

## Specifications

### Power:

AC voltages: 100-240VAC Frequency: 50-60 Hz  
DC voltages: 12-24VDC  
Consumption: AC: 25W universal, 65W panel & wall mount  
DC: 25W

### Excitation Voltage:

10 ± VDC 8 x 350Ω or 16 x 700Ω load cells per A/D card

### Analog Signal Input Range:

-45 mV to +45 mV

### Analog Signal Sensitivity:

0.3 µV/graduation minimum at 7.5 Hz  
1.0 µV/graduation recommended

### A/D Sample Rate:

7.5 to 960 Hz, software selectable

### Resolution:

Internal: 8 million counts  
Display: 9,999,999

### System Linearity:

± 0.01% full scale

### Digital I/O:

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

### Communication Ports:

Four ports on CPU board support up to 115,200bps  
Port 1: Full duplex RS-232  
Port 2: RS-232 with CTS/RTS; PS/2 keyboard interface via DB-9 connector  
Port 3: Full duplex RS-232, 20mA output  
Port 4: Full duplex RS-232, 2-wire RS-485, 20mA output  
Optional dual-channel serial expansion boards available  
Channel A: RS-232, RS-485, 20 mA  
Channel B: RS-232, 20 mA

### Display:

(W x H) 4.6 in x 3.4 in (116 mm x 86 mm), 320 x 240 pixel LCD module with adjustable contrast.  
Transmissive display  
Transflective display (optional)

### Keys/Buttons:

27-key membrane panel, tactile feel, PS/2 port for external keyboard connection

### Temperature Range

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

### Weight:

Universal enclosure: 9.5 lb (4.3 kg)  
Wall mount enclosure: 23.0 lb (10.4 kg)  
Panel mount enclosure: 8.5 lb (3.9 kg)  
Deep universal: 11 lb (5.0 kg)

### Rating/Material:

NEMA Type 4X/IP66, stainless steel

### Warranty:

Two-year limited warranty

### EMC Immunity:

EN 50082 Part 2 IEC EN 61000-4-2, 3, 4, 5, 6, 8, and 11

### Approvals:

NTEP CC 01-088, Class III/IIIL 10,000d  
Measurement Canada AM-5426, Class III/III HD 10,000d  
OIML approved 6,000/10,000, UK 2658  
UL/cUL Listed (universal, deep and wall mount enclosure)  
UL/cUL Recognized (panel mount)  
UL/cUL Listed 508A (custom wall mount)  
CE Marked



## Approvals



Measurement  
Canada  
Approved



## Standard Features

- LCD display, (W x H) 4.6 in x 3.4 in
- Selectable character sizes from 0.25 in to 1.2 in
- 60 configurable operator prompts
- Display up to four scale channels per screen with required Legal for Trade information
- 32 scale accumulators
- Five softkeys with 10 user-defined, 14 preset functions per screen
- Ten programmable display screens
- Millivolt calibration, 5-point linearization and geographical calibration
- NEMA Type 4X/IP66 stainless steel enclosure
- Selectable A/D measurement rate up to 960/second
- 100 setpoints, 30 configurable setpoint types
- Two slots for option cards
- 1,000-ID truck register for in/out weighing
- 64 K user on-board NV RAM
- User programmable 128 K flash memory
- Reflash memory to upgrade firmware
- Power for 16, 350 ohms load cells per A/D board
- Local-remote indicators
- Multi range/interval
- Alibi™ storage
- Audit trail tracking
- Peak hold
- Rate of change

## USB Standard Features

- USB interface card on Port 2
  - The USB card is supported on Rev L CPU boards or later
  - The 920i for USB interface requires firmware version 5.0 or higher
- Connector Types:**
- Standard Type A: 920i connects to keyboard, ASCII font label ticket printers and flash drives
  - Standard Type B: 920i connects to PC
- USB Interface Functions:**
- Supports weigh mode and configuration mode functions
  - Supports upload of databases and .920 configuration file
  - Supports download of databases, .920 configuration file, iRite, COD file and firmware file
  - Sanity checks for command errors
- Flash Drives:**
- Supports USB 2.0
  - Create sub directories by unit ID and database name
  - Use the root directory for generic files
- Optional Washdown Connectors page 524**
- Sealed receptacle
  - Connectors - cables
  - USB cover - flash drive and receptacle

