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EVE

XRF Firmware - Temperature: Dallas

Category: LLAP Devices - commands and instructions
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The Dallas firmware is capable of operating as a permanently powered "polled" device with 1 Dallas DS18B20 sensors connected. Looking at the datasheet for the DS18B20 and the CC1110 a voltage of between 3v and 3.6v should suffice. A nominal voltage of 3.3v would be best.

The supported commands for the temp firmware are:

Generic commands

- APVER - LLAP version
- DEVTYPE - Device type
- DEVNAME - Device name
- HELLO - Hello (PING)
- SER - Serial number
- FVER - Firmware version
- CHDEVID - Change device ID
- PANID - Change PANID
- REBOOT - Restart the device

Device specific commands

- TEMP - Reply with the temperature an channel A
- TMPA - Reply with the temperature on channel A

Please note:

Dallas temperature sensors do not lend themselves to low power broadcasts so cyclic sleep is not implemented on the Dallas firmware

However like most device the Dallas does support the polled Sleep command (SLEEP999P) deatials can be found here

Trouble shooting

If the reading comes back as 127 degrees then the XRF is talking to the sensor but the actual sensor has failed to do a temp conversion, this can be because the supply voltage is not high enough

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