

### Specifications

#### Power:

AC voltages: 100-240 VAC Frequency: 50-60 Hz  
 DC voltages: 12-24 VDC  
 Consumption: AC: 25W (universal) or 65W (others)  
 DC: 25W for all models

#### Excitation Voltage:

10 ± VDC  
 16 x 350Ω or 32 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/8,000,000  
 Display: 1,000,000

#### System Linearity:

± 0.01% full scale

#### Digital I/O:

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

#### 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 or USB type A and B connectors  
 Port 3: Full duplex RS-232, 20mA  
 Port 4: Full duplex RS-232, 2-wire RS-485, 20mA  
 Optional dual-channel serial expansion boards  
 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 or USB 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, Type 12, 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/II HD 10,000d  
 OIML approved 6,000/10,000, TC11584  
 UL/cUL Listed (universal, deep and wall mount)  
 UL/cUL Recognized (panel mount)  
 UL/cUL Listed 508A (custom wall mount)  
 CE Marked



Board Information:  
 Previous CPU board is green in color  
 Current CPU board is blue in color

### 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, five-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 -ohm 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 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:

- 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*	12-24 VDC, 25 watt		10 lb	Consult
120080*	12-24 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

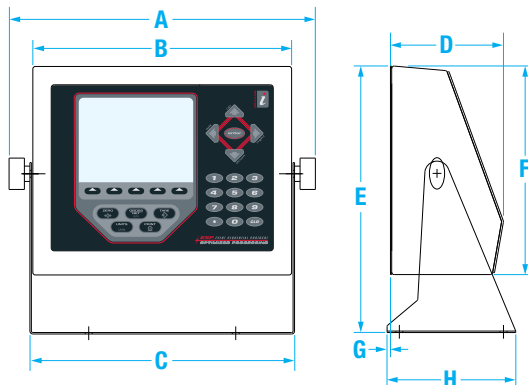
\*DC/DC converter installed option, not UL approved



† US plug (NA) - Type B



†† Euro Plug - Type E



### 920i Universal Dimensions

A	12.50 in (318 mm)	D	4.61 in (117 mm)	G	0.14 in (3.5 mm)
B	10.56 in (268 mm)	E	10.87 in (276 mm)	H	5.25 in (206 mm)
C	10.90 in (277 mm)	F	8.50 in (216 mm)		

## 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*	12-24 VDC, 25 watt		12 lb	Consult
120081*	12-24 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

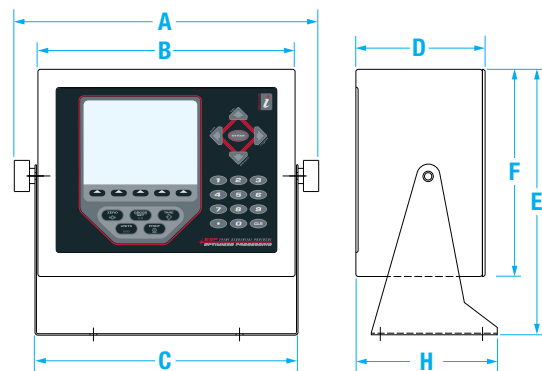
\*DC/DC converter installed option, not UL approved



† US plug (NA) - Type B



†† Euro Plug - Type E



### 920i Deep Universal Dimensions

A	12.50 in (318 mm)	D	5.36 in (216 mm)	F	8.50 in (216 mm)
B	10.76 in (273 mm)	E	10.87 in (276 mm)	H	5.88 in (149 mm)
C	10.90 in (277 mm)				

# 920i® Series

Programmable Weight Indicator/Controller



## 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*	12-24 VDC, 25 watt		23 lb	Consult
120082*	12-24 VDC, 25 watt	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



† US plug (NA) - Type B



†† Euro Plug - Type E

## 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*	12-24 VDC, 25 watt		9 lb	Consult
120083*	12-24 VDC, 25 watt	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

