

Proposal for the Device Statistic Information Additions Device Temperature Statistics Group

To: T13 Technical Committee
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This document shows the list of candidates of device temperature statistic information to be included in the Device Statistic Information Log. Each of the candidates will be reviewed and included in the standard after approval. Supporting of each of the item on the list is optional.

Summary of Device Statistic Information Candidates:

1. Device Statistic Information Header
2. Current Device Temperature
3. Average Device Temperature for the Past 24-Hour
4. Average Device Temperature for the Past 3-Month
5. Highest Device Temperature Ever (Lifetime)
6. Lowest Device Temperature Ever (Lifetime)
7. Highest Average 24-Hour Temperature (Lifetime)
8. Lowest Average 24-Hour Temperature (Lifetime)
9. Highest Average 3-Month Temperature (Lifetime)
10. Lowest Average 3-Month Temperature (Lifetime)

Device Statistic Information Table

Byte Offset	Bit	Description
0		Device Statistic Information Header
		Description: When T13 decides to make a new revision to this structure
		Update Criteria: When event occurs
		Measurement Units: Number sequence Initialization: Set to 0001h at the factory
	63:48	Revision number
	47:0	Reserved
8		Current Device Temperature
		Description: This value indicates the current device temperature measured by the device. The update frequency of the device temperature is vendor specific. The location of the measurement is determined by the device by the thermostat device meter on a vendor specific location on the device. The precision of

		thermostat device is vendor specific. Update Criteria: Vendor specific, with a nominal updated frequency of 5 seconds Measurement Units: In degrees Celsius Initialization: Not applicable
	63	1=valid statistic data
	62:56	Reserved
	55:8	Reserved
	7:0	Signed CHAR Current Device Temperature
16		Average Device Temperature for the Past 24-Hour Description: This value indicates the average device temperature for the past 24 hours of operation. The average value is taken from the device last 24 hours of operating. The number of sample taken for the average is vendor specific, with a normal sample frequency of every one hour. The measured value has the same criteria as defined in the Current Device Temperature statistics. The operation of the device is defined when the device is power-up in Normal or Idle state. The measurement when the device is in the Standby state is vendor specific. Update Criteria: Vendor specific, with a nominal updated frequency of every one hour Measurement Units: In degrees Celsius Initialization: Set to 25 degree Celsius at the factory
	63	1=valid statistic data
	62:56	Reserved
	55:8	Reserved
	7:0	Signed CHAR Average Device Temperature for the Past 24-Hour
24		Average Device Temperature for the Past 3-Month Description: This value indicates the average device temperature for the past 3-month of operation. The average value is taken from the device last 3-month of operating. The number of sample taken for the average is vendor specific, with a normal sample frequency of every one week. The measured value has the same criteria as defined in the Current Device Temperature statistics. The operation of the device is defined when the device is power-up in Normal or Idle state. The measurement when the device is in the Standby state is vendor specific. Update Criteria: Vendor specific, with a nominal updated frequency of every one week Measurement Units: In degrees Celsius

		Initialization: Set to 25 degree Celsius at the factory
	63	1=valid statistic data
	62:56	Reserved
	55:8	Reserved
	7:0	Signed CHAR Average Device Temperature for the Past 3-Month
32		Highest Device Temperature Ever (Lifetime)
		Description: This value indicates the recorded highest device temperature since the device starts operation. The measured value has the same criteria as defined in the Current Device Temperature statistics. The operation of the device is defined when the device is power-up in Normal or Idle state. The measurement when the device is in the Standby state is vendor specific.
		Update Criteria: Update is synchronized with the frequency of the Device Current Temperature criteria when device is on its operation. Update value is vendor specific when device is on power-save mode such as Standby state.
		Measurement Units: In degrees Celsius
		Initialization: Set to 25 degree Celsius at the factory
	63	1=valid statistic data
	62:56	Reserved
	55:8	Reserved
	7:0	Signed CHAR Highest Device Temperature Ever (Lifetime)
40		Lowest Device Temperature Ever (Lifetime)
		Description: This value indicates the recorded lowest device temperature since the device starts operation. The measured value has the same criteria as defined in the Current Device Temperature statistics. The operation of the device is defined when the device is power-up in Normal or Idle state. The measurement when the device is in the Standby state is vendor specific.
		Update Criteria: Update is synchronized with the frequency of the Device Current Temperature criteria when device is on its operation. Update value is vendor specific when device is on power-save mode such as Standby state.
		Measurement Units: In degrees Celsius
		Initialization: Set to 25 degree Celsius at the factory
	63	1=valid statistic data
	62:56	Reserved
	55:8	Reserved
	7:0	Signed CHAR Lowest Device Temperature Ever (Lifetime)

