

920i® Series Programmable Weight Indicator and Controller



As of: Thursday, March 6, 2025



Standard Features

- Customizable backlit LCD graphical user interface
- 22 softkeys with 10 user-defined keys
- Tactile keypad for scale operations, numeric entry and navigation
- On-screen keyboard available during entry mode (or external keyboard)
- Supports 28 scales within 5 different scale types:
 - Analog load cell, multi-range/interval weighing
 - Total scale summing
 - Serial input scales
 - iQUBE² scales
 - Program scales
- 2 to 14 option slots for additional scale channels, serial ports, digital inputs and outputs, analog outputs and protocol interfaces
- iRite™ Programming Software
 - Customizable user applications with event-based functions
 - 150 built-in functions for application processes and data tables
- Four serial ports supporting RS-232, RS-485, 20mA
- USB Type A and B replaces Serial on Port 2 (USB model)

Approvals




Measurement
Canada
Approved



- Alibi memory captures serial port transmissions
- Configurable data stream format
- 100 setpoints, 27 configurable setpoint types
- Six digital I/O for control
- Four different enclosure types: universal, deep universal, wall mount, panel mount



 **WARNING:**
Cancer
and
Reproductive
Harm
California
Proposition
65

Rice Lake 920i Weight Indicator

The 920i® weight indicator and process controller blends revolutionary user interfaces, total flexibility and processing performance with the simplicity of a basic weight indicator. A crisp, highly customizable LCD graphical display, programmable softkeys and industry recognized electronics are surrounded by a virtually indestructible enclosure to create one of the industry's most trusted weight indicators and process controllers.

Adding an entirely new dimension in flexibility for solution providers and users alike, the 920i indicator/controller brings simplified customization at a fraction of the cost of traditional process instrumentation. From tailored basic weighing to complex process automation, the 920i gives you features, programmability and power for your process.

920i Series Specifications

Power:

AC voltages: 100 to 240 VAC

Frequency: 50/60 Hz

DC voltages: 12 to 24 VDC

Power Consumption:

AC: 25W (universal) or 65W (others)

DC: 25W for all models

Excitation Voltage:

10 VDC (± 5 VDC)

16 \times 350 ohm or 32 \times 700 ohm load cells per A/D card

Analog Signal Input Range:

-45 mV to +45 mV

Analog Signal Sensitivity:

0.3 μ V/graduation minimum at 7.5 Hz

1.0 μ V/graduation recommended

A/D Sample Rate:

7.5 to 960 Hz, software selectable

Resolution:

Internal: 8,000,000 counts

Display: 1,000,000

System Linearity:

$\pm 0.01\%$ 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 \times H)

4.6 \times 3.4 in (116 \times 86 mm),

320 \times 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:

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

Operating: 14 °F to 122 °F (-10 °C to 50 °C)

Rating/Material:

NEMA Type 4X, Type 12, IP66

Stainless steel

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)

Warranty:

Two-year limited

EMC Immunity:

10 V/m

Approvals:

NTEP 01-088, Class III/IIIL 10,000d

Measurement Canada AM-5426,

Class III/III HD 10,000d

OIML R76/2006-A-GB1-19.08

EU Test Certificate TC11584

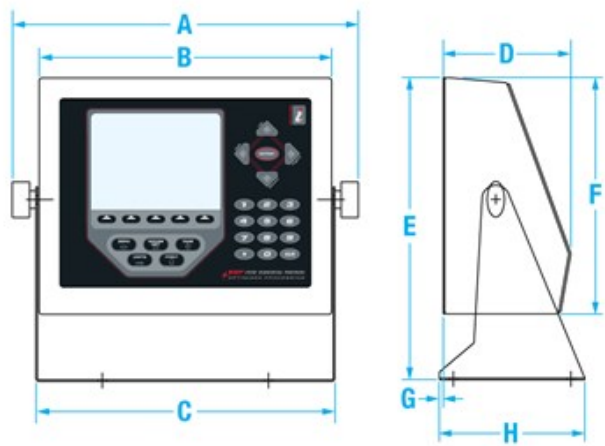
cULus Listed (Universal, Deep Universal and Wall Mount)

cULus Recognized (Panel Mount)

cULus Listed 508A (Custom Wall Mount)