# 920i® Series

Programmable Weight Indicator/Controller



## 920i Universal Part Number/Price

Part #	Description	USB	Est. Weight	Price
<b>Single-Channel</b>				
67527	115 VAC†		10 lb	Consult
115003	115 VAC†	USB	10 lb	Consult
67615	230 VAC†		10 lb	Consult
120062	230 VAC†	USB	10 lb	Consult
69522	230 VAC††		10 lb	Consult
120074	230 VAC††	USB	10 lb	Consult
107713*	9-36 VDC, 25 watt		10 lb	Consult
120080*	9-36 VDC, 25 watt	USB	10 lb	Consult
<b>Dual-Channel</b>				
69767	115 VAC†		10 lb	Consult
120086	115 VAC†	USB	10 lb	Consult
69772	230 VAC†		10 lb	Consult
120090	230 VAC†	USB	10 lb	Consult
69774	230 VAC††		10 lb	Consult
120096	230 VAC††	USB	10 lb	Consult
<b>No A/D Channel</b>				
77790	115 VAC†		10 lb	Consult
120100	115 VAC†	USB	10 lb	Consult
77791	230 VAC††		10 lb	Consult
120104	230 VAC††	USB	10 lb	Consult

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

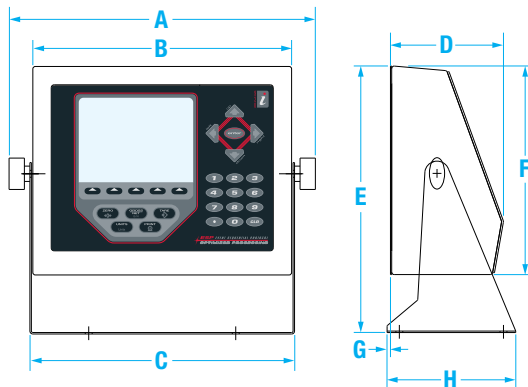
⊙ †† CEE 7/7 plug (Euro) ⊕ † NEMA 5-15 plug

## 920i Deep Universal Part Number/Price

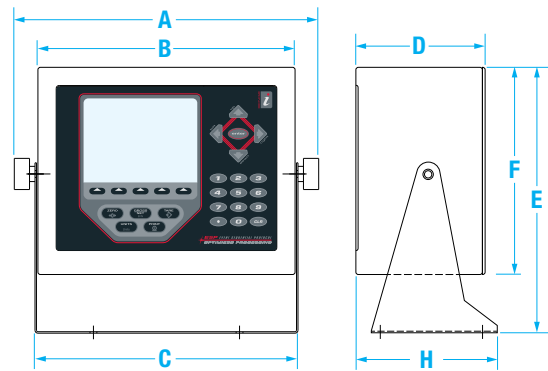
Part #	Description	USB	Est. Weight	Price
<b>Single-Channel</b>				
82455	115 VAC†		12 lb	Consult
115004	115 VAC†	USB	12 lb	Consult
82457	230 VAC†		12 lb	Consult
120064	230 VAC†	USB	12 lb	Consult
82459	230 VAC††		12 lb	Consult
120075	230 VAC††	USB	12 lb	Consult
107714*	9-36 VDC, 25 watt		12 lb	Consult
120081*	9-36 VDC, 25 watt	USB	12 lb	Consult
<b>Dual-Channel</b>				
82456	115 VAC†		12 lb	Consult
120087	115 VAC†	USB	12 lb	Consult
82458	230 VAC†		12 lb	Consult
120092	230 VAC†	USB	12 lb	Consult
82460	230 VAC††		12 lb	Consult
120097	230 VAC††	USB	12 lb	Consult
<b>No A/D Channel</b>				
93243	115 VAC†		12 lb	Consult
120101	115 VAC†	USB	12 lb	Consult
93244	230 VAC††		12 lb	Consult
120105	230 VAC††	USB	12 lb	Consult

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

⊙ †† CEE 7/7 plug (Euro) ⊕ † NEMA 5-15 plug



920i Universal Dimensions			
A	12.50 in (318 mm)	D	4.61 in (117 mm)
B	10.56 in (268 mm)	E	10.87 in (276 mm)
C	10.80 in (203 mm)	F	8.50 in (216 mm)
		G	0.14 in (3,5 mm)
		H	5.25 in (206 mm)



920i Universal Dimensions			
A	12.50 in (318 mm)	D	5.36 in (216 mm)
B	10.56 in (268 mm)	E	10.87 in (61 mm)
C	10.80 in (203 mm)	F	8.50 in (216 mm)
		H	5.88 in (7 mm) 4X

