## Specifications

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

**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 115,200 bps
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, 20 mA output
Port 4: Full duplex RS-232, 2-wire RS-485, 20 mA 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

**RICE LAKE**

# 920i® Series
Programmable Weight Indicator/Controller

## 920i Universal Part Number/Price

| Part # | Description | USB | Est. Weight | Price |
|--------|-------------|-----|-------------|-------|
| **Single-Channel** | | | | |
| **67527** | 115 VAC† | | 10 lb | $2,095.00 |
| **115003** | 115 VAC† | USB | 10 lb | $2,195.00 |
| **67615** | 230 VAC† | | 10 lb | $2,095.00 |
| **120062** | 230 VAC† | USB | 10 lb | $2,195.00 |
| **69522** | 230 VAC†† | | 10 lb | $2,095.00 |
| **120074** | 230 VAC†† | USB | 10 lb | $2,195.00 |
| **107713*** | 9-36 VDC, 25 watt | | 10 lb | $2,195.00 |
| **120080*** | 9-36 VDC, 25 watt | USB | 10 lb | $2,295.00 |
| **Dual-Channel** | | | | |
| **69767** | 115 VAC† | | 10 lb | $2,195.00 |
| **120086** | 115 VAC† | USB | 10 lb | $2,295.00 |
| **69772** | 230 VAC† | | 10 lb | $2,195.00 |
| **120090** | 230 VAC† | USB | 10 lb | $2,295.00 |
| **69774** | 230 VAC†† | | 10 lb | $2,195.00 |
| **120096** | 230 VAC†† | USB | 10 lb | $2,295.00 |
| **No A/D Channel** | | | | |
| **77790** | 115 VAC† | | 10 lb | $1,945.00 |
| **120100** | 115 VAC† | USB | 10 lb | $2,045.00 |
| **77791** | 230 VAC†† | | 10 lb | $1,945.00 |
| **120104** | 230 VAC†† | USB | 10 lb | $2,045.00 |

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

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

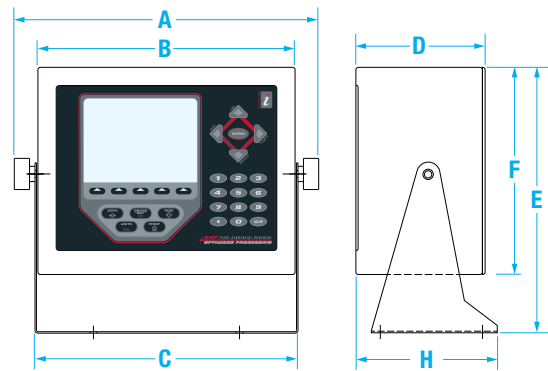## 920i Deep Universal Part Number/Price

| Part # | Description | USB | Est. Weight | Price |
|--------|-------------|-----|-------------|-------|
| **Single-Channel** | | | | |
| **82455** | 115 VAC† | | 12 lb | $2,295.00 |
| **115004** | 115 VAC† | USB | 12 lb | $2,395.00 |
| **82457** | 230 VAC† | | 12 lb | $2,295.00 |
| **120064** | 230 VAC† | USB | 12 lb | $2,395.00 |
| **82459** | 230 VAC†† | | 12 lb | $2,295.00 |
| **120075** | 230 VAC†† | USB | 12 lb | $2,395.00 |
| **107714*** | 9-36 VDC, 25 watt | | 12 lb | $2,395.00 |
| **120081*** | 9-36 VDC, 25 watt | USB | 12 lb | $2,495.00 |
| **Dual-Channel** | | | | |
| **82456** | 115 VAC† | | 12 lb | $2,395.00 |
| **120087** | 115 VAC† | USB | 12 lb | $2,495.00 |
| **82458** | 230 VAC† | | 12 lb | $2,395.00 |
| **120092** | 230 VAC† | USB | 12 lb | $2,495.00 |
| **82460** | 230 VAC†† | | 12 lb | $2,395.00 |
| **120097** | 230 VAC†† | USB | 12 lb | $2,495.00 |
| **No A/D Channel** | | | | |
| **93243** | 115 VAC† | | 12 lb | $2,145.00 |
| **120101** | 115 VAC† | USB | 12 lb | $2,245.00 |
| **93244** | 230 VAC†† | | 12 lb | $2,145.00 |
| **120105** | 230 VAC†† | USB | 12 lb | $2,245.00 |

