

MODEL JI-300**I2C HOST ADAPTER****1.0 Specifications****Hardware****PC Interface**

Type:	USB 2.0
Connector:	Standard Type B Socket

Power

USB port:	5V @ 300mA (max) Note that all power is supplied by the USB port.
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I2C Interface

Connector:	Standard 9-Pin, D-sub, Female
Pin-outs:	Pin 1 = SDA Pin 4, 5 = GND Pin 6 = SCL Pin 8 = Vbus Pin 2, 3, 7, 9 = No Connection
SCL/SDA Bus Voltage (V _{bus}) Range:	Programmable - 1.50V to 5.25V (10mV steps) +/-2%
Input Threshold:	V _{IL} : 0.2V _{bus} (typical) V _{IH} : 0.7V _{bus} (typical) V _{TH} : 0.1V _{bus} (typical)
Input Voltage Range:	-0.3V to 6.0V (operational) -5.0V to 10.0V (maximum rating)
SCL Frequency:	Programmable – Standard: 7.0KHz to 4.0MHz Advanced: 254Hz to 4.0MHz (20nS steps)
SCL/SDA Sink Current:	27mA (typical) <ul style="list-style-type: none"> • Constant-current drive • Short-circuit protected
SCL/SDA Pull-up Resistors:	Programmable – 273 to 4.99K ohms & Open (16 selections) +/-3%
Input Capacitance:	< 40pF without test cables
External Bus Voltage:	Switched V _{bus} available to power external I2C target. Current limited to 90mA (typical)

LEDs

Power:	Power-On (USB device enumeration)
SCL/SDA Activity:	LED provides two functions: <ul style="list-style-type: none">• I2C Bus activity• Software "Open" success - Indicated by LED blinking three times when the software application successfully opens a USB connection unit.

Enclosure

Dimensions:	4.1" x 1.1" x 5.5"
Material:	Vinyl-clad steel cover with an extruded aluminum base.
Weight:	0.9 lbs.

General

I2C bus

Address Format:	7-bit
Bus Modes:	Master & Multi-Master
SCL Programmable Parameters:	<ul style="list-style-type: none">- tSU;DAT (20nS steps)- tHD;DAT (20nS steps)- tHIGH (20nS steps)

Data Transfer

Tx/Rx Status Report:	<ul style="list-style-type: none">- Bus not-Free condition- Clock Stretch occurrence- SDA signal contention (Master Mode)- Loss of arbitration (Multi-Master mode)- Missing ACK
Behavior Setup:	<ul style="list-style-type: none">- Bus not Free (programmable max. time)- Clock Stretch (programmable max. time)- Repeated Start (Selectable)