48	Highest Average 24-Hour Temperature (Lifetime)	
	Description:	This value indicates the recorded highest device temperature of the 24-hours average since the device starts operation. The measured value has the same criteria as defined in the Average Device Temperature for the Past 24-Hour statistics. The operation of the device is defined when the device is power-up in Normal or Idle state. The measurement when the device is in the Standby state is vendor specific.
	Update Criteria:	Update is synchronized with the frequency of the Average Device Temperature for the Past 24-Hour criteria when device is on its operation. Update value is vendor specific when device is on power-save mode such as Standby state.
	Measurement Units:	In degrees Celsius
	Initialization:	Set to 25 degree Celsius at the factory
	63	1=valid statistic data
	62:56	Reserved
	55:8	Reserved
	7:0	Signed CHAR
56	Highest Average 24-Hour Temperature (Lifetime)	
	Lowest Average 24-Hour Temperature (Lifetime)	
	Description:	This value indicates the recorded lowest device temperature of the 24-hours average since the device starts operation. The measured value has the same criteria as defined in the Average Device Temperature for the Past 24-Hour statistics. The operation of the device is defined when the device is power-up in Normal or Idle state. The measurement when the device is in the Standby state is vendor specific.
	Update Criteria:	Update is synchronized with the frequency of the Average Device Temperature for the Past 24-Hour criteria when device is on its operation. Update value is vendor specific when device is on power-save mode such as Standby state.
	Measurement Units:	In degrees Celsius
	63	1=valid statistic data
	62:56	Reserved
	55:8	Reserved
	7:0	Signed CHAR
64	Lowest Average 24-Hour Temperature (Lifetime)	
	Highest Average 3-Month Temperature (Lifetime)	
	Description:	This value indicates the recorded highest device

		<p>temperature of the 3-month average since the device starts operation. The measured value has the same criteria as defined in the Average Device Temperature for the Past 3-Month statistics. The operation of the device is defined when the device is power-up in Normal or Idle state. The measurement when the device is in the Standby state is vendor specific.</p> <p>Update Criteria: Update is synchronized with the frequency of the Average Device Temperature for the Past 3-Month criteria when device is on its operation. Update value is vendor specific when device is on power-save mode such as Standby state.</p> <p>Measurement Units: In degrees Celsius</p> <p>Initialization: Set to 25 degree Celsius at the factory</p>
	63	1=valid statistic data
	62:56	Reserved
	55:8	Reserved
	7:0	Signed CHAR Highest Average 3-Month Temperature (Lifetime)
72		<p>Lowest Average 3-Month Temperature (Lifetime)</p> <p>Description: This value indicates the recorded lowest device temperature of the 3-month average since the device starts operation. The measured value has the same criteria as defined in the Average Device Temperature for the Past 3-Month statistics. The operation of the device is defined when the device is power-up in Normal or Idle state. The measurement when the device is in the Standby state is vendor specific.</p> <p>Update Criteria: Update is synchronized with the frequency of the Average Device Temperature for the Past 3-Month criteria when device is on its operation. Update value is vendor specific when device is on power-save mode such as Standby state.</p> <p>Measurement Units: In degrees Celsius</p> <p>Initialization: Set to 25 degree Celsius at the factory</p>
	63	1=valid statistic data
	62:56	Reserved
	55:8	Reserved
	7:0	Signed CHAR Lowest Average 3-Month Temperature (Lifetime)