



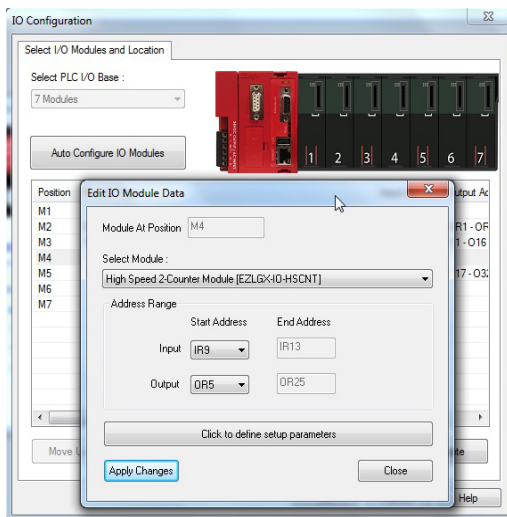
High Speed Counter Inputs with Fast DC/PLS Outputs

High Speed 24 bit Counter Modules with PLS outputs that accept quadrature encoder inputs. The PLS outputs compare the counter value to two on/off presets and turn on outputs within 100µs of position change. Presets can be loaded into the counter modules from EZRack PLC. All inputs and outputs are optically isolated.

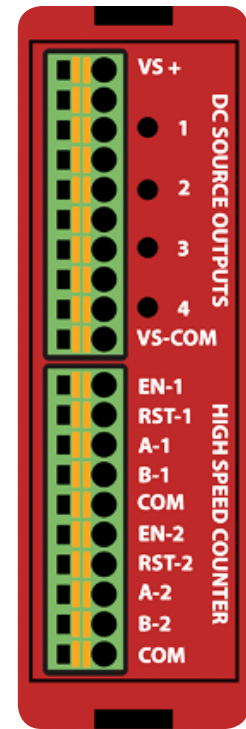
The counters have various preset/reset and inhibit modes as shown on the following page.

Configuring your High Speed Counter Module is EZier than Ever!

1 In EZRack PLC's I/O configuration specify the range of registers to be used for input and output.

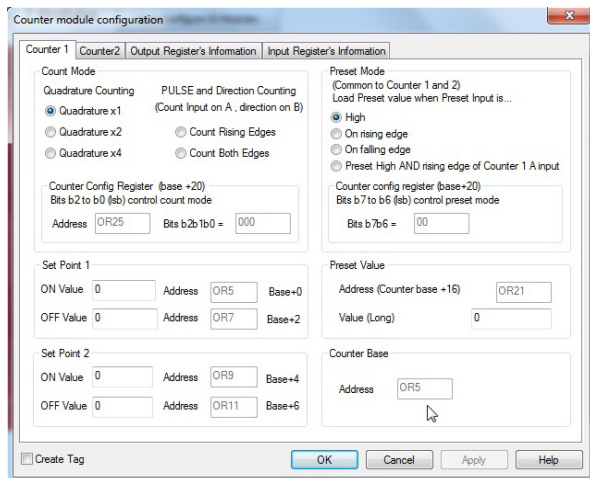


Pinout Information			
1	VS+	11	Counter EN-1
2		12	Counter RST-1
3	Output 1	13	Counter A-1
4		14	Counter B-1
5	Output 2	15	Common
6		16	Counter EN-2
7	Output 3	17	Counter RST-2
8		18	Counter A-2
9	Output 4	19	Counter B-2
10	VS Common	20	Common

