TCD-104/S400

4-ch K-type Thermocouple

TCD-108/S400

8-ch K-type Thermocouple

Features

- 4/8-channel K-type thermocouple (±0.5°C Accuracy)
- Thermocouple length: 50 cm
- Sampling Rate: 50 ms to 60000 seconds
- Max. recording for each channel: 450,000/300,000
- Powered by 4x AAA batteries
  (60 hours @ 50 ms sampling rate)
- 400°C operating temperature with thermal insulation box
- Easy-to-use software interface
- Traceable temperature data

Introduction

TCD-104/TCD-108 temperature measurement module can provide high-precision temperature measuring capability with standard K-type thermocouple. Besides, TCD-104/TCD-108 has built-in over-temperature protection, intelligent temperature data logging capability, automatic analysis result output (highest Tin temperature, tinning time, heating rate, etc.).

Applications

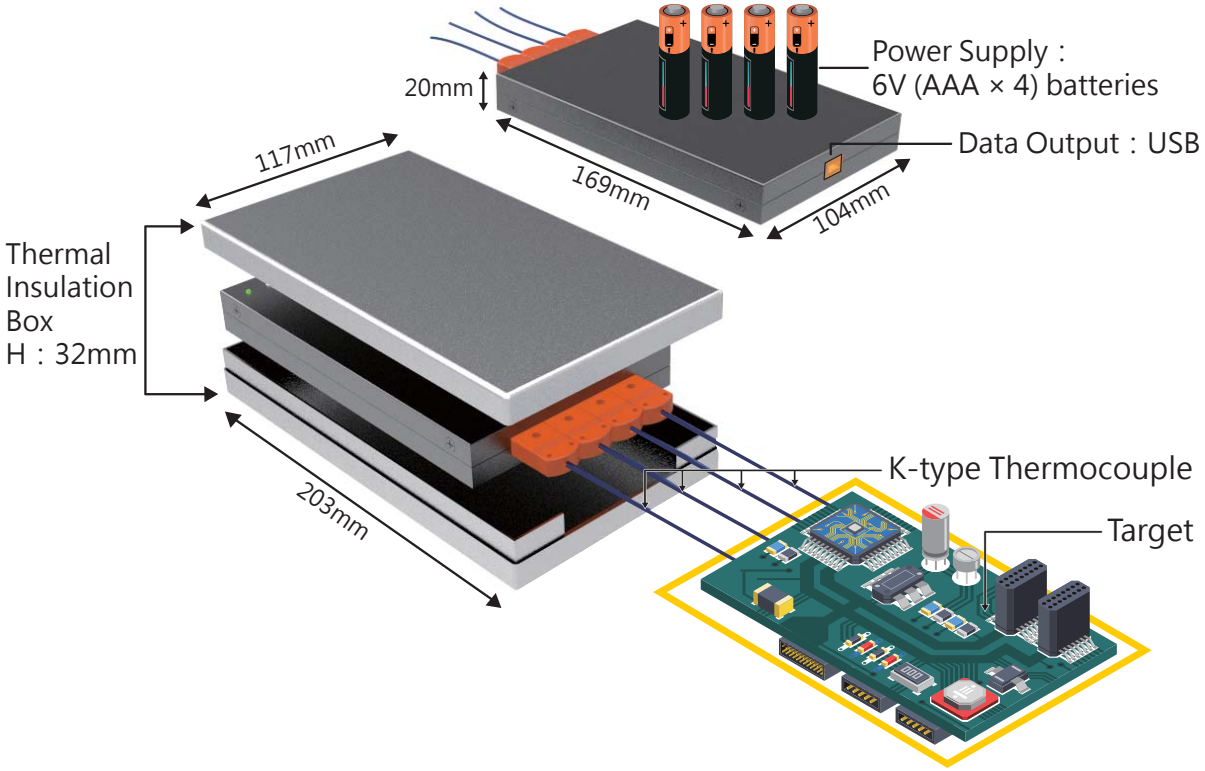
SMD assembly manufacturing, PC board manufacturing, footwear manufacturing, food industry, pharmaceutical industry and any temperature measurement required industries.

