

# OIT4160B Product Specifications (PLC & Motion Controller Interfaces)



## Hardware Specifications

### Physical Dimensions

**Height** — 4.00 inches [102 mm]

**Width** — 6.00 inches [152 mm]

**Total Depth** — 1.77 inches [45 mm]

### Mechanical


**Material** — aluminum sealed to NEMA 4/12 when panel mounted


**Mounting** — panel


**Wiring** — field-wired to external barrier strip and RJ-45 comm. connector

**Weight** — 1 pound [0.45 kg]

### Ratings

 Complies with EN50081-2 (1994) & EN50082-2 (1995)

 NEMA 4/4X(indoor)/12

 Class I, Division 2, Groups A, B, C, D (**OIT4160B-C1D2** only)

### Environment

**Operating Temperature** — 14 to 149° F [-10 to 65° C]

**Storage Temperature** — -40 to 185° F [-40 to 85° C]

### Power Requirements (OIT4160-B00)

**Input Voltage** — +12 to +30 VDC

**Power Requirements** — 2.5 watts typical

### Power Requirements (OIT4160B-C1D2)

**Input Voltage** — +12 to +30 VDC, Class 2  
**Power Requirements** — 2.5 watts typical, 3 watts maximum

## Communication

**Serial Port** — RS-232, RS-422 or RS-485  
**Connector** — RJ45  
**Baud Rates** — 19.2K, 9600, 4800, 2400, 1200, 600 or 300  
**Type** — point-to-point

## Display

**Type** — VFD; 5 x 7 dot matrix with cursor  
**Size** — 2 lines of 20 characters  
**Character Height** — 0.19 inches [5 mm]  
**Viewing Angle** — approximately 90 degrees

## Keypad

**Type** — membrane  
**Feedback** — tactile and internal buzzer  
**Layout** — 18 keys, including 6 function keys  
**Operational Life** — up to 3 million operations  
**Customizing** — custom keypad overlays available for additional charge

## Other Hardware

- 128K x 8 flash PROM for firmware, protocol and configuration data
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# Operating Specifications

## Keypad

- Alarm Ack key acknowledges the current alarm
- Arrow keys move the cursor between read/write register monitors in the screen
- Clear key clears the current register monitor's contents and activates data entry mode
- Delete key performs a destructive backspace at the cursor's current position in a register monitor
- Delta+ & Delta- keys immediately increment or decrement the value in the current register monitor by the preset amount
- Enter key accepts the data entered by the operator and updates the current register
- Global Function keys can be configured as momentary, push on/off, latch or screen display
- Help key displays customized help screens
- Last Message & Next Message keys display the screens in the screen stack
- Numeric keys allow the operator to enter passwords or to enter new values into register monitors
- Page Up & Page Down keys move through a group of chained screens
- Screen-dependent Function keys can be configured as momentary, push on/off, latch or

- screen display for each screen
- Toggle key immediately changes the value in a binary read/write register monitor

## **Screens**

- Up to 500 configurable as message, recipe, alarm, menu, or help screens
- Can display blinking characters
- Can display characters from the extended character set

## **Message Screens**

- Beep on display
- Chain to other message screens
- Display for a preset length of time from 1 to 255 seconds
- Display one line of scrolling text up to 128 characters long (rate is adjustable)
- Display up to 25 register monitors

## **Recipe Screens**

- Include up to 20 preset values
- Beep on display
- Display for a preset length of time from 1 to 255 seconds
- Display one line of scrolling text up to 128 characters long (rate is adjustable)
- Display up to 25 register monitors

## **Alarm Screens**

- 4 priority levels
- 9 audible alert types
- Display one line of scrolling text up to 128 characters long (rate is adjustable)
- Display up to 25 register monitors
- Output to external buzzer

## **Menu Screens**

- Beep on display
- Branch to a maximum of 9 message, recipe or menu screens
- Chain to other menu screens
- Display for a preset length of time from 1 to 255 seconds
- Display one line of scrolling text up to 128 characters long (rate is adjustable)
- Display up to 25 register monitors

## **Help Screens**

- Display from any message, recipe or menu screens

## **Register Monitors**

- Adjustable decimal/symbol location

- Adjustable field width
- Fully programmable linear scaling on decimal, signed and long formats
- High/low limits
- Increment/decrement value
- Left/right justification
- Optional comma insertion
- Optional "Hide Data" format for secure data entry
- Optional leading zeros
- Read only or read/write

### **Register Monitor Formats**

- Decimal
- Signed
- Long
- 4-digit BCD
- 8-digit BCD
- Binary-1/0 coil
- Binary-on/off coil
- Binary-bank 8
- Binary-bank 16
- ASCII character
- ASCII string (allows display of ON/OFF or other text strings in place of 1/0 values)

### **Other Operating Features**

- Downloadable operational and protocol software
- Global & Screen-dependent Function keys have 4-level password protection
- Up to 16 set points that monitor the value in a register and display a screen if the low/high limit is exceeded
- Screen saver
- Screen stack
- Alarm stack
- Message Request Register
- Current Message Register
- Status Coils
- Key Coils