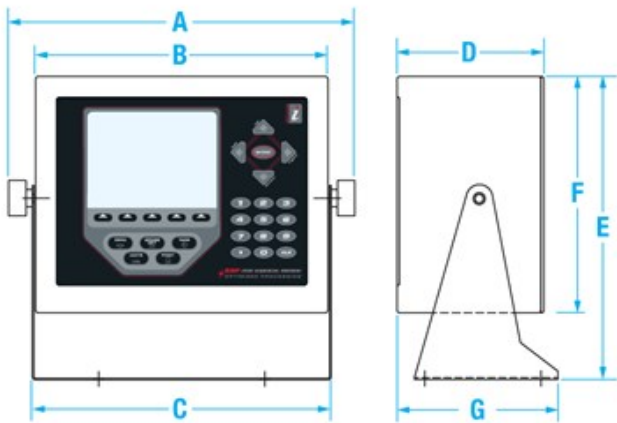
CE Marked

920i Universal Dimensions



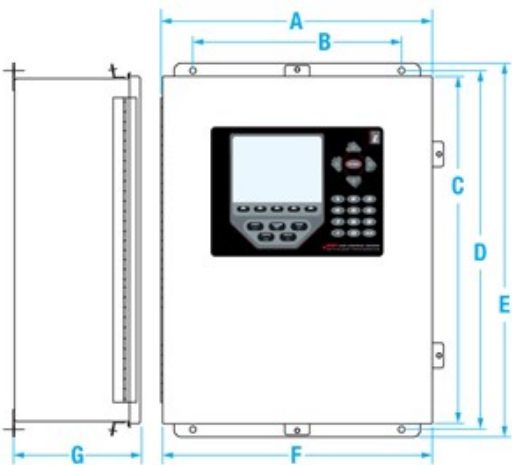
920i Universal Dimensions					
A	12.50 in (318 mm)	D	4.61 in (117 mm)	G	0.14 in (3.5 mm)
B	10.56 in (268 mm)	E	10.87 in (276 mm)	H	5.25 in (206 mm)
C	10.90 in (277 mm)	F	8.50 in (216 mm)		

920i Deep Universal Dimensions



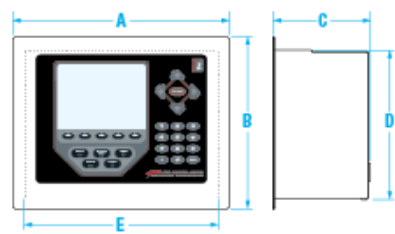
920i Deep Universal Dimensions					
A	12.50 in (318 mm)	D	5.36 in (136 mm)	F	8.50 in (216 mm)
B	10.76 in (273 mm)	E	10.87 in (276 mm)	G	5.88 in (149 mm)
C	10.90 in (277 mm)				

920i Wall Mount Dimensions



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



920i Panel Mount Dimensions			
A	11.56 in (294 mm)	D	7.95 in (202 mm)
B	9.16 in (233 mm)	E	10.38 in (263 mm)
C	5.20 in (132 mm)		

Parts

Part # Description

Universal Enclosure

67527	Indicator,920i Universal ASSY 115VAC Single Channel
115003	Indicator,920i USB,Univ Universal, 115VAC, Single Channel, with USB connector
67615	Indicator,920i Universal 230VAC With North American Plug (Nema 5-15P)
120062	Indicator,920i USB,Univ Universal, 230VAC, Single Channel, with USB connector
69522	Indicator,920i Universal Single Channel, 230VAC w/Continental Europe Plug (CEE 7/7)
120074	Indicator,920i USB,Univ Universal, 230VAC, Single Channel, with Continental Europe Plug (CEE 7/7) with USB connector
107713	Indicator,920i Universal ASSY, Single Channel, DC-DC Convertor, 12 - 36VDC Nominal, 25 Watts.
120080	Indicator,920i Plus,Univ Universal ASSY, Single Channel, with USB connector,DC-DC Converter, 12 - 36VDC Nominal, 25 Watts
69767	Indicator,920i Universal ASSY 115VAC Dual Channel
120086	Indicator,920i Plus,Univ Universal ASSY,115VAC, Dual Channel, with USB Connector