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

†† CEE 7/7 plug (Euro)     † NEMA 5-15 plug
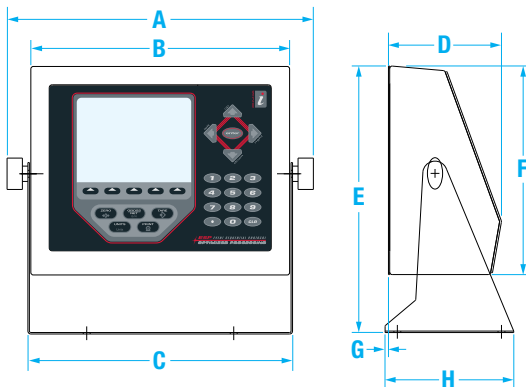
### 920i Universal Dimensions

| | | | | | |
|---|---|---|---|---|---|
| A | 12.50 in (318 mm) | D | 4.61 in (117 mm) | 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 | 10.80 in (203 mm) | F | 8.50 in (216 mm) | | |

### 920i Universal Dimensions

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

## 920i Wall Mount Part Number/Price

| Part # | Description | USB | Est. Weight | Price |
|---|---|---|---|---|
| **Single-Channel** | | | | |
| **69763** | 115 VAC† | | 23 lb | $2,695.00 |
| **115005** | 115 VAC† | USB | 23 lb | $2,795.00 |
| **69765** | 230 VAC† | | 23 lb | $2,695.00 |
| **120066** | 230 VAC† | USB | 23 lb | $2,795.00 |
| **72133** | 230 VAC†† | | 23 lb | $2,695.00 |
| **120078** | 230 VAC†† | USB | 23 lb | $2,795.00 |
| **107715*** | 9-36 VDC | | 23 lb | $2,795.00 |
| **120082*** | 9-36 VDC | USB | 23 lb | $2,895.00 |
| **Dual-Channel** | | | | |
| **69770** | 115 VAC† | | 23 lb | $2,795.00 |
| **120088** | 115 VAC† | USB | 23 lb | $2,895.00 |
| **69776** | 230 VAC† | | 23 lb | $2,795.00 |
| **120093** | 230 VAC† | USB | 23 lb | $2,895.00 |
| **72134** | 230 VAC†† | | 23 lb | $2,795.00 |
| **120098** | 230 VAC†† | USB | 23 lb | $2,895.00 |
| **No A/D Channel** | | | | |
| **77794** | 115 VAC† | | 23 lb | $2,545.00 |
| **120102** | 115 VAC† | USB | 23 lb | $2,645.00 |
| **77795** | 230 VAC†† | | 23 lb | $2,545.00 |
| **120106** | 230 VAC†† | USB | 23 lb | $2,645.00 |

*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 |
|---|---|---|---|---|
| **Single-Channel** | | | | |
| **69764** | 115 VAC† | | 9 lb | $2,095.00 |
| **115006** | 115 VAC† | USB | 9 lb | $2,195.00 |
| **69766** | 230 VAC† | | 9 lb | $2,095.00 |
| **120069** | 230 VAC† | USB | 9 lb | $2,195.00 |
| **72137** | 230 VAC†† | | 9 lb | $2,095.00 |
| **120079** | 230 VAC†† | USB | 9 lb | $2,195.00 |
| **107716*** | 9-36 VDC | | 9 lb | $2,195.00 |
| **120083*** | 9-36 VDC | USB | 9 lb | $2,295.00 |
| **Dual-Channel** | | | | |
| **69771** | 115 VAC† | | 9 lb | $2,195.00 |
| **120089** | 115 VAC† | USB | 9 lb | $2,295.00 |
| **69777** | 230 VAC† | | 9 lb | $2,195.00 |
| **120095** | 230 VAC† | USB | 9 lb | $2,295.00 |
| **72138** | 230 VAC†† | | 9 lb | $2,195.00 |
| **120099** | 230 VAC†† | USB | 9 lb | $2,295.00 |
| **No A/D Channel** | | | | |
| **77792** | 115 VAC† | | 9 lb | $1,945.00 |
| **120103** | 115 VAC† | USB | 9 lb | $2,045.00 |
| **77793** | 230 VAC†† | | 9 lb | $1,945.00 |
| **120107** | 230 VAC†† | USB | 9 lb | $2,045.00 |

