

IQ

P L U S

590-DC

BATTERY-POWERED
DIGITAL WEIGHT INDICATOR



RICE LAKE WEIGHING SYSTEMS
Industrial Solutions on a Global Scale®

IQ

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The IQ plus® 590-DC... Easy Operation Anywhere, Anytime.

Take full advantage of your weighing system with the 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.

Standard Features:

- Full numeric keypad
- Keypad entry of piece weight, tare weight, calibration, and sample size
- Display tare button
- Powered by 6 C-cell alkaline batteries for complete portability
- 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 LCD display
- 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

Specifications:

Power:	
Power:	9 VDC, provided by 6 C-cell alkaline batteries or AC adapter
Power Consumption:	<100mA
Analog Specifications:	
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
Analog Signal 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
Input Sensitivity:	155 nV per internal count
System Linearity:	Within 0.01% of full scale
Zero Stability:	155 nV/°C, maximum
Span Stability:	4.0 ppm/°C, maximum
Calibration Method:	Front panel or software, constants stored in EEPROM
Common Mode Voltage:	2.5 ± .25 VDC
Common Mode Rejection:	140 dB minimum @ 50 or 60 Hz
Normal Mode Rejection:	90 dB minimum @ 50 or 60 Hz
Input Overload:	± 12 V continuous, static discharge protected
RFI Protection:	Signal, excitation, and sense lines protected by capacitor bypass
Digital Specifications:	
Digital Filter:	RATTLETRAP® software filtering
Serial Communications:	
EDP/Printer Port:	Full duplex RS-232
Operator Interface:	
Display:	1" (24.5mm) 6-digit LCD display
Annunciators:	Units (lb/kg), piece count mode (PC), gross, net, standstill, center of zero, tare, low battery
Keyboard:	19-key flat membrane panel
Environmental:	
Operating Temperature:	-10° to 40°C/14° to 104°F (legal) -10° to 50°C/14° to 122°F (industrial)
Enclosure:	
Dimensions:	9.0" x 6.5" x 3.0" (229mm x 166mm x 76mm [includes battery compartment cover, does not include stand or knobs])
Shipping Weight:	6.5 lb (2.95 kg)
Finish:	NEMA 4X/IP66, stainless steel



CC #98-203A1
n_{max} = 10,000
Class III/IIIL

Measurement Canada Approved

AM 5300
Class III 10,000
Class IIIHD 20,000



Your Rice Lake Weighing Systems distributor is:

RICE LAKE WEIGHING SYSTEMS

Industrial Solutions on a Global Scale®

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