

# TEMPERATURE DATA LOGGER DATASHEET

Copenhagen Atomics Temperature data logger system allows to connect up to 64 k-type thermocouples on one USB port. When connected, the software will sample and upload up to 68 sensor values every second (1 Hz) to the web graph, where data can be viewed and downloaded as csv files for further processing.

The web graph stores the data for 7 days by default. This storage is included in the account, when user buys the hardware from Copenhagen Atomics. Web server distributes data via SignalR protocol, thus multiple computers can be connected to receive the data and set off alarms or control other components.

Both firmware and software are open source available from github.

Data points can also be recorded on a local computer by connecting to the 4-port data

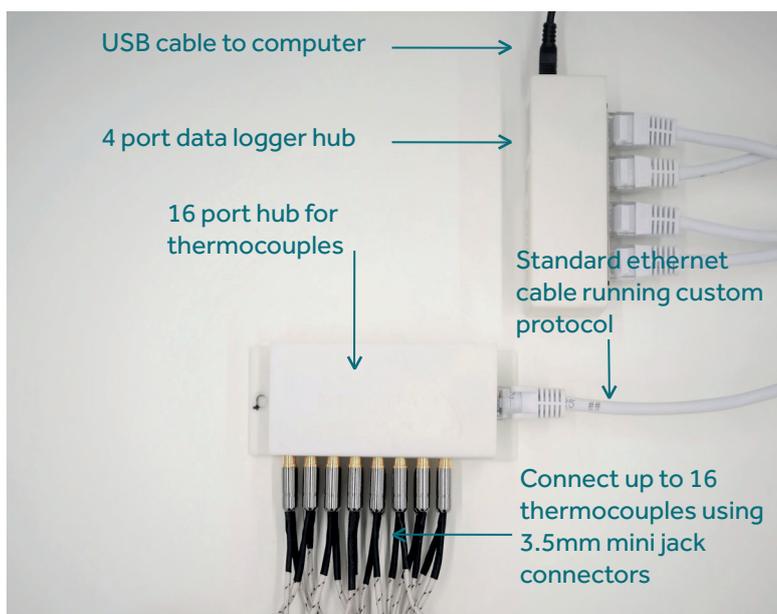
logger hub, via USB, from a standard terminal program (e.g. Putty or Minicom) and the data logger will stream the data into the terminal as lines of text.

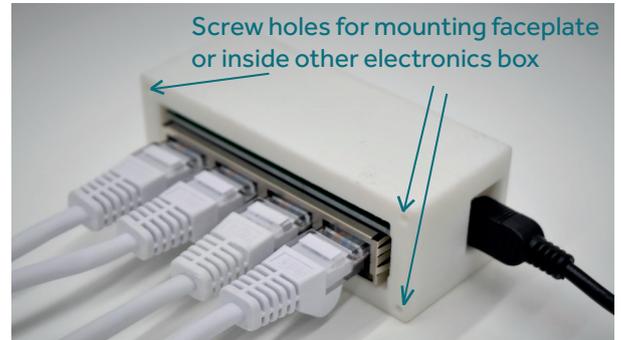
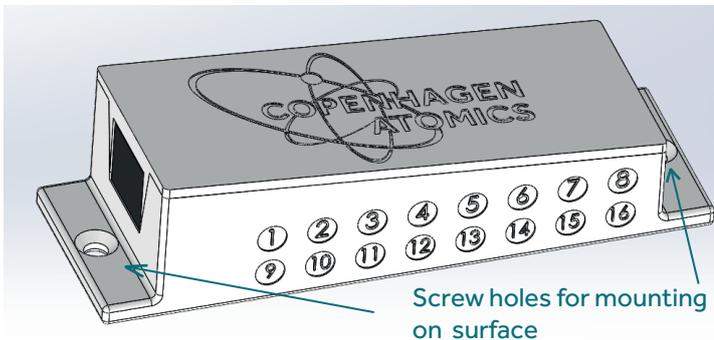
Each 16 port hub will send a text line every second containing temperatures from 16 thermocouples plus an internal temperature from the chip inside the 16 port hub. Temperatures are given in centigrade with one decimal accuracy.

To make the system work, you need:

- minimum one 4 port data logger hub
- minimum one 16 port thermocouple hub
- minimum one Ethernet cable
- minimum one USB cable

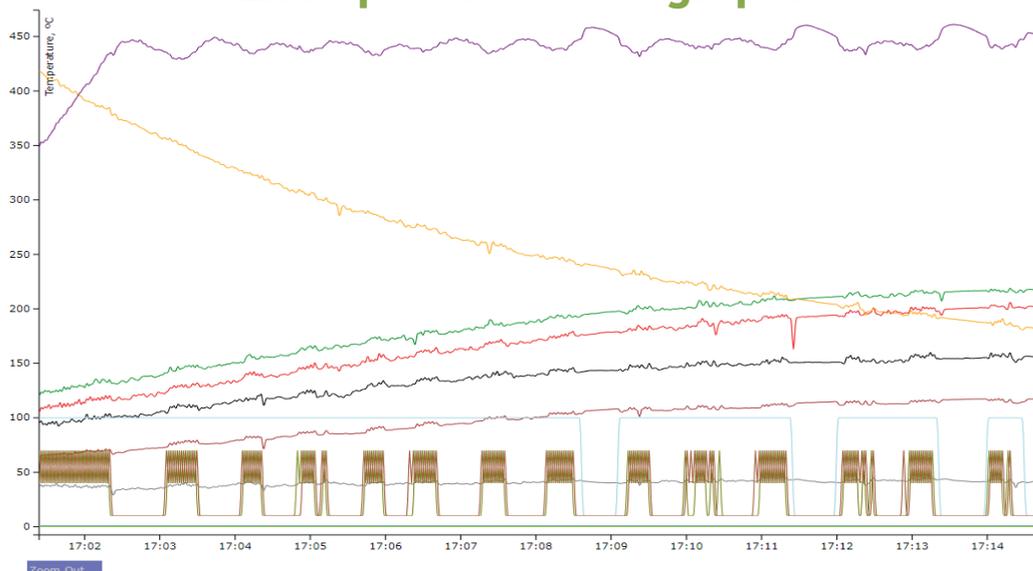
The Data Logger Starter Kit contains one of each of the above plus two thermocoupler with mini jack 3.5mm plug.





STARTTIME: 01 APR 2017 16:51

### Example of the web graph:



## About Copenhagen Atomics

Copenhagen Atomics is based on a philosophy where we encourage collaboration between teams from different countries, both in industry and academia. The three main areas that we focus our efforts on are measurement systems, chemistry and control systems.

Copenhagen Atomics was founded in 2015 and our main workshop and lab are located in Copenhagen.