Part #	Description
69772	Indicator,920i Universal 230VAC w/North American Plug (Nema 5-15P) Dual Channel
120090	Indicator,920i USB,Univ Universal, 230VAC, with North American Plug (NEMA 5-15P) Dual Channel, with USB Connector
69774	Indicator,920i Universal 230VAC w/Continental Europe Plug (CEE 7/7) Dual Channel
120096	Indicator,920i USB,Univ Universal, 230VAC, with Continental Europe (CEE 7/7) Plug, Dual Channel, with USB Connector
77790	Indicator,920i Universal ASSY 115 VAC, No A/D Board
120100	Indicator,920i USB,Univ Universal ASSY, 115VAC, No A/D Board, with USB connector
77791	Indicator,920i Universal ASSY, 230 VAC, No A/D Board
120104	Indicator,920i USB,Univ Universal ASSY, 230VAC, No A/D Board, with USB connector
Deep Universal Enclosure	
82455	Indicator,920i Deep Enclosure Universal ASSY, 115VAC, Single Channel
115004	Indicator,920i USB,Deep Universal, 115VAC, Single Channel, with USB connector
82457	Indicator,920i Deep Enclosure Universal ASSY, 230VAC, Single Channel, w/North American Plug (Nema 5-15P)
120064	Indicator,920i USB,Deep Universal, 230VAC, Single Channel, with USB connector
82459	Indicator,920i Deep Enclosure Universal ASSY, 230VAC w/Continental Europe Plug (CEE 7/7), Single Channel
120075	Indicator,920i USB,Deep Universal, 230VAC, Single Channel, with Continental Europe Plug (CEE 7/7), with USB Connector
107714	Indicator,920i Deep Enclosure Universal, Single Channel, DC-DC Convertor, 12 - 36VDC Nominal, 25 Watts
120081	Indicator,920i Plus,Deep Enclosure Universal, Single Channel, with USB connector DC-DC Converter, 12 - 36VDC Nominal, 25 Watts

Part #	Description
82456	Indicator,920i Deep Enclosure Universal ASSY, 115VAC, Dual Channel
120087	Indicator,920i USB,Deep Universal ASSY, 115VAC, Dual Channel, with USB Connector
82458	Indicator,920i Deep Enclosure Universal ASSY, 230VAC, Dual Channel, w/North American Plug (Nema 5-15P)
120092	Indicator,920i USB,Deep Universal, 230VAC, with North American Plug (NEMA 5-15P) Dual Channel, with USB Connector
82460	Indicator,920i Deep Enclosure Universal ASSY, 230VAC with Continental Europe Plug (CEE 7/7), Dual Channel
120097	Indicator,920i USB,Deep Universal, 230VAC, with Continental Europe (CEE 7/7) Plug, Dual Channel, with USB Connector
93243	Indicator,920i Deep Enclosure Universal Assy, 115 VAC, without A-D Board
120101	Indicator,920i USB,Deep Universal, 115VAC, No A/D Board, with USB connector
93244	Indicator,920i Deep Enclosure Universal Assy, 230 VAC, without A-D Board w/ European CEE7/7 Power Cord
120105	Indicator,920i USB Deep Universal ASSY 230VAC No A/D Board With USB Connector With European CEE7/7 Power Cord

