

## Re: Electronic thermostat

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- *From:* Michael <nospam@xxxxxxx>
  - *Date:* Mon, 27 Mar 2006 16:01:20 GMT
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Mike Steward wrote:

I am looking for a cheap method of fitting some sort of thermometer to my hot water tank which is heated from a log fire. The tank is built in to a cupboard and very well insulated, therefore difficult to get at. I need ideally some sort of digital read out in centigrade 0 to 100 deg.

The sensor would have to be on a cable about a metre long.

Any ideas ? Mike S.

Just the other day I saw a battery operated, indoor/outdoor thermometer for less than US\$10.00. Not sure where I saw it; maybe at BG Micro (Garland, Texas). Don't remember whether or not it can read out in Celcius.

If I were doing it, I would use a microcontroller, an LCD, and a DalSemi/Maxim DS1820 or DS1822 digital thermometer "chip" (because I've used all of them before). As a matter of fact, several years ago I placed a DS1820 on the outlet pipe of my (natural gas) water heater and ran the wires - 20+ feet of twisted wire-wrap wire - to my livingroom, directly above, through an existing hole. :-) The DS1820 and 1822 chips report temperature in Celcius, so you'd be all set. (I wanted Fahrenheit, had to program the microntrroller to convert.)

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Michael