Details of Data Frame Format:

11bits-syn bits: $00000000000_{\rm b}$

1bit-start bit: 1_b

3bits-Channel ID: Channel ID:

Channel 1 (001_b)
Channel 2 (000_b)
Channel 3 (010_b)

11bits-temperature(Hex): • Temperature range: -50° C $\sim +70^{\circ}$ C

Oven +70⁰C: 700_H
 Below -50⁰C: 600_H

• -50° C ~ $+70^{\circ}$ C: Hex (temperature_d + 500_{d}) e.g. 25.5° C => Hex(255_{d} + 500_{d})=> $2F3_{H}$

7bits-humidity(Hex): • Humidity range: 0%~100%

• Direct converts Dec to Hex value

3bits- miscellanies (low battery): Bit 3 is low battery status, if this bit is 1, it indicate low

battery now. If this bit is 0, it indicates enough battery

now.

Battery Enough: 000Battery Low: 100

4bits-CRC check code: It is generated by $P(x)=11001_b$ and data (3bits - Channel

ID, 11bits – temperature (Hex), 7bits - humidity (Hex),

3bits – miscellanies)

Total number of bit is 40