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

†† CEE 7/7 plug (Euro)    † NEMA 5-15 plug
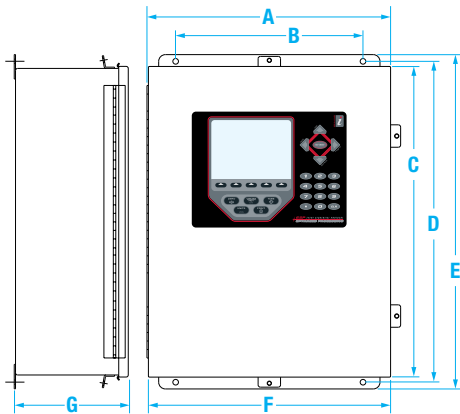
### 920i Wall Mount Dimensions
| | | | | | |
|---|---|---|---|---|---|
| A | 14.30 in (363 mm) | D | 18.84 in (479 mm) | F | 14.00 in (356 mm) |
| B | 11.00 in (279 mm) | E | 19.63 in (499 mm) | G | 6.75 in (171 mm) |
| C | 18.00 in (457 mm) | | | | |
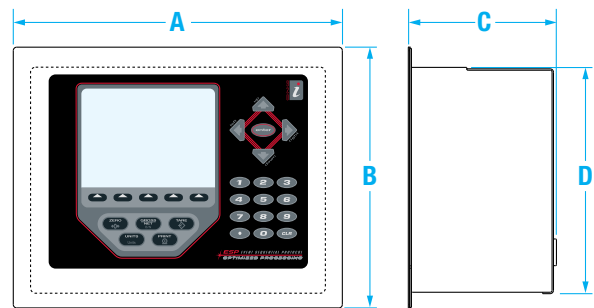
### 920i Panel Mount Dimensions
| | | | |
|---|---|---|---|
| A | 11.56 in (294 mm) | C | 5.20 in (132 mm) |
| B | 9.16 in (233 mm) | D | 7.95 in (202 mm) |

## Options/Accessories

| Part # | Description | Price |
|---|---|---|
| **Option Cards** | | |
| 68532 | A/D, single-channel | $275.00 |
| 68533 | A/D, dual-channel | $425.00 |
| 67600 | Memory, 1 MB NV RAM | $275.00 |
| 67601 | Digital I/O, 24-channel TTL output | $275.00 |
| 67602 | Analog output: selectable 0-10 V, 0-20 mA | $300.00 |
| 103138 | Analog output, dual-channel 0-10 V, 0-20 mA | $525.00 |
| 67603 | Pulse input, single-channel | $275.00 |
| 67604 | Serial port card, dual-channel, RS-232 and RS-485 | $325.00 |
| 87697 | Analog input +/-10 VDC, 0-20 mA and thermocouple | $600.00 |
| **Network Cards** | | |
| 65383 | Ethernet Thin Server (external) | $295.00 |
| 71986 | Ethernet TCP/IP 10/100 Base-T module (internal) page 565 | $400.00 |
| 98057 | Ethernet TCP/IP, wireless LAN card 802.11 B/G page 565 | $650.00 |
| 87803 | EtherNet/IP® page 565 | $800.00 |
| 68539 | Remote I/O interface page 563 | $650.00 |
| 68540 | Profibus® DP interface page 563 | $650.00 |
| 68541 | DeviceNet™ interface page 564 | $650.00 |
| 103136 | ControlNet® interface page 564 | $1,000.00 |
| **Expansion Cards** | | |
| 69782 | Two-slot expansion board (wall mount) | $275.00 |
| 71743 | Two-slot expansion board (panel mount and deep universal) | $275.00 |
| 179488 | Two-slot expansion board (wall mount DC powered) | $275.00 |
| 180047 | Two-slot expansion board (deep universal and panel mount, DC powered) | $275.00 |
| 69783 | Six-slot expansion board (wall mount) | $400.00 |
| **Hardware** | | |
| 83569 | Clear protective overlay (package of 5) | $75.00 |
| 70056 | Cable, DB9M to DB9F, Straight Cable | $35.00 |
| 93359 | Keyboard, QUERTY PS/2 | $90.00 |
| 99149 | Keyboard, QWERTY 109-key USB, flexible, washable | $135.00 |
| 77788 | Fiber optic board, installed in 920i | $200.00 |
| 92777 | Filter, PreVent™ vent kit PG 7 cord grip | $30.00 |
| 19368 | Start/stop controls without box, for use on wall mount | $395.00 |
| 19369 | Start/stop switch with FRP box | $395.00 |
| **Manuals and Software** | | |
| 69781 | iRev™ scale software | $95.00 |
| 72809 | 920i interchange® database software | $295.00 |
| 67887 | Additional installation manual | $30.00 |
| 67888 | Additional programming reference | $30.00 |
| **Primary Component Parts** | | |
| 186272*** | CPU board assembly for LED backlight | $950.00 |
| 186275*** | Display board, LED back light, transmissive | $265.00 |
| 186276*** | Display board, LED back light, transflective | $265.00 |
| 67613 | AC power supply, 25 watt for universal | $135.00 |
| 71333 | Power supply, 65 watt for deep, panel and wall mount | $165.00 |
| 132791 | Power supply 12-24 VDC, 25 watt | $195.00 |
| 66502 | Switch panel membrane | $68.00 |