Wall Mount Enclosure

69763	Indicator,920i Wall Mount Assy,Single Channel A/D 115VAC
115005	Indicator,920i USB,Wall Mount, 115VAC, Single Channel, with USB connector
69765	Indicator,920i Wall Mount ASSY 230VAC w/North American Plug (Nema 5-15P)
120066	Indicator,920i USB,Wall Mount, 230VAC, Single Channel, with USB connector
72133	Indicator,920i Wall Mount ASSY 230VAC w/Continental Europe (cee 7/7) Single Channel
120078	Indicator,920i USB,Wall Mount, 230VAC, with Continental Europe Plug, (CEE 7/7), Single Channel, with USB connector
107715	Indicator,920i Wall Mount Assy, Single Channel, DC-DC Convertor, 12 - 36VDC Nominal, 25 Watts.
69770	Indicator,920i Wall Mount ASSY 115VAC Dual Channel
120088	Indicator,920i USB,Wall Mount, 115VAC, Dual Channel, with USB Connector
69776	Indicator,920i Wall Mount 230VAC w/North American Plug (Nema 5-15P) Dual Channel
120093	Indicator,920i USB,Wall Mount ASSY, 230VAC, with North American Plug (NEMA 5-15P) Dual Channel, with USB Connector
72134	Indicator,920i Wall Mount 230VAC w/Continental Europe (cee 7/7) Plug Dual Channel
120098	Indicator,920i USB,Wall Mount, 230VAC, with Continental Europe (CEE 7/7) Plug, Dual Channel, with USB Connector
77794	Indicator,920i Wall Mount Assy, 115 VAC, No A/D Board
120102	Indicator,920i USB,Wall Mount, 115VAC, No A/D Board, with USB connector
77795	Indicator,920i Wall Mount Assy, 230 VAC, No A/D Board
120106	Indicator,920i USB,Wall Mount ASSY, 230VAC, No A/D Board, with USB connector
153346	Indicator,920 Wallmount No A/D, Start/Stop switches wired to onboard I/O.
120082	Indicator,920i Plus,Wall Mount ASSY, Single Channel, with USB connector DC-DC Converter, 12 - 36VDC Nominal, 25 Watts

Part # Description

Panel Mount Enclosure

69764	Indicator,920i Panel Mount ASSY 115VAC, SINGLE CHANNEL A/D
115006	Indicator,920i USB,Panel Mount, 115VAC, Single Channel, with USB connector
69766	Indicator,920i Panel Mount ASSY 230VAC w/North American Plug (Nema 5-15P) Single Channel A/D
120069	Indicator,920i USB,Panel Mount, 230VAC, Single Channel, with USB connector
72137	Indicator,920i Panel Mount 230VAC w/Continental Europe (CEE 7/7) Plug Single Channel
120079	Indicator,920i USB,Panel Mount, 230VAC, with Continental Europe Plug (CEE 7/7), Single Channel, with USB Connector
107716	Indicator,920i PanelMount ASSY, Single Channel, DC-DC Convertor, 12 - 36VDC Nominal, 25 Watts.
120083	Indicator,920i Plus,Panel Mount ASSY, Single Channel, with USB Connector, DC-DC Converter, 12 - 36VDC Nominal, 25 Watts
69771	Indicator,920i Panel Mount ASSY 115VAC Dual Channel
120089	Indicator,920i USB Panel Mount, 115VAC, Dual Channel, with USB Connector
69777	Indicator,920i Panel Mount 230VAC w/North American Plug (Nema 5-15P) Dual Channel
120095	Indicator,920i USB,Panel Mount ASSY, 230VAC, with North American Plug (NEMA 5-15P) Dual Channel, with USB Connector
72138	Indicator,920i Panel Mount 230VAC w/Continental Europe (cee 7/7) Plug Dual Channel
120099	Indicator,920i USB,Panel Mount, 230VAC, with Continental Europe (CEE 7/7) Plug, Dual Channel, with USB Connector
77792	Indicator,920i Panel Mount Assy, 115 VAC, No A/D Board
120103	Indicator,920i USB,Panel Mount, 115VAC, No A/D Board, with USB connector
77793	Indicator,920i Panel Mount Assy, 230 VAC, No A/D Board
120107	Indicator,920i USB,Panel Mount ASSY, 230VAC, No A/D Board, with USB connector

Options

Part # Description

Option Cards

68532	Ind Option, A/D Single Channel 920i, Kit.
68533	Ind Opt,A/D Dual Channel 920i
67600	Ind OPT,Memory Module 1 Meg 920i
67601	Ind OPT,I/O 24 Channel 720i, 820i, 920i
67602	Ind OPT,Analog Output 0-10V, 0-20mA, 4-20mA for 720i, 820i, 920i
103138	Ind Opt,Analog Output Dual Channel, 0-10V, 0-20mA, and 4-20mA for 720i, 820i, 920i.
67604	Ind OPT,Serial Port Dual Channel Full Duplex RS232 and 4 Wire RS485 720i, 820i, 920i
87697	Ind OPT,Dual Analog input 0-10V 0-20mA With Dual Thermocouple Inputs 920i Requires 2.05 Software or Higher

