# Structure of data packet

Version 3.0

16.01.2023

The device transmits an image of **ImageWidth** by **ImageHeight** pixels in **ImageType** format via TCP-IP protocol as a data packet divided into **FrameCount** frames, each frame contains **FrameSize** bytes. The data packet header structure is shown in Table 1.

Device control commands are given in tables 2 and 3.

Table 1 - The structure of the header of the data packet

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Offset in bytes** | **ID** | **Description** | **Size in bytes** | **Notes** |
| 0 | Sign | Signature | 4 | 1614081Eh |
| 4 | HeaderSize | Size of header | 1 | 64 bytes |
| 5 | HeaderVer | Version of header | 1 | 1 version |
| 6 | DeviceType | Type of device | 1 | 1 version |
| 7 | IMEI | IMEI | 15 | Defined in device configuration |
| 22 | Reserve |  | 1 | Filled «0» |
| 23 | ICCID | ICCID | 20 | Defined in device configuration |
| 43 | ImageType | Type of Image  (0 – RAW, 1 – BMP, 2 – JPG) | 1 | 0 - RAW |
| 44 | ImageSize | Size of image | 2 | 57600 bytes |
| 46 | ImageWidth | Width of Image in pixels | 2 | 320 pixels |
| 48 | ImageHeight | Height of Image in pixels | 2 | 180 pixels |
| 50 | FrameSize | Size of Frame in bytes | 2 | 320 bytes |
| 52 | FrameCount | Count of Frames | 2 | 180 frames |
| 54 | Brightness | Brightness of flashlight | 1 | Range: 0 .. 255 |
| 55 | Reserve |  | 9 | Filled «0» |

Table 2 - Command of request an image from a device

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Offset in bytes** | **ID** | **Description** | **Size in bytes** | **Notes** |
| 0 | Sign | Signature | 4 | 1614081Eh |
| 4 | RequestSize | Size of Request | 1 | 6 |
| 5 | RequestType | Type of Request | 1 | 0 |

Table 3 - Command for setting device parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Offset in bytes** | **ID** | **Description** | **Size in bytes** | **Notes** |
| 0 | Sign | Signature | 4 | 1614081Eh |
| 4 | RequestSize | Size of Request | 1 | 8 |
| 5 | RequestType | Type of Request | 1 | 1 |
| 6 | Param1 | Set brightness of flashlight | 1 | Range: 0 .. 255 |
| 7 | Param2 | Reserve | 1 | Range: 0 .. 255 |