***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 |
|---|---|---|---|---|---|---|
| **USB Cable Options** <br> Note: Connector is a male plug | | Sealed | | Unsealed | | |
| | | A | B | A | B | |
| 79074 | Unsealed connectors USB-A to USB-B, 2 m cable | | | X | X | $30.00 |
| 124700 | Sealed connectors, USB-A to USB-B, 3 m IP68 cable | X | X | | | $75.00 |
| 126477 | Sealed connector USB-A to unsealed connector USB-A, 3 m IP68 cable | X | | X | | $75.00 |
| 124701 | Sealed connector USB-A to unsealed connector USB-B, 3 m IP68 cable | X | | | X | $75.00 |
| 124702 | Sealed connector USB-B to unsealed connector USB-A, 3 m IP68 cable | | X | X | | $75.00 |
| 124695 | Panel plug 1.125 in diameter | | | | | $5.00 |
| **USB Receptacles** <br> Note: Receptacle is a socket | | Sealed | | Unsealed | | |
| 126476 | Sealed receptacle USB-A for wall mount, 0.5 m cable | X | | X | | $75.00 |
| 124703 | Sealed receptacle USB-A to unsealed connector USB-B , 0.5 m cable | X | | | X | $75.00 |
| 124704 | Sealed receptacle USB-B to unsealed connector USB-B , 0.5 m cable | | X | | X | $75.00 |
| 125998* | Sealed receptacle USB-A to five-pin connector, 0.28 m cable (internal to 920i) | X | | | | $75.00 |
| 125999* | Sealed receptacle USB-B to five-pin connector, 0.28 m cable (internal to 920i) | X | | | | $75.00 |
| 124694 | Cover for sealed receptacles | | | | | $10.00 |
| 124689 | Cover for flash driver mounts on sealed receptacle | | | | | $20.00 |
| 125077 | Rice Lake USB flash drive, 1 GB | | | | | $20.00 |
| **Ethernet Cables** | | Sealed | | Unsealed | | |
| 124706 | Sealed to sealed, 3 m cable | X | | | | $75.00 |
| 124707 | Sealed to unsealed connector, 3 m cable | X | | X | | $75.00 |
| **Ethernet Receptacles** | | Sealed | | Unsealed | | |
| 126353* | RJ-45 receptacle sealed, 0.28 m internal to 920i (requires Ethernet TCP/IP option installed) | X | | | | $75.00 |

*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)
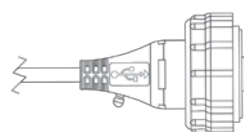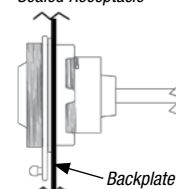
*Unsealed Connectors*