# 920i® Series

Programmable Weight Indicator/Controller



INDICATORS / CONTROLLERS

## 920i Wall Mount Part Number/Price

Part #	Description	USB	Est. Weight	Price
<b>Single-Channel</b>				
69763	115 VAC†		23 lb	Consult
115005	115 VAC†	USB	23 lb	Consult
69765	230 VAC†		23 lb	Consult
120066	230 VAC†	USB	23 lb	Consult
72133	230 VAC††		23 lb	Consult
120078	230 VAC††	USB	23 lb	Consult
107715*	9-36 VDC		23 lb	Consult
120082*	9-36 VDC	USB	23 lb	Consult
<b>Dual-Channel</b>				
69770	115 VAC†		23 lb	Consult
120088	115 VAC†	USB	23 lb	Consult
69776	230 VAC†		23 lb	Consult
120093	230 VAC†	USB	23 lb	Consult
72134	230 VAC††		23 lb	Consult
120098	230 VAC††	USB	23 lb	Consult
<b>No A/D Channel</b>				
77794	115 VAC†		23 lb	Consult
120102	115 VAC†	USB	23 lb	Consult
77795	230 VAC††		23 lb	Consult
120106	230 VAC††	USB	23 lb	Consult

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

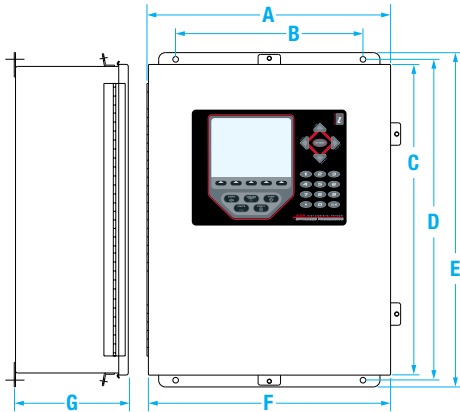
⊙ †† CEE 7/7 plug (Euro) ⊞ † NEMA 5-15 plug

## 920i Panel Mount Part Number/Price

Part #	Description	USB	Est. Weight	Price
<b>Single-Channel</b>				
69764	115 VAC†		9 lb	Consult
115006	115 VAC†	USB	9 lb	Consult
69766	230 VAC†		9 lb	Consult
120069	230 VAC†	USB	9 lb	Consult
72137	230 VAC††		9 lb	Consult
120079	230 VAC††	USB	9 lb	Consult
107716*	9-36 VDC		9 lb	Consult
120083*	9-36 VDC	USB	9 lb	Consult
<b>Dual-Channel</b>				
69771	115 VAC†		9 lb	Consult
120089	115 VAC†	USB	9 lb	Consult
69777	230 VAC†		9 lb	Consult
120095	230 VAC†	USB	9 lb	Consult
72138	230 VAC††		9 lb	Consult
120099	230 VAC††	USB	9 lb	Consult
<b>No A/D Channel</b>				
77792	115 VAC†		9 lb	Consult
120103	115 VAC†	USB	9 lb	Consult
77793	230 VAC††		9 lb	Consult
120107	230 VAC††	USB	9 lb	Consult

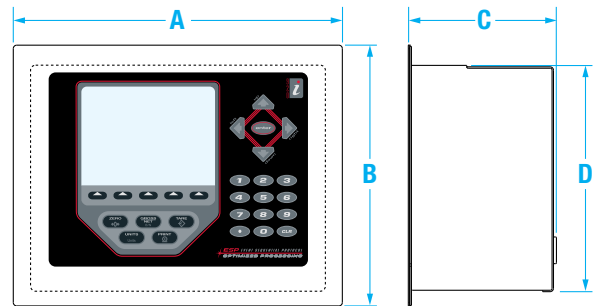
\*DC/DC converter installed option, not UL approved

⊙ †† CEE 7/7 plug (Euro) ⊞ † NEMA 5-15 plug



### 920i Wall Mount Dimensions

A	14.30 in (363 mm)	D	18.84 in (479 mm)	F	14.00 in (356 mm)
B	11.00 in (279 mm)	E	19.63 in (499 mm)	G	6.75 in (171 mm)
C	18.00 in (457 mm)				



### 920i Panel Mount Dimensions

A	11.56 in (294 mm)	C	5.20 in (132 mm)
B	9.16 in (233 mm)	D	7.95 in (202 mm)

