

680 Synergy Series

Digital Weight Indicator



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



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:

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

Analog Output (optional):

Type: Voltage or current output, 16-bit resolution

Voltage Output:

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

Voltage Load Resistance:

1 KΩ minimum

Current Output:

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

Current Loop Resistance:

1,000Ω maximum

Analog Signal Input Range:

-0.5 mV/V to +7 mV/V

Analog Signal Sensitivity:

1 μV/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 (three-wire)

RS-485 (five-wire)

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)

Dimensions (W x H x D):

11.58 in x 8.57 in x 4.05 in

(29.41 cm x 21.77 cm x 10.29 cm)

Weight:

6.25 lb (2.84 kg)

Rating/Material:

Rating: IP69K

Material: AISI 304 Stainless Steel

Warranty:

Two-year limited warranty

EMC Immunity:

10 V/m

Approvals:

NTEP

Measurement Canada

UL/cUL Listed

CE Marked

Part Number/Price

Part #	Description	Est. Weight	Price
193152 †	680 Plus indicator, LED display, 115-230VAC, US power cord	6.25 lb	Consult
193153 ††	680 Plus indicator, LED display, 115-230VAC, EU power cord	6.25 lb	Consult
196326 †††	680 Plus indicator, LED display, 115-230VAC, UK power cord	6.25 lb	Consult
196327 ††††	680 Plus indicator, LED display, 115-230VAC, AUS power cord	6.25 lb	Consult
With Analog Output Card			
195176 †	680 Plus indicator, LED display, 115-230VAC with analog output card, US power cord	6.25 lb	Consult
195177 ††	680 Plus indicator, LED display, 115-230VAC with analog output card, EU power cord	6.25 lb	Consult
196539 †††	680 Plus indicator, LED display, 115-230VAC with analog output card, UK power cord	6.25 lb	Consult
196538 ††††	680 Plus indicator, LED display, 115-230VAC with analog output card, AUS power cord	6.25 lb	Consult



† NEMA 5-15 plug (NA) - Type B



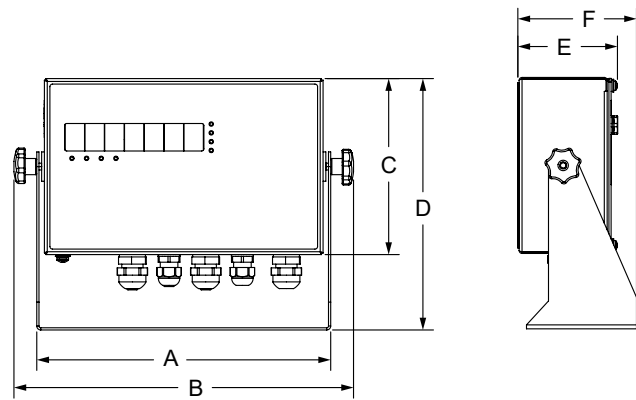
†† CE7/7 (Euro) - Type E



††† 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