

# 820i® Series

Programmable HMI Indicator/Controller



## Standard Features

- LCD backlit display (W x H) 4.6 in x 2.2 in
- 1 small option slot and 1 large option slot for pluggable options
- Weight display from 0.5 in to 0.75 in
- Display up to 2 scales (scale 1, scale 2 and total)
- 5 user-defined softkeys
- Weight or millivolt calibration with linearization and geographical compensation
- NEMA Type 4X/IP66 stainless steel enclosure
- Selectable A-D measurement rate up to 960/second
- Power for 16, 350 ohm load cells
- 100 setpoints, latched or free-running
- Multi-range/Internal
- Peak hold, rate of change
- Audit trail tracking and Alibi™ software
- 1000 - ID truck register for in/out weighing
- User programmable 256 K flash memory
- Onboard data storage 190 K
- Downloadable programs
- Visual programming for easily creating custom programs
- 8 digital I/O (expandable)
- Configurable with Revolution® software

## Optional Communication:

- Ethernet TCP/IP (serial port 2 header)
- Fiber optic
- Wi-Fi
- RS-485 4 wire
- USB
- Network Protocols



Panel Mount

## Specifications

### Power:

Line voltages: 90 or 264 VAC  
DC voltages: 9-36 VDC  
Frequency: 50 or 60 Hz  
Power consumption: 25 watts maximum

### Excitation Voltage:

10 VDC, 16 x 350 Ω or 32 x 700 Ω load cells

### Analog Signal Input Range:

-10 mV to +45 mV

### Analog Signal Sensitivity:

0.3 μV/graduation minimum at 7.5 Hz  
1.0 μV/graduation typical at 120 Hz  
4.0 μV/graduation typical at 960 Hz

### A/D Sample Rate:

7.5 to 960 Hz, software selectable

### Resolution:

Internal resolution: 8 million counts/8,000,000 23 bit  
Weight display resolution: 9,999,999

### System Linearity:

± 0.01% full scale

### Digital I/O:

8 channels on CPU board; optional  
24-channel I/O expansion boards available

### Circuit Protection:

RFI, EMI, ESD protection

### Serial Ports:

2 ports on CPU board support up to 115,200 bps  
Port 2: Full duplex RS-232 with handshaking  
Port 4: Full duplex RS-232, 2-wire, RS-485, 20 mA output  
Keyboard port hard wired (scan code 1)  
Optional dual-channel serial expansion boards available  
Channel A: RS-232, RS-485, 20 mA  
Channel B: RS-232, 20 mA

### Display :

Viewable area (W x H): 4.6 in x 2.2 in (116 mm x 55 mm), 320 x 156 pixel VGA liquid crystal display (LCD) module with adjustable contrast  
Transmissive display- standard  
Transflective display - option

### Keyboard:

28-key membrane panel, tactile feel, external keyboard support  
Optional keyboard connection supported

### Operating Temperature:

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

### Weight:

Universal enclosure: 9.5 lb (4.3 kg)  
Panel mount enclosure: 8.5 lb (3.9 kg)

### Rating/Material:

NEMA Type 4X/IP66, stainless steel

### Warranty:

Two-year limited warranty

### Approvals:

NTEP CC 01-088, Class III/IL 10,000d  
Measurement Canada AM-5426 Class III/IIHD 10,000d  
OIML UK 2658, 6,000/10,000d  
CE Marked  
UL /cUL Listed (universal)  
UL Recognized (panel mount)  
ROHS compliant

## Approvals



Measurement  
Canada  
Approved



# 820i™ Series

Programmable HMI Indicator/Controller

## Part Number/Price

PART #	DESCRIPTION	EST. SHIP WEIGHT	PRICE
<b>Single Channel</b>			
91995 †	820i Universal, 115 VAC	10 lb	Consult
91996 †	820i Universal, 230 VAC	10 lb	Consult
91997 ††	820i Universal, 230 VAC CE/OIML	10 lb	Consult
107711*	820i Universal, 9-36 VDC nominal	10 lb	Consult
93424 †	820i Panel Mount, 115 VAC **	9 lb	Consult
98280 ††	820i Panel Mount, 230 VAC, CE/OIML**	9 lb	Consult
107712*	820i Panel Mount, 9-36 VDC nominal**	9 lb	Consult
<b>Dual Channel</b>			
93011 †	820i Universal, 115 VAC	10 lb	Consult
93012 †	820i Universal, 230 VAC	10 lb	Consult
93013 ††	820i Universal, 230 VAC CE/OIML	10 lb	Consult
93425 †	820i Panel Mount, 115 VAC**	9 lb	Consult
98281 ††	820i Panel Mount, 230 VAC, CE/OIML**	9 lb	Consult

