## **Product Overview**



## 1 Pinouts

Pin 5 is signal ground for both connectors. Both models are powered by the signals on pins 7(RTS), 4(DTR), and 3(TD). These handshake lines can be in either the high or low condition, but must be present to power the converter. The unit can work at baud rates up to 115.2 kbps.

It is important that TTL/CMOS logic, and only TTL/ CMOS logic (0 to +5 VDC for the 232LPTTL, and 0 to +3.3VDC for the 232LPTTL33) is used for the TTL/CMOS side of the converter. The maximum sinking current for one TTL/CMOS output is 3.2 mA. The maximum source current for one TTL/CMOS is 1 mA. Signal levels are inverted by the converters. Please refer to table below.

RS-232 Pin	Function	TTL/CMOS Pin
3 (input)	TD	3 (output)
2 (output)	RD	2 (input)
7 (input)	RTS	7 (output)
8 (output)	CTS	8 (input)
5 (signal gnd)	GND	5 (signal gnd)

This unit is powered from the RS-232 data and handshake lines, whether the lines are high or low.



232LPTTL

5VDC TTL/

**CMOS Input** 

Low (< .8V)

High (>2V)

5VDC TTL/

**CMOS Output** 

+3.45V minimum,

+4.6V typical

+.55V maximum.

+.1V typical

232LPTTL33

3.3VDC TTL/

**CMOS** Input

Low (< .8V)

High (>2V)

3.3VDC TTL/

**CMOS Output** 

+2.4V minimum,

+3.0V typical

+.55V maximum.

+.1V typical

**RS-232 Output** 

+5V minimum.

+9V typical

-5V minimum,

-+9V typical

**RS-232** Input

Low (< .2V)

High (>2.4V)

3



## **Recommended Accessories**

**9PAMF6** DB9 Male to DB9 Female Cable



MMNM9 Null Modem Adapter DB9 Male/DB9 Male







Four Channel RS-232 to TTL/CMOS Converter

Before you begin, be sure you have the following:

- + 232LPTTL or 232LPTTL33 Converter + Serial Cable
- B+B SMARTWORX
  Powered by
  AD\ANTECH



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