



# A3817T13 Temperature Measuring Infrared Thermal Camera





# Part 1. Technical index

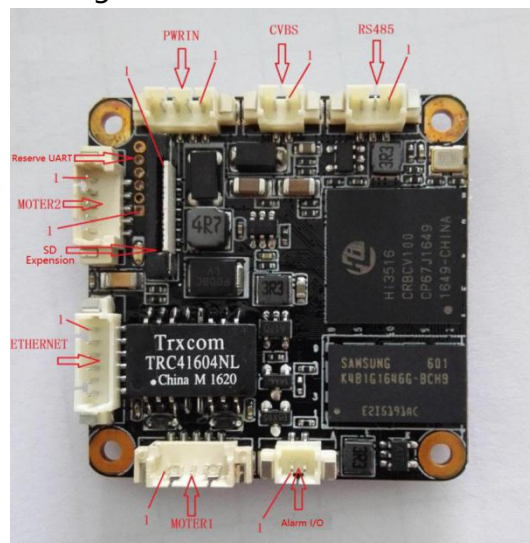
Form 1 Technical index of network temperature measuring movement

<b>Detector</b>	
Detector type	LWIR uncooled focal plane array
Resolution	384x288/640x480
Pixel size	17μm
NETD	<50mk@300K, f1.0
Image frame rate	50Hz/25Hz
Spectral range	8-14μm
<b>Video display processing</b>	
Non-uniform correction	Baffle
Video output	CCIR / PAL composite video (50Hz)
Image polarity	Black heat/White heat/Brown/Red heat/Iron red/Rainbow
Digital zoom	Follow-up support
Brightness	Adjustable
Contrast	Adjustable
Boot time	<5s
Lens	13mm/19,25mm
<b>Interface for thermal imaging movement</b>	
Data interface	RJ45(100M Ethernet)
Communication control	UART/RS232 LVCMOS 2.5V-3.3V compatible
Analog video output	CVBS
Digital video	H264 video streaming, support Onvif V2.4
Alarm	GPIO
<b>Temperature measurement function</b>	
Range of TEMP measurement	26°C~46°C
Accuracy of TEMP measurement	±0.2°C(Reference black body), ±0.3°C(Single machine work)
Distance of TEMP measurement	<8m
Alarm	Support area alarm, support isothermal analysis
Secondary development support	Secondary correction, read out part of the spot temperature, read out part of the block temperature
<b>Power supply</b>	
Range of Voltage	9-12V

Power consumption	<2.5W
<b>Environmental parameters</b>	
Operating time	0°C~+30°C
Range of storage TEMP	-45°C~+65°C
<b>Physical</b>	
Weight(without lens)	< 40g
Size(mm)	38x38x35(without lens interface)

## Part 2. Interface definition

### 1.Interface board socket diagram



### 2.Socket description

#### (1) RS485(Ports ofRS485)

Pin number	Definition
1	Signal ground
2	RS485_A (RS485+)
3	RS485_B (RS485-)

#### (2) CVBS(Analog video output)

Pin number	Definition
1	VIDEO (Video+)
2	GND (Video-)

#### (3) PWRIN(Power input)

Pin number	Definition
1	12V Power input
2	Power ground
3	

4	Power ground
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(4) SD Expansion

PIN number	Definition
1	Output 12V
2	GND
3	USB_PWREN
4	USB_DP
5	USB_DM
6	GND
7	SDIO_CARD_PWREN
8	SDIO_CDATA2
9	SDIO_CDATA3
10	SDIO_CDATA1
11	SDIO_CDATA0
12	SDIO_CCMD
13	SDIO_CCLK_OUT
14	GND
15	UART_TXD
16	UART_RXD

Note: Logic frequency 3.3V

(5) UART

Pin number	Definition
1	UART2_TX
2	UART2_RX
3	UART3_TX
4	UART3_RX
5	GPIO (Alarm I/O)
6	GND

Note:

1.UART2\_TX, UART2\_RX, UART3\_TX, UART3\_RX, GPIO are the direct output of FPGA, and the level is 2.5V LVCMOS.

2.UART2 can work and is used to communicate directly with the thermal imaging core; UART3 is used to expand external devices, such as LRF, which currently has no function.

3.The signal defaults to a low level, and when the level is high, it is in an alarm state.

(6) MOTER2(Motor drive and feedback)

Pin number	Definition
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1	OUT1 (Motor drive output 1)
2	OUT2 (Motor drive output 2)
3	GND
4	4.5V Output
5	FBIN (Motor feedback input)

(7) EUHERNET(Network Interface)

Pin number	Definition
1	ACT
2	RJ1
3	RJ2
4	LINK
5	RJ3
6	RJ6

Note: Logic level is 3.3V

(8) MOTER1(Motor drive and feedback)

Pin number	Definition
1	OUT1 (Motor drive output 1)
2	OUT2 (Motor drive output 2)
3	GND
4	4.5V Output
5	FBIN (Motor feedback input)

(9) Alarm I/O

Pin number	Definition
1	Alarm Outpt (5V Logic)
2	GND

Note: The signal defaults to a low level, it will in an alarm state when the level is high.

## Part 3. Control protocol

1. The built-in web config of the movement can access the web through IP to configure the movement. Basic functions of security are provided by the machine; SD card storage is optional.

2. The menu of thermal imaging movement can be called through the web to control the unique parameters of thermal imaging.