

Tempy.eye (TAS1919D)



TAS1919 series (Dongle type)
EASY TO IMPLEMENT THERMOL CHECK FUNCTION !
NO NEED FOR DIFFICULT CALIBRATION !

Tempy.eye All-in-one User-friendly sensor

Non-contact Infrared Thermopile Temperature Sensor

- ✓ MAKE YOUR LIFE SAFE WITH TEMPUS Tempy.eye !
- ✓ ESSENTIAL BODY TEMPERATURE CHECKER !

TEMPUS TAS1919D is a dongle-type non-contact temperature sensor that measures the surface temperature of an object. We use our own 'TAS1919' 16-channel(4x4) array temperature sensor on TAS1919D. A 16-channel array thermopile sensor wafer developed and produced by Tempus was also used for the TAS1919. TAS1919D can be quickly and easily connected to the interface, allowing you to simply and accurately measure the temperature in a non-contact manner. It can be used to measure body temperature in a non-contact method at a distance of 20cm to 50cm.

KEY POINTS

- All-in-one
 - Array temperature sensor*
 - RH/T sensor*
 - ToF sensor*
 - LED*
 - Calibration*
 - Heat sink*
- Non-contact
- Accurate
- Space utilization optimization
- Health tracker
- UART Digital interface
- Easy to design



"BODY TEMPERATURE MEASUREMENT BECAME ROUTINE"

It is the most suitable and indispensable sensor in this era where various viruses are adversely affecting humanity. The heat of the human body is the easiest and most frequent route/method to check for abnormalities in the body from many virus and diseases. TAS1919 can make your life convenient and safe.



Social Distancing



Creating Contactless Culture



Human Body Temperature Detection Possible

About Tempus Inc.

IR Multiband Spectral Sensor Company

We design and operate our own production, calibration, and test equipment after long trial and error for mass production of infrared sensor devices and modules.



Tempy.eye (TAS1919D)

TAS1919 series (Dongle type)

EASY TO IMPLEMENT THERMOL CHECK FUNCTION !

NO NEED FOR DIFFICULT CALIBRATION !



EASY TO USE, QUICK, ACCURATE AND TARGET-DETECTABLE TAS1919D

TAS1919D Is an All-in-one dongle-type product with a 16-channel non-contact thermopile sensor. It is essential where health, safety, hygiene and security are important!

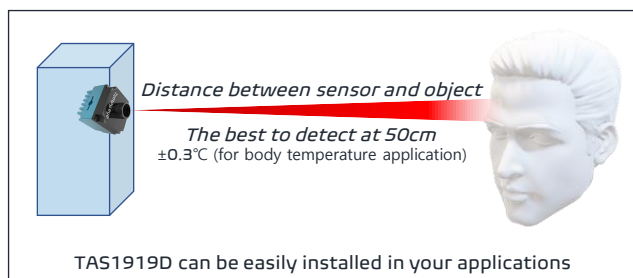
Users can simply connect TAS1919D to their application without difficulty. The heat sink is designed to achieve thermal equilibrium and not to be affected by the surrounding environment, and it is factory calibrated using a temperature/humidity sensor and ToF sensor.

It is recommended for users who want to implement an access control system with the addition of accurate and fast non-contact temperature measurement.

TAS1919D APPLICABLE TO VARIOUS APPLICATIONS

- Fever check system
- High precision non-contact temperature measurements
- Security / Safety gates intrusion
- Human detection / Movement detection
- Presence detection / Person localization
- Home energy management system
- Home appliances with temperature control
- Kitchen hood smart on / off function

EASILY INSTALLED IN YOUR APPLICATIONS



- The user measures the temperature of an object at a specific distance.
- The TAS1919D with UART interface can be easily installed on any product you want.

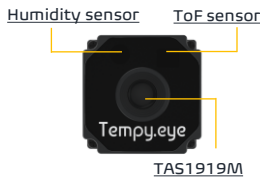
* Note: The application examples provided in this flyer are for reference only. In practical application, please contact Tempus before using the product.



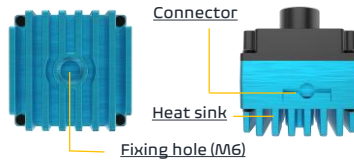
Tempy.eye (TAS1919D)

TAS1919 series (Dongle type)
EASY TO IMPLEMENT THERMOL CHECK FUNCTION !
NO NEED FOR DIFFICULT CALIBRATION !

TAS1919D VIEWED FROM VARIOUS ANGLES



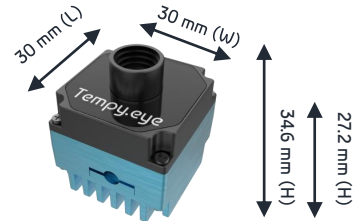
Top



Bottom

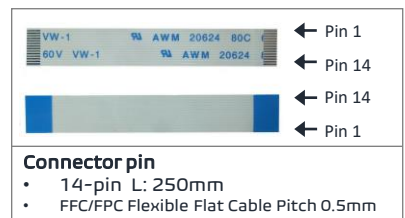


Front



SPECIFICATIONS

Pixels	4x4 pixel temperature sensor inside the dongle package
Accuracy	$\pm 0.3^{\circ}\text{C}$ (for body temperature application) $\pm 0.5^{\circ}\text{C} \sim \pm 5^{\circ}\text{C}$ (for Customizing)
Target viewing angle	X= 18°, Y=18°
Measurement Distance	20 ~ 50cm (30cm is the proper distance for body temperature measurement)
Supply voltage	4.0 to 5.5VDC
Calibrated range (Object temperature)	22°C ~ 42.4°C (It may vary by application)
Calibrated range (Environment temperature)	10°C ~ 40°C (It may vary by application)
Operating temperature	-20°C ~ 65°C (Accuracy guaranteed environment temperature range is 10°C ~ 40°C)
Storage temperature	-20°C ~ 80°C
Storage humidity	95% max



Pin No.	Pin name	Function
1	VCC	Power
2	Reserved	
3	SPI_SCK	SPI
4	SPI_MOSI	(Currently not supported)
5	SPI_MISO	
6	SPI_NSS	
7	TxD	UART
8	RxD	UART
9 ~ 13	Reserved	
14	GND	Power

* Note: Specification and pin configuration are subject to change without notice. Please check the latest datasheet.

The above information is considered correct in the current version flyer. Tempus disclaims any liability arising from the provision, application or use of any information or product; all liability, including, but not limited to, special, consequential or incidental damages, all warranties, express, statutory, implied or explanatory, including warranties of fitness for a particular purpose, non-infringement and merchantability. Tempus reserves the right to change the above information at any time without notice. Users should get the latest version of the information to make sure this is the current version. The user must further determine the suitability of the product for application, including the required level of reliability, and whether it is suitable for a specific purpose. Tempus' products are intended for use in typical commercial applications. Unless otherwise agreed in writing, products are not designed, approved or warranted to be suitable for applications requiring extended temperature ranges and/or unusual environmental requirements. Tempus does not specifically recommend high reliability applications such as medical life support devices or life support equipment.

Copyright © Tempus Inc. 2020 All Rights Reserved.
No part of this document may be reproduced without the prior written consent of Tempus.

CONTACT

+82-2-944-6524
sales@tempuselec.com
www.tempuselec.com

LOCATION

☑ Head office (with Fab)
12F Seoul Techno park 232, Gongneung-ro, Nowon-gu, Seoul, 01811 Korea

☑ Daejeon Laboratory
RM824, National NanoFab Center 291 Daehak-ro, Yuseong-gu, Daejeon, 34141 Korea