MTP31-A

Infrared temperature sensor module

The MTP31 infrared temperature measurement modules integrates the MEMS thermopile sensor developed by Mfrontier Advanced. The temperature measurement range can be accurate to within 0.1. The perfect combination of the core intelligent algorithm and the temperaturecalibrated low-power MCU greatly ensures remote control. Accuracy of distance temperature measurements.

The MTP31 infrared temperature measurement module supports UART and IIC digital output, which facilitates customers to quickly and conveniently integrate into terminal products, which can greatly improve the efficiency of terminal product development.

Medical instruments   Thermometry detection   Power detection

Smart home appliances   Industrial applications   Smart building

Features

- Non-contact temperature measurement, high sensitivity

- Built-in DSP real-time calculation, real-time calibration

- Core intelligent algorithm, accuracy up to 0.2℃

- Ultra-low power consumption <2mA, extending the battery life of end products

Products parameters

Measurement range	Body temperature mode 32~42.5 ℃，object surface mode 0~300 ℃
Accuracy	±0.3 for body temperature mode, ±1 or ±1% m.v for object surface mode
Digital resolution	0.1 ℃
Measurement period	0.5 s
Supply voltage	4.5~5.5 V
Working current	＜ 2 mA
Output signal	UART，IIC
Communication level	TTL 3.3 V
Temperature compensation	10.0~40.0 ° C
Field of view（50% signal strength）	12.4°
Spectral response	5.5~14 µm
Remote temperature measurement	DS 比 6:1
Working temperature	0~50 ℃
Working humidity	0~95%RH（non consendation）
Size	35*26*30（L*W*H）