rate
- Self-resetting thermal fuse

Options/Accessories

- 46030 Revolution[™] Scale Software
- 51778 Additional operating manual

POWER:

9 VDC, provided by 6 C-cell alkaline batteries or AC adapter

POWER CONSUMPTION:

<100mA

FULL SCALE INPUT SIGNAL:

Up to 17mV

EXCITATION VOLTAGE:

5 ± 0.25 VDC, 4 x 350Ω or 8 x 700Ω load cells

SENSE AMPLIFIER:

Differential amplifier with 4- and 6-wire sensing

INPUT RANGE:

-2.5 mV — 22.5 mV

SENSITIVITY:

0.3 μV/graduation minimum

1.5 μV/grad recommended

INPUT IMPEDANCE:

200 MΩ

INTERNAL RESOLUTION:

1,000,000 counts

DISPLAY RESOLUTION:

100,000 dd

COUNTING CAPACITY:

100,000 pieces

MEASUREMENT RATE:

30, 15, 7½, 3¾ per second

SYSTEM LINEARITY:

Within 0.01% of full scale

ZERO STABILITY:

155 nV/°C, maximum

SPAN STABILITY:

4.0 ppm/°C, maximum

CALIBRATION METHOD:

Software, constants stored in EEPROM

COMMON MODE VOLTAGE:

2.5 ± .25 VDC

INPUT OVERLOAD:

± 12 V continuous, static discharge protected

DIGITAL SPECIFICATIONS:

Digital Filter: RATTLETRAP® software filtering

SERIAL COMMUNICATIONS:

EDP/Printer Port: Full Duplex RS-232

OPERATOR INTERFACE:

Display: 1" (24.5mm) 6-digit Liquid Crystal Display (LCD)

Annunciators: Units (lb/kg), piece count mode (PC), gross, net, standstill, center of zero, tare, low battery

Keyboard: 19-key flat membrane panel

OPERATING TEMPERATURE:

14° to 104°F/-10° to 40°C (legal)

14° to 122°F/-10° to 50°C (industrial)

WEIGHT:

6.5 lb (2.95 kg)

RATING/MATERIAL:

NEMA 4X/IP66, stainless steel

APPROVALS:

NTEP certified, per H-44 at 10,000 Divisions, Class III/IIIL, CC# 98-203A1; Measurement Canada approved, AM-5300, Class III at 10,000 Divisions, Class IIIHD at 20,000 Divisions; CE pending, UL & CUL listed

WARRANTY:

Two year limited warranty

DIMENSIONS

A = 11.0" (280mm)	E = 1.6" (41mm)
B = 9.0" (229mm)	F = 3.2" (82mm)
C = 6.5" (166mm)	G = 4.1" (104mm)
D = 7.5" (190mm)	H = 3.0" (76mm)