Network Cards

65383	Ind Opt,Ethernet Thin Server UDS-1100, 10/100 RJ45 232 Serial to Ethernet.
206271	Ind Opt,Wireless LAN Card RS232/WiFi Interface 802.11 A/B, 10/100 Base-T, XPico for 920i
87803	Ind Opt,EtherNet/IP for 920i, 820i and 720i. Protocol for Allen-Bradley PLC.
68540	Ind Opt,PROFIBUS DP Interface Kit (Internal), 720i, 820i and 920i.
187816	Ind Opt,Profinet 920i
68541	Ind Opt,DeviceNet Interface 720i, 820i and 920i.
103136	IND OPT,ControlNet Right Angle BNC Connector
71986	Ind Opt,Ethernet TCP/IP Interface Card, Embedded Device Server 10/100baseT 920i, 820i & 720.

Expansion Cards

69782	Ind Opt,Expansion Board With 2 Option Slots 920i Wall Mount
71743	Ind OPT,Expansion Board w/2 Option Slots 920i Panel Mount
180047	Ind OPT,Expansion Board w/2 Option Slots 920i for DC Powered Panel Mount and Deep Univ.
179488	Ind Opt,Expansion Board With 2 Option Slots 920i Wall Mount for DC Power Supply
69783	Ind Opt,Expansion Board With 6 Option Slots 920i Wall Mount

Hardware

83569	Overlay, Clear Protective Window with Adhesive Edge, Package of Five Each, 820i, 920i
70056	Cable,RS232 DB9M To DB9F Straight Cable
77788	Board, Fiber Optic RX/TX Option,includes Part 73997 and assembly to Part 78908 by DCA, 920i Internal Mount, iQube System.

Part #	Description
92777	Filter,Goretex Vent Kit Includes Adapter for PG9 to M12X1.5, Locknut & Goretex Vent
19368	Option, Start/Stop switch Use on custom SST/FRP/MS Painted Enclosures.
19369	Ind Opt,Start/Stop ASSY External FRP Nema 4X Box For Use Universal or Desktop units.
93359	Ind OPT,PS/2 Keyboard Qwerty Desktop
99149	Keyboard,QWERTY 109-Key USB, Flexible, Washable

Manuals and Software

72809	LIT,USB Drive Interchange Database Editor for 920i and 1280 (English)
67887	LIT,Technical Manual 920i Programmable Indicator/Controller (English)
67888	LIT,Manual iRite Programmer Reference Guide
69781	Software Pkg,iRev 920i Tool Kit CD Revision 4.01.13

Boards

186272	Board Assy,Replacemnt Blu 920i CPU w/Firmware, RoHS Compliant Blue Solder Mask.
206696	Display Kit,920i Module And Retrofit Cable to Power LED BackLight used with Green CPU PCB LED BackLight, STN, Transmissive, 320 x 240 Pixels
186273	Display,LCD Module 920i LED Backlight, STN, Transmissive, 320 x 240 Pixels 12:00 View, RoHS Compliant, Negative Mode
186274	Display,LCD Module 920i Sunlight viewable, LED Backlight, FSTN, Transflective 320 X 240 Pixels, 12:00 View, RoHS Compliant, Positive mode

Power Supply

67613	Power Supply,+/- 6V 25W Board 920i Universal, 820i, and 720i. Protective Cover - PN 85494
71333	Power Supply,+/-6V 65W Board 920i for Deep Univ, Panel Mount, and Wall Mount
132791	Power Supply,DC/DC 9-36 VDC Input +/- 6VDC Output,25 Watt,Onboard/Livestock/920i

Membrane

66502	Overlay,Membrane Switch Panel 920i
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USB Cables (Connector is a male plug)

79074	Cable Assy, USB 2.0, Male Type A to Male Type B, Black, 6 Feet
124700	Cable,USB A to B sealed 3 meters, with sealed circular Connectors.
126477	Cable,USB A sealed to A Non-sealed, 3meters with A type sealed and A type not sealed connectors
124701	Cable,USB A sealed to B Non-sealed, 3meters with A type sealed and B type not sealed connectors
124702	Cable,USB B Sealed To A Not Sealed, 3 Meters With B Type Sealed A Type Not Sealed

USB Receptacles (Receptacle is a socket)

