

USB High-Voltage, High Current Digital I/O Module - Isolated

Model JI-4616

Jupiter Instruments

Ver 1.3

3/25/2013 Edition

www.jupiteri.com

Electrical Specifications

Input/Output	
Inputs:	
Channel Count	8
Input Voltage	Range: -32 VDC to 32 VDC
	V _{IH} high input: 3.0 V min
	V _{IL} low input: 1.0 V max
Isolation*	500 VDC
Input Resistance	4.7K
Pulse Width	1.5mS min
ESD Protection	4000V Human-Body Model (A114-A)
Outputs:	
Channel Count	8
Output Type	Low-Side MOSFET Switch, Current-Sink
Switching Voltage	0 VDC - 30 VDC max
Switching Current**	3.0 A max per channel
Voltage Clamp	36 V nominal
Isolation*	500 VDC
Protection Function	Short Circuit & Thermal Shut-Down
ESD Protection	2000V Human-Body Model (A114-A)
Power	
USB	
Input voltage	4.7 to 5.25 VDC when configured
Current Consumption	Active State: 135 mA max
PC Interface	
Communication	USB 2.0 Full Speed
Connector	Standard type B socket

* Input channels are comprised of 2 banks of 4 inputs and output channels are comprised of 2 banks of 4 output MOSFET switches. A ground is provided for each bank. Isolation is measured between bank-to-bank and bank-to-ground. See JI-4040 block for isolation arrangement.

** Maximum current capacity of each bank is 8 Amps.

Mechanical and Environmental Specifications

Mechanical	
Dimensions	Board only: 3.9" x 0.5" x 4.7" (WxHxL)
	Enclosure: 4.1" x 1.1" x 5.5" (WxHxL)
Weight	Board only: 0.1 lbs
	Enclosure: 0.9 lbs
Environmental	
Operating Temperature	Board only: 0C to 70C
	Enclosure: 0C to 60C
Storage Temperature	-40C to 70C