

680 Synergy Series

Digital Weight Indicator

INDICATORS /
CONTROLLERS



Specifications

Power:

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

Power Consumption:

2W (AC) 1 × 350 ohm load cell, 15W max

Excitation Voltage:

10 VDC (± 5 VDC), 8 × 350 ohm or
16 × 700 ohm load cells

Analog Signal Input Range:

-5 mV to +70 mV

Analog Signal Sensitivity:

1 µV/graduation recommended

A/D Sample Rate:

6.25 to 120 Hz, software selectable

Resolution:

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

System Linearity:

Within 0.01% full scale

Digital I/O:

Four configurable I/O - 5V logic

(Optional) Analog Output:

16-bit resolution, voltage output 0-10 VDC, current
output 0-20 mA / 4-20 mA

Communication Ports:

Two full-duplex RS-232
RS-485/422 (five-wire)
Micro USB (device)
Ethernet TCP/IP (10/100)

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)

Dimensions:

(L × W × H)
11.58 × 4.05 × 8.57 in
(294 × 103 × 218 mm)

Temperature Range:

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

Rating/Material:

IP69K (IP66 with RJ45)
AISI 304 stainless Steel

Weight:

6.25 lb (3 kg)

Warranty:

Two-year limited

EMC Immunity:

10 V/m

Approvals:

NTEP 19-021, Class III/IIIL, 10,000d
Measurement Canada AM-6121C
OIML R76/2006-A-NL1-19.56
EU Test Certificate TC11562
UKCA
CE Marked
cULus Listed

Approvals



Measurement
Canada
Approved



UK
CA



Standard Features

- LED display
- Battery backed time and date
- Full numeric keypad
- Multiple communication ports
- Eight setpoint, 22 configurable types
- Numeric keyed entry for tare and setpoint entry
- Formattable tickets
- Four onboard configurable digital I/O points, TTL logic
- Local/remote

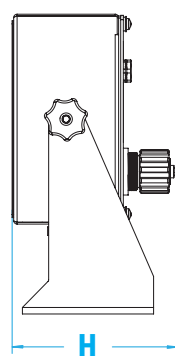
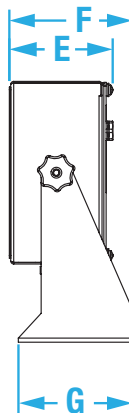
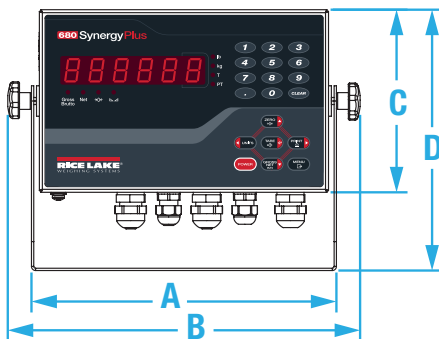
Options

- Analog output: 16-bit resolution, 0-10 VDC, 0-20 mA, 4-20 mA
- RJ45 Ethernet connector

Note: IP Rating is IP66 with RJ45 option. Rating is valid only when the cover is in place, not in use.

Dimensions

680 Synergy Series			
A	10.02 in (255 mm)	E	3.40 in (86 mm)
B	11.58 in (294 mm)	F	4.05 in (103 mm)
C	6.00 in (152 mm)	G	3.80 in (97 mm)
D	8.57 in (218 mm)	H	4.74 in (120 mm)



With External RJ45 Connector

Part Number/Price

Part #	Description	Est. Weight	Price
115 to 230 VAC			
193152†	680 Plus indicator, LED display, US power cord	7 lb	Consult
193153††	680 Plus indicator, LED display, EU power cord	7 lb	Consult
196326†††	680 Plus indicator, LED display, UK power cord	7 lb	Consult
196327††††	680 Plus indicator, LED display, AUS power cord	7 lb	Consult
9 to 36 VDC			
193154*	680 Plus indicator, LED display	7 lb	Consult
With Analog Output Card			
195176†	680 Plus indicator, LED display, 115-230 VAC with analog output card, US power cord	7 lb	Consult
195177††	680 Plus indicator, LED display, 115-230 VAC with analog output card, EU power cord	7 lb	Consult
196539†††	680 Plus indicator, LED display, 115-230 VAC with analog output card, UK power cord	7 lb	Consult
196538††††	680 Plus indicator, LED display, 115-230 VAC with analog output card, AUS power cord	7 lb	Consult
With External RJ45 Connector**			
200183†	680 Plus Indicator, LED display, 115-230VAC with RJ45, US power cord	7 lb	Consult
200184††	680 Plus Indicator, LED display, 115-230 VAC with RJ45, EU power cord	7 lb	Consult
200185†††	680 Plus Indicator, LED display, 115-230 VAC with RJ45, UK power cord	7 lb	Consult
200186††††	680 Plus Indicator, LED display, 115-230 VAC with RJ45, AUS power cord	7 lb	Consult

*Not UL approved

**IP rating is IP66 with RJ45 option

Options/Accessories

Part #	Description	Price
195084	Analog output option card	Consult
151099	Panel mount option, gasketed non-NEMA seal	Consult
195684	CPU board	Consult
194477	Parts kit	Consult

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



† US plug (NA) - Type B



†† Euro Plug - Type E



††† BS1363 (UK) - Type G



†††† AS 3112 (Australian) - Type I