System Specifications

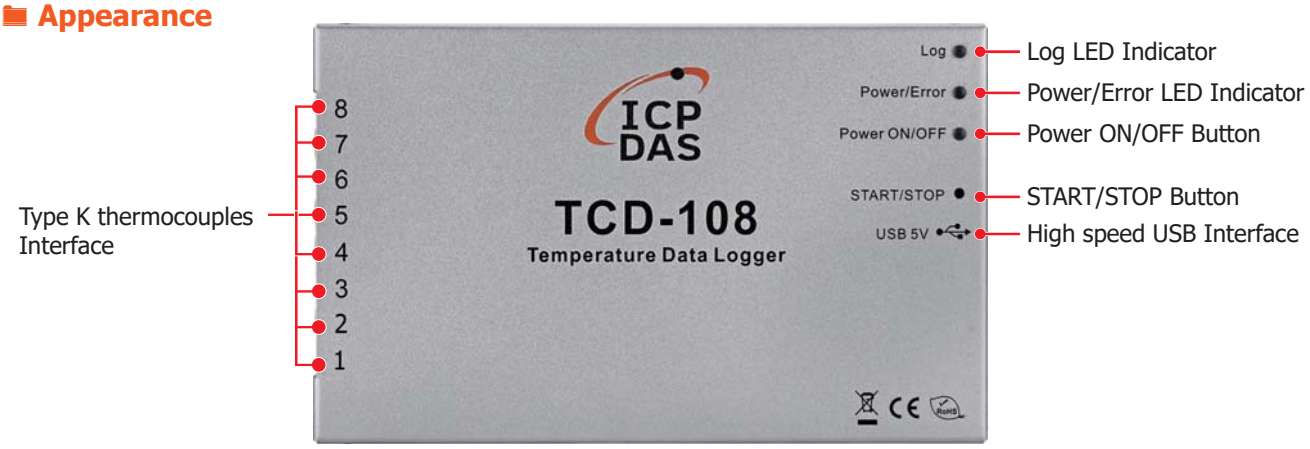
Model	TCD-104	TCD-108
LED Indicators		
Status	Log : Yellow for data logger PWR : Green for normal operation Error : Red for error indicator	
Temperature Measurement		
Sensor Type	K-Type	
Channels	4	8
Measuring Range	-270°C to 1372°C (-454°F to 2501°F)	
Resolution	0.1°C	
Accuracy	±0.5°C	
System		
Data Logger	450,000 records	300,000 records
USB		
Specification	USB 2.0 Full-Speed	
Power		
Consumption	0.06 W Max.	
Battery Usage Life	Operating for more than 60 hours with heavy-duty AAA battery x 4	
Mechanical		
Dimensions (mm)	104 x 169 x 21 (W x L x H)	
Environmental		
Operating Temperature	-40 to +400°C	
Humidity	10 to 95% RH, Non-condensing	

Appearance

TCD-104 and TCD-108 are temperature data loggers with 4/8-channel K-type thermocouple sensors. They are powered by 4x AAA batteries for working more than 60 hours. With an optional thermal insulation box, they can operate in 400°C environment. TCD-104 and TCD-108 are suitable for the industries that concern the temperature change in their manufacturing process, especially heating curve in ovens.



Appearance



The TCD-108/S400 kit comprises of an TCD-108 data logger, iTCLogger software, USB 2.0 cable, thermal barrier, carry case, a quick start guide and k-type temperature cable.

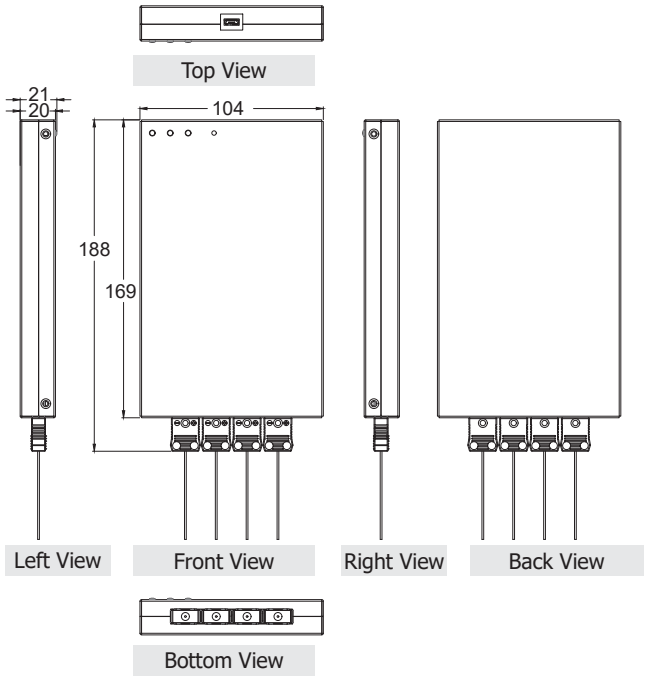
Software: iTCLogger Utility

iTCLogger Utility is used to configure and download the data from TCD-104 and TCD-108 via the USB.
It can display the trend chart and calculate some static values, like max., min, mean

