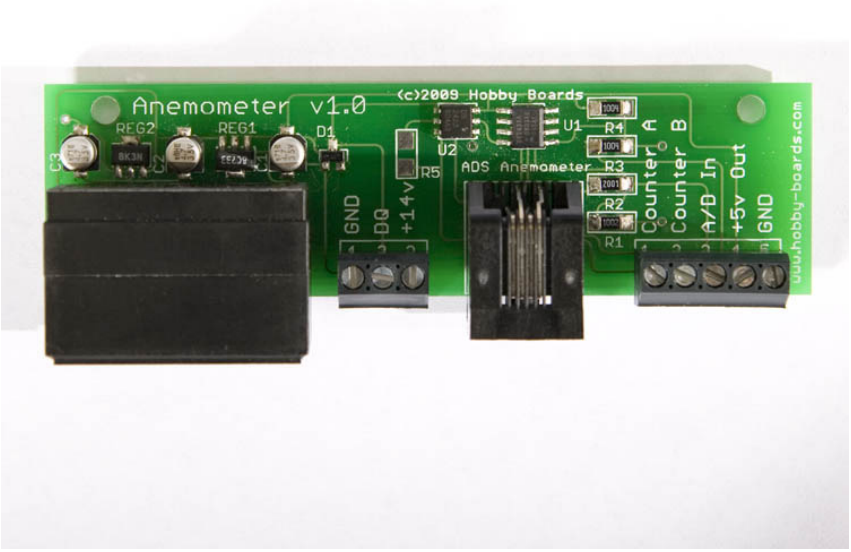
HOBBY BOARDS

Complete 1-Wire Solutions



Anemometer Controller Board

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Thank you for your interest in Hobby Boards' Anemometer Controller board. We are confident that this device will form an integral part of your 1-Wire system for years to come.

Description

Hobby Boards' Anemometer Controller board was designed for use with our anemometer solutions, but can be used as a general counter or single channel A/D.

Technical Specs

Controller

- The Hobby Boards' Anemometer board uses the Dallas DS2423 and DS2438 1-Wire chips.
- Dual 32-bit counters.
- Count frequency of up to 2kHz.
- A/D will support input voltages up to 10VDC.

Connections

- 1-Wire connections are made through a dual RJ45 jack with pass-through capability or the available screw terminals for easy connectivity to your 1-Wire network.
- Power is supplied through CAT5 cable connected to the RJ45 jack or through the screw terminal.

Power Requirements

- The maximum power draw is 5mA at +7v DC (board only).

Installation

Connecting Controller Board

- Apply dielectric compound to the RJ12 jack and two RJ45 jacks on the controller board (optional; dielectric compound not included).
- As shipped, Counter A and Counter B are tied together. For independent counter operation, remove the resistor labeled R5.
- To connect counters, connect input wires to the screw terminals labeled +5v Out and to either Counter A or Counter B.
- To connect A/D, connect input wires to the screw terminals on the controller board labeled GND and A/D In.
- For any devices requiring power, the device can be connected to the screw terminals labeled +5v Out and GND. The board can supply up to 100mA.
- Connect your 1-Wire cable (see Connecting 1-Wire and Power below).

Operation

Connecting 1-Wire and Power

To connect the controller board to your 1-Wire network, simply use a standard network cable and connect it to either RJ45 jack. The second jack is provided to allow pass-through connections. The two jacks can be connected interchangeably. Optionally, the controller board can be connected to your 1-Wire network using the screw terminals labeled GND, DQ, and +14v.

The controller board requires at least 7 VDC. This will be supplied in one of two ways. Power can be supplied locally, using the screw terminals labeled GND and +14v. Alternatively, power can be supplied through the 1-Wire network if your controller board is connected through a Hub, Master Hub, or Power Injector.

Software Requirements

This board is compatible with any software which supports the DS2423 for counter operation, or the DS2438 for A/D operation.