**CPU Specifications**

- **User Data Memory Type**: Batteries backed RAM, User configurable
- **Pluggable Option Module**: RS-232, RS-485, Ethernet 10/100 BASE-T
- **Expansion Modules**: 4 expansion modules max
- **Real Time Clock Accuracy**: ±2.6s per day, typical at 25°C
- **Voltage Withstand**: 1500VAC between power inputs to ground protection
- **Nominal Voltage**: 24VDC @ 0.3A max, <1V P-P ripple, 16.1W max
- **Input Power**: 47–63 Hz, 40VA

**Built-in RS-232/485 Port Specifications**

- **Description**: Non-isolated serial port that can communicate via RS-232 or RS-485 (software selectable). Includes ESD protection and built-in surge protection.

**Supported Protocols**

- **Modbus RTU (Master & Slave)**
- **K-Sequence (Slave)**

**Data Rates**

- **1200, 2400, 4800, 9600, 19200, 38400, 57600, and 115200 baud**

**Default Settings**

- **RS-232, 19200 bps, No Parity, 8 data bits, 1 stop bit, 8 data bits, 1 stop bit**

**Port Type**

- **3-pin terminal strip, 5.6mm pitch**

**Port Status LED**

- **Green LED is illuminated when device is powered up and HDU**

**Cable Recommendations**

- **RS-232 uses L9772-XXX from AutomationDirect.com**
- **RS-485 uses L9889-XXX from AutomationDirect.com**

**Replacement Connector**

- **ADO Part # BX-RTB05**

**Terminals Block Connection Options**

- **Terminal Block**
- **Equiv. Dinkle part #**
- **Wire Striper Length**
- **Wire Gauge**
- **Screwdriver Blade**
- **Recommended Pitch**
- **Connector Type**
- **Part Number**

**CPU Mode Switch Functions**

- **RNL position**: CPU is forced into RNL Mode if no errors are encountered. (See Terminal Block Connection Options table).
- **RNR2 position**: RNR1.PROGRAM and RNR2.HALT modes are available. In these modes of operation, the modes of operation can be changed through the Do-more Designer Software.
- **STOP position**: CPU is forced into STOP Mode.

**Data Rates**

- **1200, 2400, 4800, 9600, 19200, 38400, 57600, and 115200 baud**


**WARNING:** To minimize the risk of potential safety problems, you should follow all applicable local and national codes that regulate the installation and operation of your equipment. These codes vary from area to area and it is your responsibility to determine which codes should be followed, and to verify that the equipment, installation, and operation are in compliance with the latest revision of these codes.

**Equipment damage or serious injury to personnel can result from the failure to follow all applicable codes and standards.** We do not guarantee the products described in this publication are suitable for your application, nor do we assume any responsibility for your product design, installation, or operation. If you have any questions concerning the installation or operation of this equipment, or if you need additional information, please call Technical Support at 770-844-4200.

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**I/O Terminal Blocks sold separately.** (See Terminal Block Connection Options table).

**NOTE:** When using RS-485, a terminator resistor is built-in and software selectable.
Discrete Input Specifications

- **Input Type**: Sink/Source
- **Output Total per Module**: 10 High Speed - All inputs may be used as standard inputs
- **Common**: 2.5V potential/common isolated
- **Nominal Voltage Rating**: 12–24 VAC/DC
- **Input Voltage Range**: 9–30 VADC
- **Maximum Voltage**: 30 VADC
- **Minimum Voltage**: 0–250 mV - High Speed
- **DC Frequency**: 0–250kHz - High Speed
- **Input Impedance**: 3 MΩ @ 24VDC
- **Input Current**: 2 mA
- **Off Voltage Level**: 25 VDC
- **Status Indicators**: Logic Side, Green

Discrete Output Specifications

- **Output Type**: Sourcing
- **Total Outputs per Module**: 6 Total - 4 High Speed (Y0..Y3)*
- **Common**: 2.5V potential/common isolated
- **Maximum Current per Common**: 0.5 A per output, no derating over temperature range
- **Maximum Switching Frequency**: 10 kHz
- **Leakage Current**: 10 µA
- **Maximum Switching Time**: Under 0.1 ms
- **Status Indicators**: Logic Side, Green

High Speed Input (HSI) Functions

- **Function**
  - **Input Function**: High-Speed Counting, Position, Scaling, Frequency, Measurement
  - **Input Required**: 2
  - **Measurement Interval**: Up to (4)
  - **Frequency Measurement**
  - **Position Scaling**
  - **Table-Driven**
  - **Preset tables**
  - **Interrupts**
  - **Time interrupts**
  - **Match register interrupts**

High Speed Output (HSO) Functions

- **Function**
  - **Pulse Mode**: 2
  - **Pulse Width Modulation**: 2
  - **Electronic gearing, Camming, Following, Homing, Jogging**
  - **Axis Profile**:
    - **Input Required**: 2
    - **Function**: 2
    - **Pulse/Direction (Bidirectional) outputs**
    - **PWM pulse width modulation outputs**

High Speed Output (HSO) Functions

- **Function**
  - **Pulse Mode**: 2
  - **Pulse Width Modulation**: 2
  - **Electronic gearing, Camming, Following, Homing, Jogging**
  - **Axis Profile**:
    - **Input Required**: 2
    - **Function**: 2
    - **Pulse/Direction (Bidirectional) outputs**
    - **PWM pulse width modulation outputs**

High Speed Output (HSO) Functions

- **Function**
  - **Pulse Mode**: 2
  - **Pulse Width Modulation**: 2
  - **Electronic gearing, Camming, Following, Homing, Jogging**
  - **Axis Profile**:
    - **Input Required**: 2
    - **Function**: 2
    - **Pulse/Direction (Bidirectional) outputs**
    - **PWM pulse width modulation outputs**

I/O Wiring

- **Sourcing Output**: Input
- **Sourcing Input**: Output
- **Supply Power Wiring**: AC Input
  - **120–240 VAC
  - 300VDC**