# 920i® Series

Programmable Weight Indicator/Controller

## Options/Accessories

Part #	Description	Price
<b>Option Cards</b>		
68532	A/D, single-channel	Consult
68533	A/D, dual-channel	Consult
67600	Memory, 1 MB NV RAM	Consult
67601	Digital I/O, 24-channel TTL output	Consult
67602	Analog output: selectable 0-10 V, 0-20 mA	Consult
103138	Analog output, dual-channel 0-10 V, 0-20 mA	Consult
67603	Pulse input, single-channel	Consult
67604	Serial port card, dual-channel, RS-232 and RS-485	Consult
87697	Analog input +/-10 VDC, 0-20 mA and thermocouple	Consult
<b>Network Cards</b>		
65383	Ethernet Thin Server (external)	Consult
71986	Ethernet TCP/IP 10/100 Base-T module (internal) page 565	Consult
98057	Ethernet TCP/IP, wireless LAN card 802.11 B/G page 565	Consult
87803	EtherNet/IP® page 565	Consult
68539	Remote I/O interface page 563	Consult
68540	Profibus® DP interface page 563	Consult
68541	DeviceNet™ interface page 564	Consult
103136	ControlNet® interface page 564	Consult
<b>Expansion Cards</b>		
69782	Two-slot expansion board (wall mount)	Consult
71743	Two-slot expansion board (panel mount and deep universal)	Consult
179488	Two-slot expansion board (wall mount DC powered)	Consult
180047	Two-slot expansion board (deep universal and panel mount, DC powered)	Consult
69783	Six-slot expansion board (wall mount)	Consult
<b>Hardware</b>		
83569	Clear protective overlay (package of 5)	Consult
70056	Cable, DB9M to DB9F, Straight Cable	Consult
93359	Keyboard, QUERTY PS/2	Consult
99149	Keyboard, QWERTY 109-key USB, flexible, washable	Consult
77788	Fiber optic board, installed in 920i	Consult
92777	Filter, PreVent™ vent kit PG 7 cord grip	Consult
19368	Start/stop controls without box, for use on wall mount	Consult
19369	Start/stop switch with FRP box	Consult
<b>Manuals and Software</b>		
69781	iRev™ scale software	Consult
72809	920i interchange® database software	Consult
67887	Additional installation manual	Consult
67888	Additional programming reference	Consult
<b>Primary Component Parts</b>		
186272***	CPU board assembly for LED backlight	Consult
186275***	Display board, LED back light, transmissive	Consult
186276***	Display board, LED back light, transreflective	Consult
67613	AC power supply, 25 watt for universal	Consult
71333	Power supply, 65 watt for deep, panel and wall mount	Consult
132791	Power supply 12-24VDC, 25 watt	Consult
66502	Switch panel membrane	Consult

\*\*\*Design change in 2018 to LED backlight display. See replacement parts for CCFL backlight display and CPU board Rev N or older.

The LED backlight display can be used with CPU board Rev N or older by replacing the power supply cable. PN 186464 for Universal, PN 186278 for Panel or Deep, PN 186760 for Wall mount.

## Options/Accessories

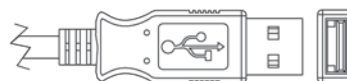
Part #	Description	Connector Type				Price
		Sealed		Unsealed		
<b>USB Cable Options</b>						
Note: Connector is a male plug						
		A	B	A	B	
79074	Unsealed connectors USB-A to USB-B, 2 m cable			X	X	Consult
124700	Sealed connectors, USB-A to USB-B, 3 m IP68 cable	X	X			Consult
126477	Sealed connector USB-A to unsealed connector USB-A, 3 m IP68 cable	X		X		Consult
124701	Sealed connector USB-A to unsealed connector USB-B, 3 m IP68 cable	X			X	Consult
124702	Sealed connector USB-B to unsealed connector USB-A, 3 m IP68 cable		X	X		Consult
124695	Panel plug 1.125 in diameter					Consult
<b>USB Receptacles</b>						
Note: Receptacle is a socket						
		Sealed		Unsealed		
126476	Sealed receptacle USB-A for wall mount, 0.5 m cable	X		X		Consult
124703	Sealed receptacle USB-A to unsealed connector USB-B, 0.5 m cable	X			X	Consult
124704	Sealed receptacle USB-B to unsealed connector USB-B, 0.5 m cable		X		X	Consult
125998*	Sealed receptacle USB-A to five-pin connector, 0.28 m cable (internal to 920i)	X				Consult
125999*	Sealed receptacle USB-B to five-pin connector, 0.28 m cable (internal to 920i)	X				Consult
124694	Cover for sealed receptacles					Consult
124689	Cover for flash driver mounts on sealed receptacle					Consult
125077	Rice Lake USB flash drive, 1 GB					Consult
<b>Ethernet Cables</b>						
		Sealed		Unsealed		
124706	Sealed to sealed, 3 m cable	X				Consult
124707	Sealed to unsealed connector, 3 m cable	X		X		Consult
<b>Ethernet Receptacles</b>						
		Sealed		Unsealed		
126353*	RJ-45 receptacle sealed, 0.28 m internal to 920i (requires Ethernet TCP/IP option installed)	X				Consult

