

I-87016W Hardware User Guide Ver. 1.0

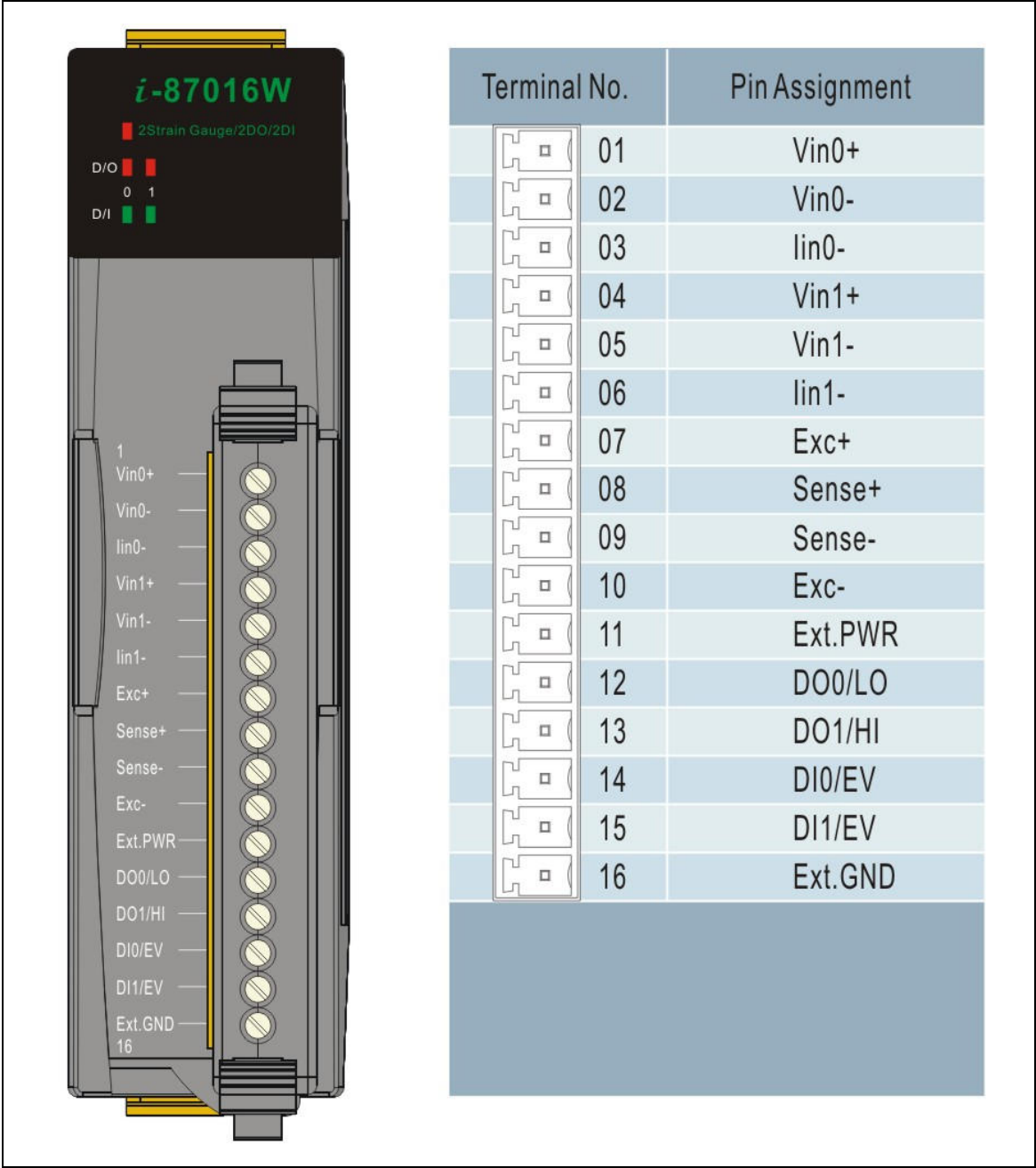
Last Modified 02/01/2010

I-87016W Specifications

Strain Gauge Input	
Input Channels	<i>2 differential</i>
Resolution	<i>16bit</i>
Input Type	<i>+/- 15mV, +/- 50mV, +/- 100mV +/- 500mV, +/- 1V, +/- 2.5V, +/- 20mA</i>
Strain Gauge Type	<i>Full-Bridge, Half-Bridge, and Quarter-Bridge</i>
Input Impedance	<i>> 400k Ohms (Voltage) 125 Ohms (Current)</i>
Sampling Rate	<i>10samples/second</i>
Accuracy	<i>+/- 0.05% of FSR</i>
Excitation Voltage Output	
Output Channel	<i>1</i>
Excitation Output Range	<i>0 ~ +10 V_{DC}</i>
Max. Output Current	<i>80 mA</i>
Accuracy	<i>+/- 0.05% of FSR</i>

Digital Output	
Output Channels	2 (<i>Sink</i>)
Output Type	<i>Isolated Open-Collector</i>
Load Voltage	+5 ~ +50 V _{DC}
Load Current	700 mA/Channel max.
Digital Input	
Input Channels	2
ON/OFF Level	3.5 ~ 50 V _{DC} /1 V _{DC} max.
Input Impedance	10k Ohms, 0.66W
Event Counter	Frequency 50 Hz max., 16bit
System	
ESD Protection	+/- 4 kV for each terminal
Isolation Voltage	3000V _{DC}
Power Consumption	2.5W max.

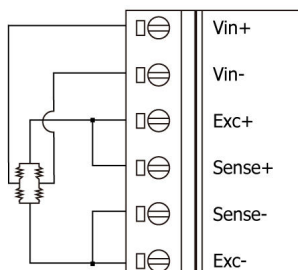
I-87016W Pin Assignment



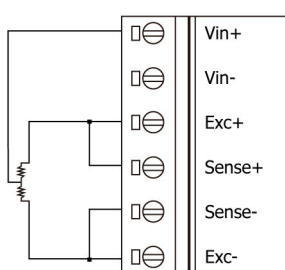
I-87016W Wire Connection Type

Bridge Sensor/ Load Cell/Strain Gauge

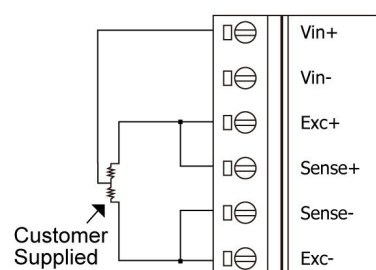
Full-Bridge



Half-Bridge

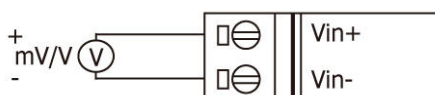


Quarter-Bridge

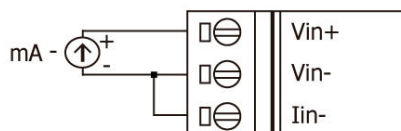


Analog Input

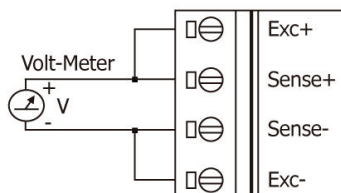
Voltage Input



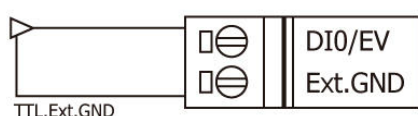
Current Input



Analog Output



Digital Input



Digital Output