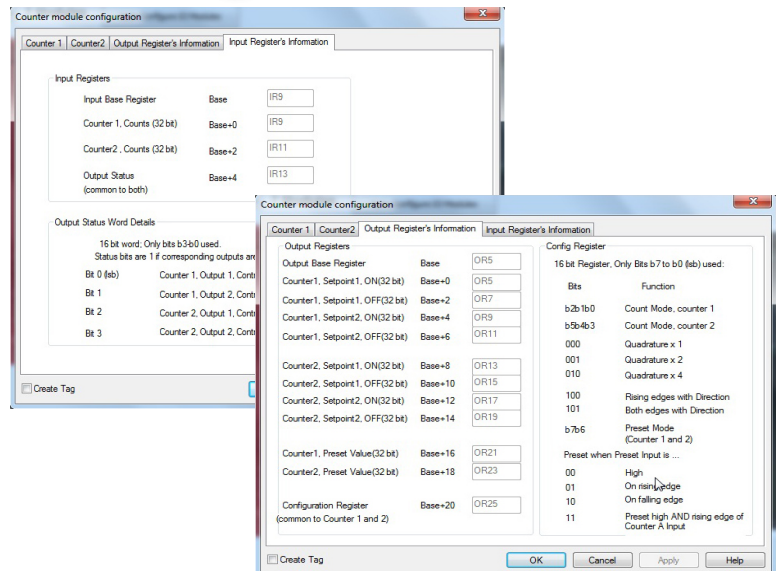


EZRPL-IO-HSCNT

2 Configure pulse, direction, quadrature counting, set points, preset values and preset mode



3 Detailed information for input and output registers



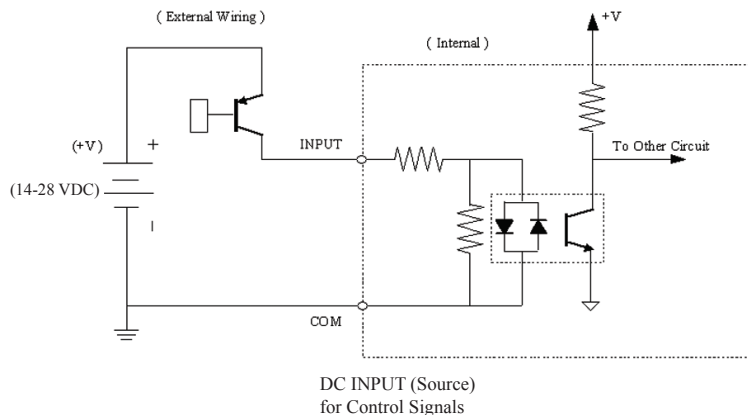


High Speed Counter Module Specifications

EZRack PLC

Module Specifications	
Feature	EZRPL-IO-HSCNT
Module Type	Intelligent High Speed Dual Counter Module
Maximum Input Frequency	100KHz after 1X, 2X or 4X Multiplication
Minimum Pulse Width	5 μ s
Resource Options	1X, 2X, or 4X Quadrature, Up or Down Counter, Reset
Counter Range	16 million (24 bits)
Preset Modes	<ol style="list-style-type: none"> 1. This mode will preset the counter to the preset value while preset is held high. While the preset signal is high, no new count signals will be counted. 2. This mode will create an interrupt on the rising edge of the reset signal to set the counter to the preset value. 3. This mode will create an interrupt on the falling edge of the preset signal to set the counter to the preset value. 4. This mode will create a preset pulse every time that there is a rising edge of signal A and the preset signal is high.
Reset Modes/Input	Same as Preset except the reset input sets the counter value to zero
Inhibit Input	Inhibits the counter from counting when high

General Specifications	
Optical Isolation	2500 Volt
Wires	1 of 14 AWG, 2 of 18 AWG, 4 of 22 AWG
Operating Environment	-20-60°C, Humidity non-condensing 5-95%



High Speed Output Specifications	
Feature	EZRPL-IO-HSCNT (dual counter)
Number of Outputs	4 High Speed PLS / DC Source outputs
Response Time	100 μ s
PLS Setpoints	1 on/off pair for each output
Peak Voltage	50.0 VDC
Maximum Steady State Output Current	0.5A per output, 1.0A max per module @ 50°C
Maximum Leakage Current	100 μ A @ 50 VDC @ 50°C
ON Voltage Drop	2 VDC @ 0.5A
Maximum Inrush Current	0.8A for 10ms
OFF to ON Response	< 2 μ s
ON to OFF Response	< 10 μ s
Status Indicators	Red LED for each output
+V Terminals & Commons	One V+, 1 Common
Short Circuit Protection	1 Amp per module, turns off outputs upon short circuit detection
Optical Isolation	2500 Volt

Counter Input Specifications	
Feature	EZRPL-IO-HSCNT (dual counter)
Number of Inputs	4 per High Speed Channel Inputs (A, B, EN, RST)
Input Voltage Range	14-28 VDC
Peak Voltage	40 VDC
Input Current	2.5 mA @ 14 VDC 5.0 mA @ 28 VDC
Maximum Input Current	5 mA @ 28 VDC
Input Impedance	5.6K Ω min. @ 14-28 VDC
ON Voltage Level	> 14 VDC
OFF Voltage Level	< 2 VDC
Min. ON Current	2.5 mA
Min. OFF Current	0.2 mA
OFF to ON Response	< 2 μ s
ON to OFF Response	< 3 μ s
Commons	1 per High Speed Counter Input

