**IrTempParse SDK User Guide**

Modify record

|  |  |  |
| --- | --- | --- |
| Version | Modify Date | instruction |
| V1.0 | 2023-07-17 | The first version |
| V2.5 | 2023-09-04 | Update interface |

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# data type definition

## 1.1 Autel\_IR\_INFO\_S

typedef struct

{

    uint16\_t tag;

    uint16\_t len;

    std::string show\_value = "NA";

    char str\_value[512];

    int num\_value;

} Autel\_IR\_INFO\_S;

**[field description]**

|  |  |
| --- | --- |
| filed | description |
| tag | attribute label |
| len | length of field data |
| show\_value | printable value of attribute |
| str\_value | attribute value save as char array |
| num\_value | attribute value save as number |

**[note]**

Autel\_IR\_INFO\_S used to save some photo properties, such as IrSerialNumber, IrVension and IrEmit.

## 1.2 QPointF

struct QPointF

{

    int x;

    int y;

    QPointF(int \_x, int \_y) : x(\_x), y(\_y){}

};

**[note]**

The QPointF structure represents a point on the canvas, with the upper left corner as (0,0)

## 1.3 TempStatInfo

struct TempStatInfo

{

    float max;

    float min;

    float avg;

    QPointF maxPoint;

    QPointF minPoint;

    TempStatInfo() : max(0.0), min(0.0), avg(0.0), maxPoint(0, 0), minPoint(0, 0) {}

};

**[note]**

temperature data statistics info.

# interface description

### GetIrPhotoTempInfo

**[description]**

**get photo temperature data and info**

**[funtion]**

int GetIrPhotoTempInfo(const char\* filepath, const int w, const int h, TempStatInfo& tempStatInfo, std::map<std::string, Autel\_IR\_INFO\_S> &result, std::vector<std::vector<float>>& tempArray);

**[Parameter]**

|  |  |  |
| --- | --- | --- |
| **parameter name** | description | Input/output |
| filepath | photo file storage path | input |
| w | width of photo, reference value 640 | input |
| h | height of photo, reference value 512 | input |
| tempStatInfo | temperature statistics info | output |
| result | photo properties info | output |
| tempArray | two-dimensional array of temperature data | output |

**[Return Value]]**

|  |  |
| --- | --- |
| Return Value | Description |
| 0 | success |
| -1 | fail |

### GetRawTempData

**[description]**

**get photo raw temperature data**

**[funtion]**

int GetRawTempData(const char\* filepath, const int w, const int h, std::vector<int16\_t> &rawTempData);

**[Parameter]**

|  |  |  |
| --- | --- | --- |
| **parameter name** | description | Input/output |
| filepath | photo file storage path | input |
| w | width of photo, reference value 640 | input |
| h | height of photo, reference value 512 | input |
| rawTempData | dataraw temperature data array | output |

**[Return Value]]**

|  |  |
| --- | --- |
| Return Value | Description |
| 0 | success |
| -1 | fail |