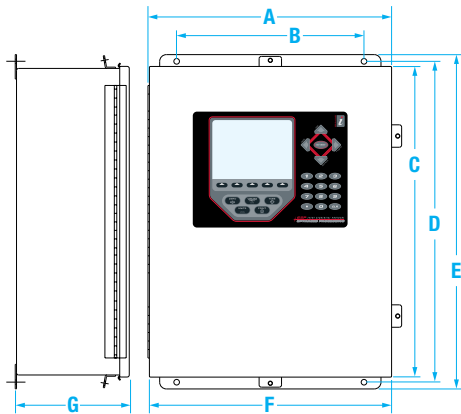
\*DC/DC converter installed option, not UL approved



† US plug (NA) - Type B

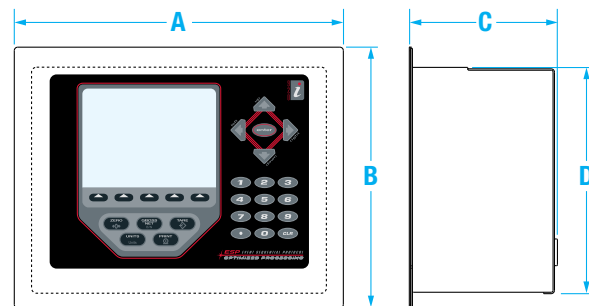


†† Euro Plug - Type E



### 920i Wall Mount Dimensions

A	14.30 in (363 mm)	D	18.84 in (479 mm)	F	14.30 in (363 mm)
B	11.00 in (279 mm)	E	19.63 in (499 mm)	G	6.75 in (171 mm)
C	18.20 in (462 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

INDICATORS / CONTROLLERS

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

RICE LAKE

## 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 module (internal) page 567	Consult
98057	Wireless LAN module 802.11 b/g page 567	Consult
87803	EtherNet/IP® page 566	Consult
68539	Remote I/O interface page 564	Consult
68540	Profibus® DP interface page 564	Consult
187816	Profinet® I/O interface page 564	Consult
68541	DeviceNet™ interface page 565	Consult
103136	ControlNet™ interface page 566	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
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, (blue color)	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	AC 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 green CPU board Rev N or older.

The LED backlight display can be used with green CPU board Rev N or older by replacing the power supply cable. Universal 186464 (AC) 186464 (DC); Deep universal 186278 (AC) 187603 (DC); Panel 186278 (AC) 187603 (DC); Wall 186760 (AC) 188345 (DC); Two-slot expansion for wall 188716 (AC) 189424 (DC); Two-slot expansion panel for deep universal 188717 (AC) 189425 (DC); Six-slot expansion for wall 188774 (AC).

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

## Options/Accessories

Part #	Description	Connector Type				Price
		Sealed		Unsealed		
USB Cable Options		A	B	A	B	
<b>Note: Connector is a male plug</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>						
<b>Note: Receptacle is a socket</b>						
		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					
<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

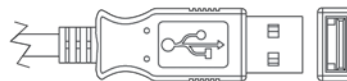
\*These options require a milled back plate which has two cutouts. If ordering only one receptacle, a plug (PN 124695) is required for the second cutout. USB enclosure parts with cutout: PN 119891 (Universal) PN 115118 (Universal Deep) PN 126585 (Wall Mount)

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

Unsealed Connectors



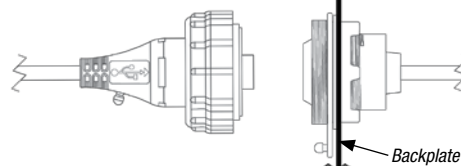
Type B



Type A

Sealed Connector

Sealed Receptacle





**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 - 4 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, 24 in	Consult
70779	Cable, 50-Pin round ribbon for digital I/O with cord grip, 60 in	Consult
72442	Cable, 50-Pin round ribbon for digital I/O without cord grip, 60 in	Consult
93577	Cable, 50-Pin flat ribbon for digital I/O, 31 in	Consult
94384	Cable, 50-Pin flat ribbon for digital I/O, 50 in	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 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
33206	16-channel relay rack	Consult
33205	24-channel relay rack	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



OPTO 22 16-channel relay rack



OPTO 22 24-channel relay rack



OPTO 22 G4 PN-45408