



November 1, 2022

Dear Distinguished Tektronix Customer,

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/  
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The purpose of this letter is to describe in detail one of the software fixes completed in our MSO5/6 version 1.44.3 release. The release notes states "5 Series MSO shuts down from invalid temperature reading".

The temperature reading that was causing the shutdown was due to noise in the communications between the sensor and the oscilloscope firmware. We modified how the oscilloscope firmware which manages spurious high readings by comparing the current reading to the previous reading if the current reading is over the shutdown threshold (95C). If there is a dramatic and sudden change (greater than 32C delta), then it is a spurious reading and will be ignored. According to our manufacturing test engineers, in real world applications the temperature never increases more than 10C between readings even when the system is under maximum stress. There are also thermal safeguards built into the hardware.

In a previous version 1.38 of the software an attempt was made to remedy this issue by excluding some invalid temperatures, but this was not sufficient.