\*DC/DC converter installed option, not UL approved

\*\* Limited Stock



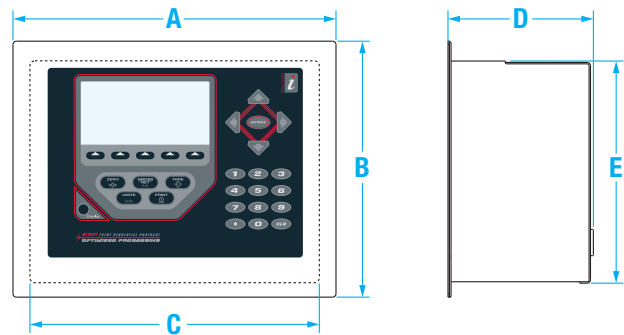
† NEMA 5-15 plug



†† CEE 7/7 plug

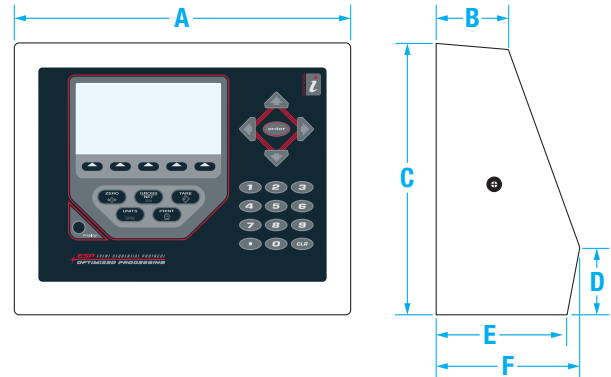
## Options/Accessories

PART #	DESCRIPTION	PRICE
<b>Option Cards</b>		
67601	Digital I/O, 24-channel	Consult
67602	Analog output: selectable 0-10 V, 0-20 mA	Consult
103138	Analog output, dual channel 0-10 V, 0-20 mA (requires version 1.04)	Consult
67604	Serial, dual channel	Consult
87697	Analog input +/-10 VDC, 0-20 mA & thermocouple	Consult
93245	USB Port (PC connection only-replaces serial port)	Consult
<b>Network Cards</b>		
77142	Ethernet TCP/IP Port (serial port 2 header)	Consult
65383	Ethernet thin server (external)	Consult
71986	Ethernet TCP/IP module (installed in option slot)	Consult
98057	Wireless LAN card 802.11 B/G (installed in option slot)	Consult
108671	Wireless LAN card 802.11 A/B (serial port 2 header)	Consult
68539	Allen-Bradley Remote I/O interface	Consult
68540	Profibus® DP interface	Consult
68541	DeviceNet™ interface	Consult
87803	EtherNet/IP® (specifically for A-B PLC)	Consult
103136	ControlNet™ interface	Consult
<b>Hardware</b>		
93359	PS/2 keyboard	Consult
83569	Clear protective overlay (package of 5)	Consult
92777	Filter PreVent™ vent kit	Consult
19369	Start/stop switch box	Consult
101923	Relay box enclosure, does not include relay	Consult
100758	Sunlight viewable display, transfective installed option, replaces transmissive display	Consult
<b>Manuals and Software</b>		
93018	Installation manual	Consult
77925	Revolution® scale software	Consult
93019	IRITE IDE software (version 1.0 included with indicator)	Consult



### 820i PANEL MOUNT DIMENSIONS

<b>A</b>	11.56 in (294 mm)	<b>C</b>	10.38 in (264 mm)	<b>E</b>	7.95 in (202 mm)
<b>B</b>	9.16 in (233 mm)	<b>D</b>	5.20 in (132 mm)		



### 820i UNIVERSAL DIMENSIONS

<b>A</b>	10.56 in (268 mm)	<b>C</b>	8.5 in (216 mm)	<b>E</b>	4.12 in (105 mm)
<b>B</b>	2.28 in (58 mm)	<b>D</b>	2.16 in (55 mm)	<b>F</b>	4.5 in (127 mm)

## Options/Accessories

PART #	DESCRIPTION	PRICE
<b>Primary Component Parts</b>		
102331	CPU board assembly-single channel includes display	Consult
102333	CPU board assembly-dual channel includes display	Consult
93246	Display board assembly	Consult
67613	AC power supply, 25 watt	Consult
97474	DC/DC converter, 9-36 VAC, nominal, 25 watt	Consult
93247	Switch panel membrane	Consult

Relay products can be found on page 521