*Type B*
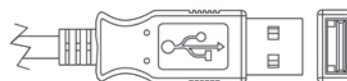


*Type A*

*Sealed Connector*     *Sealed Receptacle*



← *Backplate*

## Grayhill Relays and Racks

| Part # | Description | Price |
|---|---|---|
| 52332 | Two-channel input relay, 2.5-28 VDC | $45.00 |
| 52318 | Two-channel input relay, 120 VAC | $45.00 |
| 52319 | Two-channel input relay, 240 VAC | $45.00 |
| 52331 | Two-channel input relay, 10-32 VDC | $45.00 |
| 52316 | Two-channel output relay, 120-140 VAC at 2 amp | $45.00 |
| 52317 | Two-channel output relay, 240-280 VAC at 7 amp | $45.00 |
| 71376 | Two-channel output relay, 3-60 VDC at 1 amp | $65.00 |
| 71377 | Two-channel output relay, 0-200 VDC/VAC at 1.5A/10W (dry contact) | $85.00 |
| 84698 | Two-channel output relay, inductive load, 120-140 VAC at 2A | $65.00 |
| 84699 | Two-channel output relay, inductive load, 240-280 VAC at 2A | $65.00 |
| 54215 | Fuse, 3.15 amp, Grayhill | $3.00 |
| 52312 | Eight-channel relay rack, panel mount and wall mount, requires 50-Pin flat or round ribbon cable - 4 slots | $135.00 |
| 52314 | 16-channel relay rack, panel mount and wall mount, requires 50-Pin flat or round ribbon cable - 8 slots | $185.00 |
| 52315 | 24-channel relay rack, panel mount and wall mount, requires 50-Pin flat or round ribbon cable - 12 slots | $285.00 |
| 46189 | Jumper strap, 10 position for Grayhill | $5.00 |
| 108396 | Digital input 5 VDC, 15-30 VAC/10-32 VDC | $35.00 |
| 108397 | Digital output 5VDC, 3-60 VDC | $35.00 |
| 70780 | Cable, 50-Pin flat ribbon for digital I/O | $50.00 |
| 70779 | Cable, 50-Pin round ribbon for digital I/O with cord grip | $155.00 |
| 72442 | Cable, 50-Pin round ribbon for digital I/O without cord grip | $150.00 |

*8-channel relay rack PN 52312*

*16-channel relay rack PN 52314*

## OPTO 22 Relays and Racks

| Part # | Description | Price |
|---|---|---|
| 15969 | G4IDC5 10-32 VDC input relay module, white (N/O) | $35.00 |
| 15970 | G40DC5R dry contact 100 VDC/1.5 A output, red (N/O) | $35.00 |
| 22848 | G40DC5R5 dry contact 100 VDC/1.5 A output, red (N/C) | $35.00 |
| 15971 | G40AC5 115 VAC output relay module, black (N/O) | $35.00 |
| 15972 | G4IAC5 115 VAC input relay module, yellow (N/O) | $35.00 |
| 22847 | G40AC5A5 115/230 VAC output relay module, black (N/C) | $35.00 |
| 36632 | G40AC5A 115/230 VAC output relay module, black (N/O) | $35.00 |
| 36631 | G4IAC5A 230 VAC input relay module, yellow (N/O) | $35.00 |
| 16478 | Quencharc arc suppressor | $11.00 |
| 101923 | FRP enclosure with Opto four-channel rack | $235.00 |
| 15973 | Four-channel relay rack, 3.25 x 3.25 in | $100.00 |
| 45408 | Four-channel relay rack 6.1 x 1.2 in | $150.00 |
| 99032 | Adapter plate, for four-channel Opto rack 33490 | $5.00 |
| 26834 | Fuse, 1A 250V (for PN 15970 and PN 22848) | $7.50 |
| 21735 | Fuse, 4A 250V (for PN 15971, PN 22847 and PN 36632) | $5.00 |

*24-channel relay rack PN 52315*

*OPTO 22 G4 PN-15973*

*OPTO 22 G4 PN-45408*