

NEW

680 Synergy Series

Digital Weight Indicator

Replacement for
IQ355/420 Plus



INDICATORS / CONTROLLERS

Specifications

Power:

Line voltages: 100-240 VAC
Frequency: 50-60 Hz

Power consumption:

~2W (AC) with one 350 ohm load cell, 15W max

Excitation Voltage:

10 VDC (± 5 VDC), 8 x 350 Ω or 16 x 700 Ω load cells

Analog Output (optional):

Type: Voltage or current output, 16-bit resolution

Voltage Output:

0-5 VDC, 0-10 VDC, +/- 5 VDC, +/- 10 VDC

Voltage Load Resistance:

1 K Ω minimum

Current Output:

0-20 mA, 0-24 mA, 4-20 mA

Current Loop Resistance:

1,000 Ω maximum

Analog Signal Input Range:

-0.5 mV/V to +7 mV/V

Analog Signal Sensitivity:

1 μ V/graduation recommended

A/D Sample Rate:

6.25-120 Hz, software selectable

Resolution:

Internal: 8,000,000 counts
Display: 1,000,000

System Linearity / PI Rating:

Within 0.01% full scale

Digital I/O:

Four configurable I/O - 5V logic

Communication Ports:

Two RS-232 full duplex
RS-485 full duplex
USB (device)
Ethernet (10/100)

Status Annunciators:

Eight LED annunciators

Display:

Seven 0.8 in tall, seven-segment digits

Keys/Buttons:

Flat membrane panel, tactile feel
(18 buttons plus ON/OFF)

Temperature Range

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

Weight:

6.25 lb (3 kg)

Rating/Material:

Rating: IP69K
Material: AISI 304 Stainless Steel

Warranty:

Two-year limited warranty

EMC Immunity:

10 V/m

Approvals:

NTEP CC 12-123, Class III/IIIL, 10,000d
Measurement Canada AM-5892,
Class III/IIHHD, 10,000d
OIML R76/2006-A-NL1-19.56
UL/cUL Listed
CE Marked

Standard Features

- Bright seven-digit, seven-segment LED display
- Battery backed time and date
- Full numeric keypad
- Three serial ports: two RS-232, one full duplex RS-485
- Numeric keyed entry allowed for tare and setpoint entry
- Formattable tickets
- Ethernet TCP/IP
- USB device
- Stainless steel IP69K enclosure
- Four onboard configurable digital I/O points, TTL logic

Options

- Analog output: 16-bit resolution, 0-10VDC, 0-20 mA, 4-20 mA

Approvals



Measurement
Canada
Approved



www.ricelake.com | Phone: 800-472-6703

RICE LAKE

NEW 680 Synergy Series Digital Weight Indicator

Part Number/Price

Part #	Description	Est. Weight	Price
193152 †	680 Plus indicator, LED display, 115-230VAC, US power cord	7 lb	Consult
193153 ††	680 Plus indicator, LED display, 115-230VAC, EU power cord	7 lb	Consult
196326 †††	680 Plus indicator, LED display, 115-230VAC, UK power cord	7 lb	Consult
196327 ††††	680 Plus indicator, LED display, 115-230VAC, AUS power cord	7 lb	Consult
With Analog Output Card			
195176 †	680 Plus indicator, LED display, 115-230VAC with analog output card, US power cord	7 lb	Consult
195177 ††	680 Plus indicator, LED display, 115-230VAC with analog output card, EU power cord	7 lb	Consult
196539 †††	680 Plus indicator, LED display, 115-230VAC with analog output card, UK power cord	7 lb	Consult
196538 ††††	680 Plus indicator, LED display, 115-230VAC with analog output card, AUS power cord	7 lb	Consult



† US plug (NA) - Type B



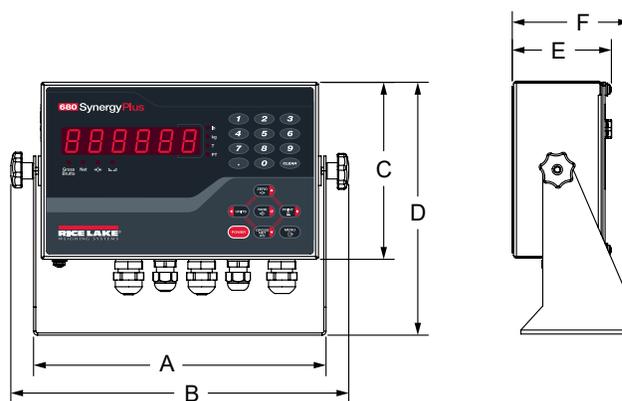
†† Euro Plug - Type E



††† BS1363 (UK) - Type G



†††† AS 3112 (Australian) - Type I



Dimensions			
A	10.02 in (254.5 mm)	D	8.57 in (217.6 mm)
B	11.58 in (294.1 mm)	E	3.40 in (86.3 mm)
C	6.00 in (152.4 mm)	E	4.05 in (26.67 mm)

Options/Accessories

Part #	Description	Price
195084	Analog output option card	Consult

To have your option factory installed, please specify when placing your order.