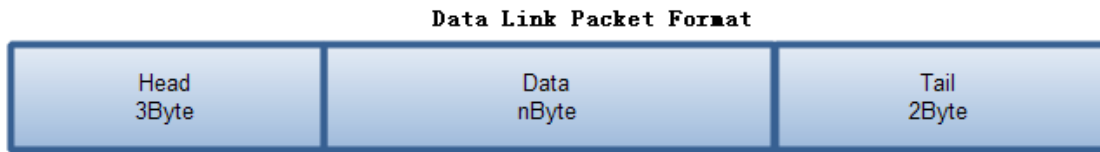


1. Data Link Packet Format

Data Link Packet format is : $Head + Data + Tail$.

Data Link Packet start with "***", and end with "\r\n".

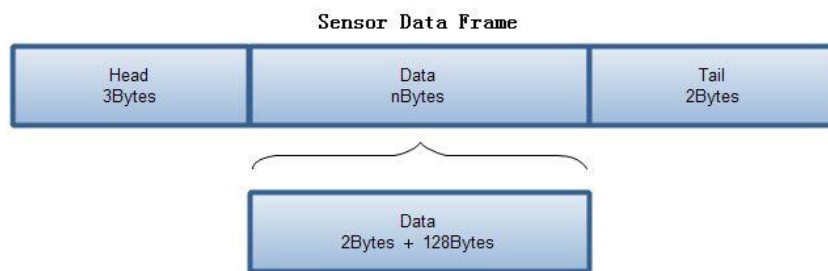


2. Application Data Packet Format

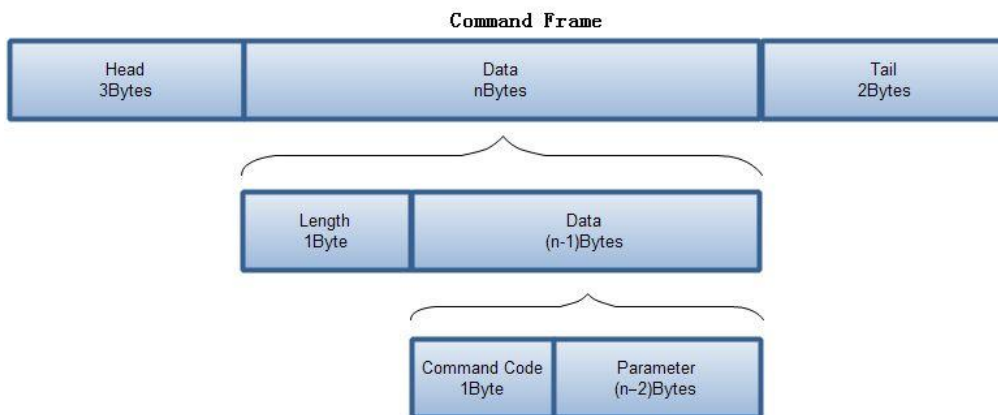
The application data is filled in *Data* field of Data Link Packet.

There are 2 kinds of frame has been defined:

- sensor data frame



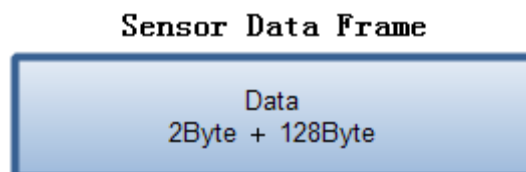
- command frame



2.1, Sensor Data Frame

Direction: GRIG-EYE → PC and Mobile Phone

Purpose: Transfer sensor data



$Data = 2\text{Bytes (Thermistor)} + 128\text{Bytes (Temperature)}$:

$2\text{Bytes (Thermistor)} = T\text{THL} + T\text{THH}$

$128\text{Bytes (Temperature)} = T\text{01L} + T\text{01H} + T\text{02L} + T\text{02H} + \dots + T\text{64L} + T\text{64H}$

T01L and T01H are the low byte and high byte of temperature sensor in Grid-eye sensor.

T01L and T01H are the low byte and high byte of Temperature Register in Grid-eye sensor.

Note:

The thermistor is 12-bits signed code + absolute value.

The Temperature is 12-bits two's complement form.

For details please refer to <SPECIFICATIONS FOR Infrared Array Sensor>.

2.2, Command Frame

Direction: PC -> GRIG-EYE

Purpose: Configure Grid-eye Sensor by host.

Command Frame



The *length of the Command* indicate the length of the *Command* in byte.

The *Command* contains the *Command Code* and its *parameters* if any.

2.2.1 Command for set the sampling frequency.

Command for set the sampling frequency



Command Code = '2' (ASCII code).

Frequency = 1(decimal) set sampling frequency to 1Hz.

Frequency = 10(decimal) set sampling frequency to 10Hz.