126476	Receptacle,USB Panelmount Sealed Circular USB A type, w/ 50cm pigtail & A type end. (Approx. 19.68 inches.)
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Part #	Description
124703	Receptacle,USB Panelmount Sealed Circular USB A type, with 50cm pigtail and B type end Samtec #SCRUS-17-G-00.50-AMS-BM
124704	Receptacle,USB Panelmount Sealed Circular USB B Type, with 50cm pigtail and B type End Samtec #SCRUS-17-G-00.50-BMS-BM
125998	Receptacle,USB Panel Mt Sealed Circular USB A Type, with 28cm Cable to 5 Pin Connector.
125999	Receptacle,USB Panel Mt Sealed Circular USB B Type, with 28cm Cable to 5 Pin Connector.

Ethernet Cables

124706	Cable,Ethernet Sealed 5E 3meters, with double ended sealed circulars connectors, cat 5E Samtec #SCPE-G-03.00-D-NP
124707	Cable,Ethernet Sealed 5E 3meters cat 5E cable, with single end sealed circular connector

Ethernet Receptacles (Receptacle is a socket)

176789	Receptacle,RJ-45 Panel Mount Sealed Circular RJ-45, 0.75 Meter Length
172734	Receptacle,RJ-45 Panel Mount 0.5 meter length (19.68") Panel holes size: 1.09 in. w/.12 in. keyed slot.
126353	Receptacle,RJ-45 Panel Mount, .25 meter length. (9.84") Panel holes size: 1.09 in. w/.12 in. keyed slot.

Cable and Receptacle Accessories

124695	Panel Plug,Round Solid 1.125 inches, Keyed watertight seal, 12 in-lb torque Samtec #SCPPA-17-01
124694	Cover,Panel Dust Cap For SCRES and SCRUS series receptacles
124689	Dust Cap, USB Flash Drive For use with SRUS series Panelmount Receptacles.
195607	USB Flash Drive-8GB Plug and Play Compatible with Windows XP or above and Mac OSC or Higher - Rice Lake Logo

Relays

15972	Relay,Module Field Input 90-140VAC - Isolated 5VDC Logic Yellow OPTO 22 G4IAC5-L
36631	Relay,Module Field Input 180-280VAC/VDC-Isolated 5VDC Logic Yellow OPTO 22 G4IAC5A
15969	Relay,Module Field Input 10-32VDC 12-32VAC-Isolated 5VDC Logic Input White OPTO 22 G4IDC5
15971	Relay,Module Output Fused 12-140VAC @ 3A Output - Isolated 5VDC Logic Black OPTO 22 G4OAC5 Normally Open
22847	Relay,Module Output Fused 24-280VAC @ 3A Output Isolated 5VDC Logic Black OPTO 22 G4OAC5A5 Normally Closed
36632	Relay,Module Output Fused 24-280VAC @ 3A-Isolated 5VDC Logic Black OPTO 22 G4OAC5A Normally Open
15970	Relay,Module Dry Contact Fused 100VDC/130VAC 10VA Max- Isolated 5VDC Logic Red OPTO 22 G4ODC5R Normally Open Output Relay
22848	Relay,Module Dry Contact Fused 100VDC/130VAC 10VA Max-Isolated 5VDC Logic Red OPTO 22 G4ODC5R5 Normally Closed

Relay Racks

15973	Board,Relay Mounting 4 Channel G4PB4 With Product Data And Mounting Information Literature
45408	Indicator Option, Relay Rack, 4 Channel Opto used in IQ's (relays not included).
33206	Board,Relay Mounting 16ch Ribbon Cable Connection OPTO 22 Model G4PB16 UL FILE E58169
33205	Board,Relay Mounting 24ch Ribbon Cable Connection OPTO 22 Model G4PB24 UL File E58169

Part # Description

Miscellaneous Parts

70780	Cable,50 Pin Flat Ribbon for Digital I/O To Grayhill Relay Rack
93577	Cable,50 Pin Flat Ribbon Length = 31 Inches
94384	Cable Assy,50 Pin Flat Ribbon, Length = 50 Inches
70779	Cable,50 Pin Round Ribbon 5ft for Digital I/O to Grayhill Relay Rack
72442	Cable,50 Pin Round Ribbon 5ft for 920i Panel Mount, Digital I/O to Grayhill Relay Rack

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