***THIS PIN NOTICE IS TO NOTIFY SUPPLIERS OF A POTENTIAL UPCOMING REQUIREMENT THAT WILL BE ADVERTISED THROUGH OPEN TENDER VIA CONTRACTS FINDER ***

Brief Description of the Requirement

Remote Temperature Monitoring Equipment.

1. General Description

The requirement is for standalone battery-operated dataloggers capable of measuring the temperature of the internal environment of a dwelling. The dataloggers may also be capable of measuring relative humidity. The dataloggers should be compact and robust enough to be posted out to participants in a monitoring programme. The datalogger should be capable of being set up and data downloaded using a freely available computer software program and a simple USB interface.

This specification is a mixture of absolute requirements and preferred capabilities. Table 1 provides the scoring system for preferred capabilities.

2. Measurement Specification

2.1 Temperature Measurement Range

Temperature measurement range to be 0 to +40°C or wider

2.2 Temperature Measurement Accuracy

Temperature measurement accuracy to be +/- 0.25°C or better in the range 10 to 30°C

2.3 Temperature Measurement Resolution

Temperature measurement resolution to be 0.1°C or better at 25°C

2.4 Temperature Measurement Drift

Temperature measurement drift to be less than 0.5°C per year

Relatively humidity measurements are not required but may be desirable. If they are available on the dataloggers the following specification should apply.

2.5 Relative Humidity Measurement Range (optional capability)

Relative humidity range to be 10 to 90 %RH or wider. However, see Table 1 for further details.

2.6 Relative Humidity Measurement Accuracy (optional capability)

Relative humidity accuracy to be +/- 5 %RH or better in the range 20 to 80 %RH. However, see Table 1 for further details.

2.7 Relative Humidity Measurement Resolution (optional capability)

Relative humidity resolution to be 0.5 %RH or better. However, see Table 1 for further details.

3. Battery Specification

3.1 The dataloggers to be powered using removeable and replaceable alkaline or lithium battery cells. The battery cells should be of a common type, being either AA (1.5V), AAA (1.5V) or CR2032 (3V).

3.2 The battery life when measuring temperature and relative humidity logged at 30-minute intervals shall be 1 year or better. However, see Table 1 for further details.

4. Datalogging Specification

4.1 Memory Size

The datalogger shall be capable of storing a minimum of 20,000 readings. However, see Table 1 for further details.

4.2 Datalogging Intervals

The datalogger shall have a minimum logging interval of 10 minutes (or shorter) and a maximum logging interval of 30 minutes (or longer). However, see Table 1 for further details.

4.3 Datalogging Start and Stop Functions

The logger start mode options should include both immediate start and time delayed start. The maximum length of the time delay option should be for 2 weeks or longer.

4.4 Memory Full options

The logger memory settings should include the option to “stop logging when memory storage full”.

4.5 Logger Time Drift

The logger time accuracy should be +/- 2 minute per month at 25°C or better

5. Datalogger Software and Computer Interface

5.1 The software and drivers used to set up the datalogger using a personal computer or laptop should be compatible with the Windows 10 operating system. The preference is that software and drivers should be freely available and be provided on either a CD, USB flash drive or as a free download from the manufacturers or suppliers web page. However, where paid for logger software is to be provided at least 5 copies of the software and long-term transferrable licences shall be provided and included within the price quoted.

5.2 The interface between the datalogger and a personal computer should be via a cable connection over a standard windows computer connection such as USB. The USB cable required should be of a common and widely available type.

6. Datalogger General Requirements

6.1 The datalogger should have at least one flat face so that it can be placed on a flat surface (such as a table or shelf) or mounted on a wall using suitable removeable mounting strips such as the “Command Strip” products supplied by the 3M company.

6.2 The weight of a datalogger (including batteries) should be no more than 150g. However, see Table 1 for further details.

6.3 The datalogger shall have not have any form of wireless communication capability.

7. Calibration

Dataloggers with calibration certificates are desired to withstand scientific scrutiny. However, they typically cost considerably more than those without. This is therefore a desirable rather than essential feature of the dataloggers for this project.

7.1 Individual dataloggers should each be supplied with a laboratory calibration certificate from either the equipment manufacturer or the equipment supplier. The temperature calibration should be a single point calibration carried out at 20°C. If applicable, the humidity calibration should be a single point calibration carried out at 50 %RH. However, see Table 1 for further details.

Table 1 Alternative Specification

	Preferred Specification		Minimum Acceptable Specification	
	Specification		Specification	
Battery Life	Battery Life 1 year or more at 10-minute logging intervals		Battery Life 1 year or more at 30-minute logging intervals	
Logger Memory	Memory 50,000 readings minimum		Memory 20,000 readings minimum	
Logging Interval	Logging Interval minimum 5 mins and maximum 30 mins		Logging Interval minimum 10 mins and maximum 30 mins	
Humidity Range	Humidity Range 10 to 90 %RH		No humidity recording capability	
Humidity Accuracy	Humidity Accuracy +/-5 %RH in range 20 to 80 %RH		No humidity recording capability	
Humidity Resolution	Humidity Resolution 0.5 %RH		No humidity recording capability	
Weight	Weight 50g or less		Weight 150g or less	
Calibration	The logger should be supplied with a calibration certificate		Optional calibration certificate	

Budget

Maximum budget of the requirement is £60,000.00 excluding VAT.

Supplier Feedback

This pre-procurement notice is being issued in order to undertake a market consultation exercise with regards to the requirements detailed above. The Department for Business, Energy and Industrial Strategy ("BEIS") would like to hear feedback from potential suppliers based on the following:

- Confirmation on whether you would be interested in this tender.
- Confirmation on whether you can deliver 400 units by week commencing 11th October 2021 and a further 400 units by week commencing 15th November 2021.
- Confirmation on whether you can deliver 800 units by week commencing 15th November 2021.
    - IF, the 800 units cannot be provided, confirmation on how many units can be provided by week commencing 15th November 2021.
- Any other comments from suppliers regarding this procurement.

Interested suppliers are to submit their feedback to fmprocurement@uksbs.co.uk, all feedback must be received by 11am on Tuesday 24th August 2021.

There is no commitment at this stage that the above-mentioned opportunity will proceed in its current format however at this stage and subject to the relevant approvals this is the intention.

BEIS may consider the information and responses received as part of the preliminary market consultation to help inform the specification and further decision making in relation to the planning and conduct of the proposed procurement.