DATA ACQUISITION Technical Information



SQ2010 channel inputs



The SQ2010 Squirrel data logger has a single analogue to digital converter (A/D) which corresponds to inputs on blocks A and B (see below). Each connection block will accept up to 2 differential inputs or up to 4 single ended inputs (it is **not** possible to mix single ended and differential inputs on a block).

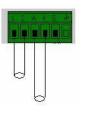




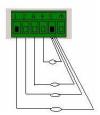
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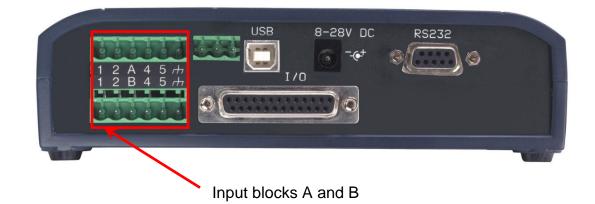
Reference No:



Differential Inputs



Single Ended Inputs



Mains rejection - what is it?

With mains rejection activated, the Squirrel data logger compensates for any interference from the local mains electricity supply (at either 50 or 60 Hz). This can be set in the logger setup screen in SquirrelView.

For higher logging speeds, the mains rejection can be turned off. However, this will have the effect of reducing the reading accuracy dependant upon the level of interference then experienced by the Squirrel data logger.



With Mains Rejection turned on (default setting)

The SQ2010 with mains rejection turned on is able to log all channels at intervals from 1 second to 365 days.

With Mains Rejection turn off

The SQ2010 can take up to 10 readings per second on a single channel with the remaining channels taking 1 reading a second.

Note: The sample Intervals must be integer multiples of each other. For example, Interval A 2s, Interval B 10s (= 5 times Interval A) and interval C 1 minute (= 30 times Interval A and 6 times Interval B) would be allowed but Interval A 2s, Interval B 3s (= 1.5 times Interval A) and interval C 5s (= 2.5 times Interval A and 1.67 times Interval B) would not be allowed.