

## MDAS Temperature Data Logger Alarm Guide

### Alarms

The alarms allow an acceptable range to be set by using both the high and the low alarms limits. E.g., if the acceptable range is 10°C to 20°C, then setting the high alarm to 20°C and the low alarm to 10°C will trigger the alarm any time the temperature exceeds that range (it will trigger any time the temperature is 20.1°C or above, and 9.9°C or below).

**Category 1** devices offer a single alarm mode: the **Exceed Limit/Threshold** type. This will trigger the alarm any time the sensor measures a value that is beyond the value that is set.

**Category 2** devices have advanced alarm modes which allow for some additional flexibility. The two advanced modes are: **Cumulative** and **Continuous Interval**, explained below.

### Alarm Modes

**Cumulative:** The temperature measured is outside of the acceptable range for the set amount of time over the entire recording period. E.g. if the Cumulative option is selected and 5 minutes is the amount of time set, then all of the previous measurements are tallied. If at any point they total five minutes or more, the alarm will trigger.

**Continuous:** Alarm will trigger if the temperature exceeds the acceptable range for a continuous period of time. E.g. if the Continuous interval option is selected and the time set is five minutes, then the alarm will trigger if five minutes have passed and all of the measurements during that time are beyond the acceptable range.

Ex. Cumulative

The screenshot shows the 'Alarm' configuration window for 'Channel 1: Temperature'. It has two sections: 'High Alarm Limit' and 'Low Alarm Limit'. In the 'High Alarm Limit' section, the 'Measurement GREATER Than' is set to 20, and the 'For' duration is 05:00. The 'Cumulative' radio button is selected, and 'Continuous Interval' is unselected. In the 'Low Alarm Limit' section, the 'Measurement LESS Than' is set to 10, and the 'For' duration is 05:00. The 'Cumulative' radio button is selected, and 'Continuous Interval' is unselected. At the bottom, there are 'Cancel' and 'Ok' buttons.

Ex. Continuous

The screenshot shows the 'Alarm' configuration window for 'Channel 1: Temperature'. It has two sections: 'High Alarm Limit' and 'Low Alarm Limit'. In the 'High Alarm Limit' section, the 'Measurement GREATER Than' is set to 20, and the 'For' duration is 05:00. The 'Cumulative' radio button is unselected, and 'Continuous Interval' is selected. In the 'Low Alarm Limit' section, the 'Measurement LESS Than' is set to 10, and the 'For' duration is 05:00. The 'Cumulative' radio button is unselected, and 'Continuous Interval' is selected. At the bottom, there are 'Cancel' and 'Ok' buttons.

**Exceed Limit/Threshold:** To keep the alarm in this mode, either alarm mode may be selected. Simply enter the temperature(s) and leave all of the time values at 0 and the alarm will trigger any time a measurement is made outside of the acceptable range.



## Indicators and Notifications

Most logger models come with a built-in indicator to let the user know that the alarm has been triggered. For loggers with a display, there will be text on the screen indicating that the alarm has been triggered. For loggers with no display, there will be a red LED light that flashes when the alarm has been triggered. Some models have both features.