

1. Temperature report packet

41 54 2B 1E 91 00 12 4B 00 01 17 C5 BA AD A0 02 0A 04 02 01 04 40 18 47 0A 00 00 29 64 0D FD

- a. 41 54 2B : head "AT+"
- b. 1E : len = 0x1E
- c. 91 : frame type
- d. 00 12 4B 00 01 17 C5 BA : device IEEE address
- e. AD A0 : device short address
- f. 02 : Source Endpoint
- g. 0A : Destination Endpoint
- h. 04 02 : Cluster ID (ZCL_CLUSTER_ID_MS_TEMPERATURE_MEASUREMENT)
- i. 01 04 : Profile ID (HA Profile)
- j. 40 : Receive options
- k. 18 : Frame Control byte
- l. 47 : Transit sequence number
- m. 0A : ZCL Command (Report)
- n. 00 00 : Attribute ID (ATTRID_MS_TEMPERATURE_MEASURED_VALUE)
- o. 29 : data type (ZCL_DATATYPE_INT16)
- p. 64 0D : value = 0x0D64 = 3428 → $3428/100 = 34.28$ °C
- q. FD : check byte = $0xFF - (\text{Byte}[0] + \text{Byte}[1] + \dots + \text{byte}[30(\text{count before check byte})])$

2. Humidity report packet

41 54 2B 1E 91 00 12 4B 00 01 17 C5 BA AD A0 02 0A 04 05 01 04 40 18 48 0A 00 00 21 B3 1A A5

- a. 41 54 2B : head "AT+"
- b. 1E : len = 0x1E
- c. 91 : frame type
- d. 00 12 4B 00 01 17 C5 BA : device IEEE address
- e. AD A0 : device short address
- f. 02 : Source Endpoint
- g. 0A : Destination Endpoint
- h. 04 05 : Cluster ID (ZCL_CLUSTER_ID_MS_RELATIVE_HUMIDITY)
- i. 01 04 : Profile ID (HA Profile)
- j. 40 : Receive options
- k. 18 : Frame Control byte
- l. 48 : Transit sequence number
- m. 0A : ZCL Command (Report)
- n. 00 00 : Attribute ID (ATTRID_MS_HUMIDITY_MEASURED_VALUE)
- o. 21 : data type (ZCL_DATATYPE_UINT16)
- p. B3 1A : value = 0x1AB3 = 6835 $\rightarrow 6835/100 = 68.35\%$ °C
- q. A5 : check byte = $0xFF - (\text{Byte}[0] + \text{Byte}[1] + \dots + \text{byte}[30(\text{count before check byte})])$