

## IQ plus<sup>®</sup> 590-DC Battery Powered Digital Weight Indicator



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 features piece count mode with sample size or average piece weight entry, allowing it to serve as part of a portable counting scale system. 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<sup>®</sup> 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<sup>™</sup> Scale Software support
- Three 300-character print ticket formats
- Power for four 350 $\Omega$  load cells or eight 700 $\Omega$  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<sup>®</sup> three-stage digital filtering
- Configurable units multiplier
- Configurable analog-to-digital measurement rate
- Self-resetting thermal fuse

### Options/Accessories

- 46030 ..... Revolution<sup>™</sup> Scale Software\*
- 51778 ..... Additional operating manual

\* Revolution can be downloaded for FREE from the distributor section of our web site at [www.rlws.com](http://www.rlws.com)

## 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°F to 104°F/-10°C to 40°C (legal)

14°F to 122°F/-10°C 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 marked, 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)

