2502 2-Channel High Speed Counter Input Module

Description

The 2502 is a two-channel High Speed Counter Input Module designed to count incoming pulses from external sensors and provide process control outputs based on count status. It is compatible with the CTI 2500 Series® and Simatic® 505 PLC systems and a direct replacement for the Siemens® 505-7002. The 2502 provides two independent counter channels.

Features

- Replaces Siemens® 505-7002 with no rewiring
- Two independent high-speed 16-bit counter channels

Each counter has:

- pulse counter mode
- 1X, 2X, 4X quadrature counter modes
- 10 KHz count rate with minimum pulse width of 25µs
- two count inputs
- reset input
- inhibit input
- two outputs
- LED indicators

Specifications

Count Inputs:

<table>
<thead>
<tr>
<th>Duty Cycle</th>
<th>Count Mode Frequency</th>
<th>Quadrature Mode Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>10%</td>
<td>10 Khz</td>
<td>4 Khz</td>
</tr>
<tr>
<td>20%</td>
<td>25 Khz</td>
<td>8 Khz</td>
</tr>
<tr>
<td>25%</td>
<td>30 Khz</td>
<td>10 Khz</td>
</tr>
<tr>
<td>30%</td>
<td>35 Khz</td>
<td>12 Khz</td>
</tr>
<tr>
<td>40%</td>
<td>50 Khz</td>
<td>15 Khz</td>
</tr>
<tr>
<td>50%</td>
<td>45 Khz</td>
<td>15 Khz</td>
</tr>
<tr>
<td>60%</td>
<td>35 Khz</td>
<td>15 Khz</td>
</tr>
</tbody>
</table>

On voltage: 2.76 VDC  
Current On: 8 to 16 mA  
Off voltage: 0.8 VDC  
Off voltage: 0 to 1 mA

Reset and Inhibit Inputs:

On voltage: 4 to 24 VDC  
Current On: 2 to 40 mA  
Off voltage: -1.5 to 1.5 VDC  
Off voltage: 0 to 0.75 mA

Outputs:

User voltage: 24 VDC max.  
Voltage Drop: 1.8 VDC max. @ 400mA  
1.0 VDC max. @ 25mA  
Leakage Current: 500 µA max.  
Max current: 500 mA

Connector: Removable  
Wire Gauge: 14-22 AWG  
Backplane Power: 3 Watts  
Module Size: Single-wide  
Shipping Weight: 1.5 lb (0.68 Kg)

Additional Product Information:

On CTI’s Website you will find links to the 2500 Series Standard Environmental Specifications and the UL Agency Certificates of Compliance.
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2502 Wiring Example
Note this module requires a 2500-40F Wiring Connector