AD2B SEI to RS-232 Adapter (9-pin)

Description

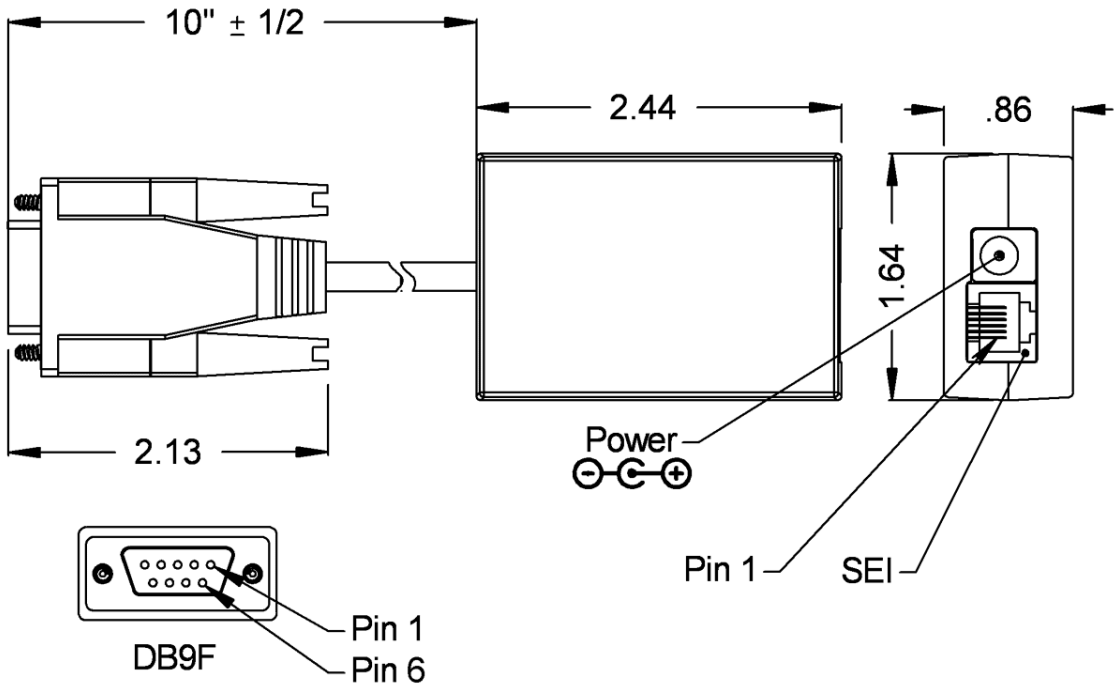
The AD2B adapter allows the RS-485-like signal of SEI devices to interface to a standard RS-232 port (9-pin DB), such as those in IBM compatible PCs. The SEI (Serial Encoder Interface) bus is a simple, quick and convenient network of SEI devices interfacing to a RS-232 serial port. The SEI bus supports from 1 to 15 devices on a single 6-wire telephone-type cable, up to 1000 feet long. For more information on the SEI bus please see the SEI page.

The AD2B has 2 differential signals to interface to SEI devices: the bidirectional data pair for communication, and the busy input pair for data flow control. The PS-12 power supply connects to the AD2B and furnishes power for all SEI devices on the bus.

Software

- www.usdigital.com/support/software/sei
- www.usdigital.com/assets/USDProducts.zip (.zip file with installer)

Mechanical Drawing



Electrical

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Vancouver, Washington 98684, USA
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www.usdigital.com
Local: 360.260.2468
Toll-free: 800.736.0194

Rev. 160126142705

Specifications apply over entire operating temperature range.

Parameter	Min.	Typ.	Max.	Units	Notes
Supply Voltage	8.0	-	16	Volts	-
Supply Current (without encoders)	-	-	15	mA	-
Differential SEI Output voltage |DataL - DataH|, |Busy+ - Busy-|	2.0	2.75	5.0	Volts	Load = 100 Ω
Differential SEI Input Voltage |DataL - DataH|, |Busy+ - Busy-|	0.2	-	5.0	Volts	-
Common Mode SEI Output Voltage (DataH + DataL)/2, (Busy- + Busy+)/2	2.0	2.5	3.0	Volts	Load = 100 Ω
Common Mode SEI Input Voltage (DataH + DataL)/2, (Busy- + Busy+)/2	-4.5	-	3.0	Volts	-
Input current DataH, DataL, Busy-, Busy+	-15	-	15	mA	In = 0 to 5V
RS-232 Output	±5.0	±8.0	-	Volts	-
RS-232 Input	±3.5	-	±15	Volts	-
RS-232 Input Resistance	3	5	7	kΩ	-

Absolute Maximum Ratings

Parameter	Min.	Max.	Units
Storage Temperature	-40	100	C
Operating Temperature	0	70	C
Humidity (non-condensing)	0	95	%

Functional Pin Descriptions

MOD6:

Pin	Name	Description
1	GND	Ground, common for power, data and busy pairs.
2	Busy+	Differential input line, active high, has 330 Ω pull down.
3	Busy-	Differential input line, active low, has 330 Ω pull up.
4	PWR	Power supply output to encoder bus.
5	DataL	Bidirectional differential data line, has 330 Ω pull up.
6	DataH	Bidirectional differential data line, has 330 Ω pull down.

DB9F:

Pin	Name	Description
3	RXD	Data input from host, normally low.
2	TXD	Data output to host, normally low.
7	RTS	Not connected.
8	CTS	Busy line to host, active low.
5	GND	Ground, common for RS232 signals.

Included Accessories

PS-12 Power supply

Software

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