\*These options require a milled back plate which has two cutouts. If ordering only one receptacle, a plug (PN 124695) is required for the second cutout. USB enclosure parts with cutout: PN 119891 (Universal) PN 115118 (Universal Deep) PN 126585 (Wall Mount)

Unsealed Connectors

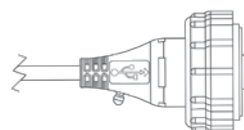


Type B

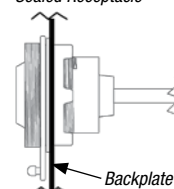


Type A

Sealed Connector



Sealed Receptacle



Backplate

### Grayhill Relays and Racks

Part #	Description	Price
52332	Two-channel input relay, 2.5-28VDC	Consult
52318	Two-channel input relay, 120 VAC	Consult
52319	Two-channel input relay, 240 VAC	Consult
52331	Two-channel input relay, 10-32 VDC	Consult
52316	Two-channel output relay, 120-140 VAC at 2 amp	Consult
52317	Two-channel output relay, 240-280 VAC at 7 amp	Consult
71376	Two-channel output relay, 3-60 VDC at 1 amp	Consult
71377	Two-channel output relay, 0-200 VDC/VAC at 1.5A/10W (dry contact)	Consult
84698	Two-channel output relay, inductive load, 120-140 VAC at 2A	Consult
84699	Two-channel output relay, inductive load, 240-280 VAC at 2A	Consult
54215	Fuse, 3.15 amp, Grayhill	Consult
52312	Eight-channel relay rack, panel mount and wall mount, requires 50-Pin flat or round ribbon cable - 8 slots	Consult
52314	16-channel relay rack, panel mount and wall mount, requires 50-Pin flat or round ribbon cable - 8 slots	Consult
52315	24-channel relay rack, panel mount and wall mount, requires 50-Pin flat or round ribbon cable - 12 slots	Consult
46189	Jumper strap, 10 position for Grayhill	Consult
108396	Digital input 5 VDC, 15-30 VAC/10-32 VDC	Consult
108397	Digital output 5VDC, 3-60 VDC	Consult
70780	Cable, 50-Pin flat ribbon for digital I/O	Consult
70779	Cable, 50-Pin round ribbon for digital I/O with cord grip	Consult
72442	Cable, 50-Pin round ribbon for digital I/O without cord grip	Consult



8-channel relay rack PN 52312



16-channel relay rack PN 52314



24-channel relay rack PN 52315



OPTO 22 G4 PN-15973



OPTO 22 G4 PN-45408

### OPTO 22 Relays and Racks

Part #	Description	Price
15969	G4IDC5 10-32VDC input relay module, white (N/O)	Consult
15970	G40DC5R dry contact 100 VDC/1.5A output, red (N/O)	Consult
22848	G40DC5R5 dry contact 100 VDC/1.5A output, red (N/C)	Consult
15971	G40AC5 115 VAC output relay module, black (N/O)	Consult
15972	G4IAC5 115 VAC input relay module, yellow (N/O)	Consult
22847	G40AC5A5 115/230 VAC output relay module, black (N/C)	Consult
36632	G40AC5A 115/230 VAC output relay module, black (N/O)	Consult
36631	G4IAC5A 230 VAC input relay module, yellow (N/O)	Consult
16478	Quencharc arc suppressor	Consult
101923	FRP enclosure with Opto four-channel rack	Consult
15973	Four-channel relay rack, 3.25 x 3.25 in	Consult
45408	Four-channel relay rack 6.1 x 1.2 in	Consult
99032	Adapter plate, for four-channel Opto rack 33490	Consult
26834	Fuse, 1A 250V (for PN 15970 and PN 22848)	Consult
21735	Fuse, 4A 250V (for PN 15971, PN 22847 and PN 36632)	Consult