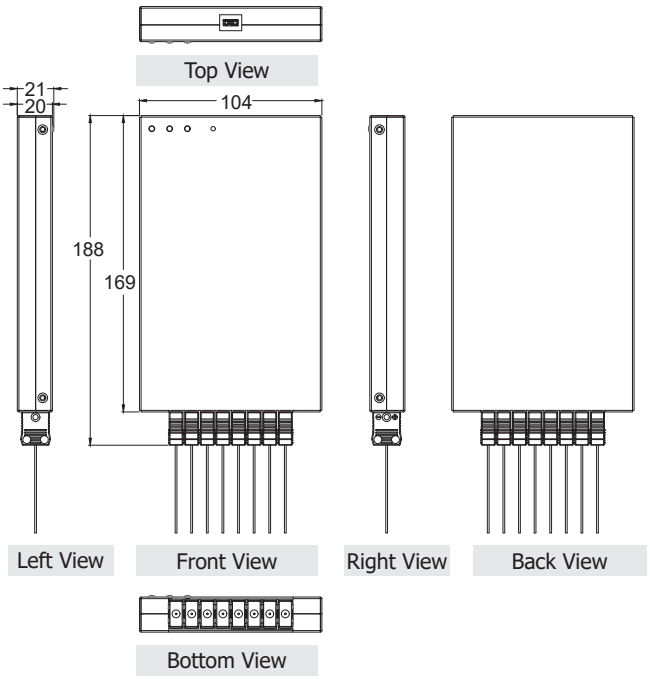
Name	Heat up	Time 150° C-185°C	Time above 220.0°C	Time above 230.0°C	Peak	Cool down	Result
Analysis	40~150(°C)	150~185(°C)	220(°C)	230(°C)	-	180~100(°C)	
Condition	0~3(°C/sec)	30~120(sec)	0~100(sec)	28~100(sec)	230~250(°C)	3~0(°C/sec)	
Channel 1	1.21	71.00	49.00	31.00	235.80	0.84	OK
Channel 2	1.20	74.00	47.00	31.00	235.50	0.87	OK
Channel 3	1.27	73.00	50.00	32.00	236.60	0.83	OK
Channel 4	1.26	72.00	50.00	35.00	239.80	0.85	OK
Channel 5	1.34	71.00	62.00	52.00	249.60	0.87	OK

Dimensions (Units: mm)

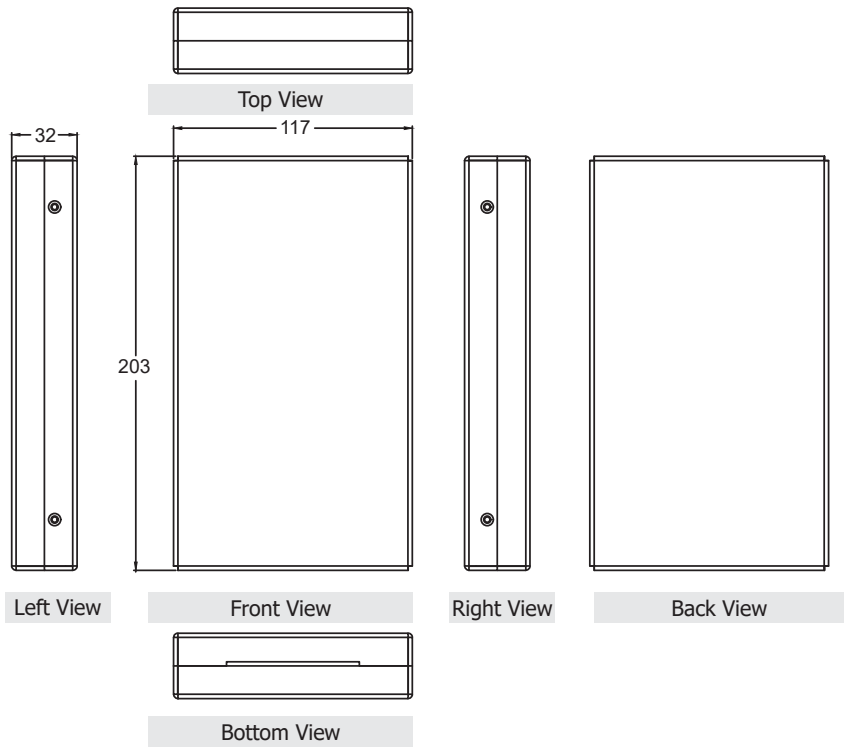
TCD-104 Inner shell



TCD-108 Inner shell



TCD-TIB1-400 shell



Ordering Information

TCD-104/S400 CR	4-ch K type Thermocouple Data Logger Module for Portable Measurement up to 400°C. (RoHS) Includes thermal insulation box and software.
TCD-108/S400 CR	8-ch K type Thermocouple Data Logger Module for Portable Measurement up to 400°C. (RoHS) Includes thermal insulation box and software.