

# **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

## directory

1. data type definition .....	4
1.1 Autel_IR_INFO_S .....	4
1.2 QPointF .....	4
1.3 TempStatInfo .....	5
2. interface description .....	5
2.1 GetIrPhotoTempInfo .....	5
2.2 GetRawTempData .....	6

# 1. 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]

field	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.

## 2. interface description

### 2.1 GetIrPhotoTempInfo

[description]

get photo temperature data and info

[function]

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

## 2.2 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	data raw temperature data array	output

[Return Value]

Return Value	Description
0	success
-1	fail