

# **HORIBA**

Explore the future

**HORIBA, Ltd.**

**International Sales Department**

**Leo YASUKAWA**

# **Introduction to HORIBA Infrared Thermometer**

**December 8<sup>th</sup>, 2020**

# Corporate Outline

- Head Office      Kyoto, Japan
- Founded          October 17, 1945
- Incorporated     January 26, 1953
- Net Sales         200.2 BJPY (FY2019)
- Employees       8,288 (FY2019)
- Business         Manufacturing, sales, services of analysis and measurement equipment



Chairman & Group CEO  
Atsushi Horiba



Founder  
Dr. Masao Horiba

Omoshiro-okashiku  
Joy and Fun



## Motto “Joy and Fun”

Work that occupies most of the time in our lives should be more fulfilling to be able to enjoy our lives even more. Taking on new challenges and having pride in our work leads us to “Joy and Fun.”

# Principle of Infrared Thermometer

## ■ Infrared Thermometer

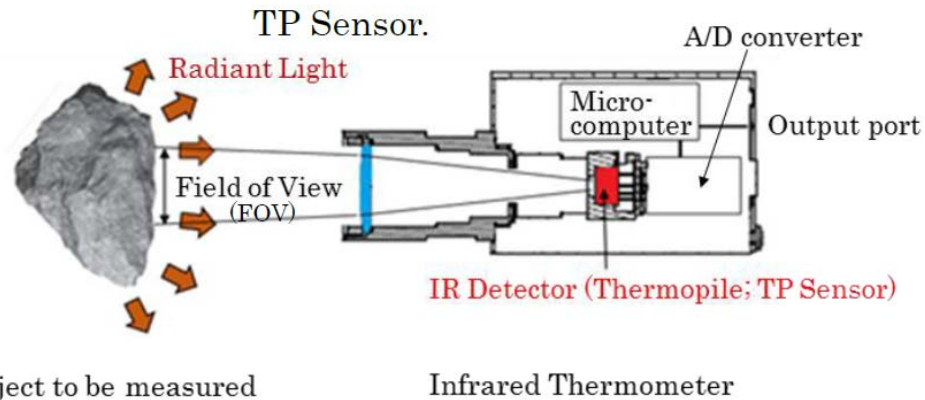
A thermometer that can quickly measure the surface temperature of an object without contact

## ■ Heat Energy

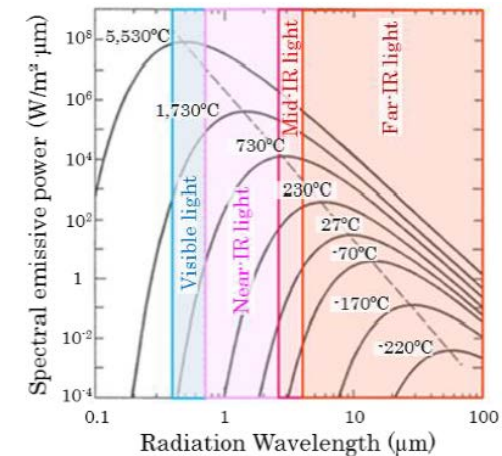
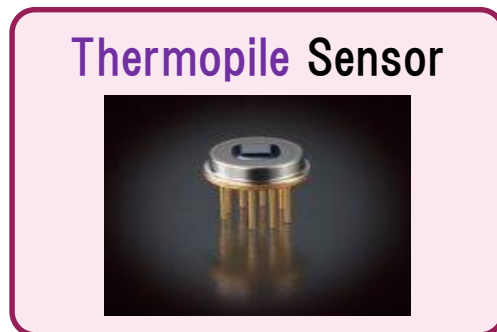
Spectral range of the radiation light differs depending on the temperature of the object

## ■ Principle of Infrared Thermometer







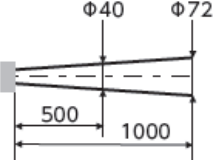
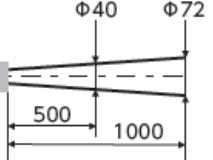
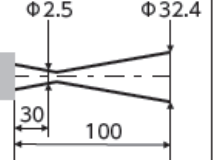
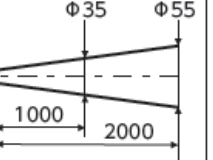
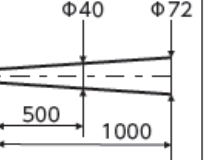
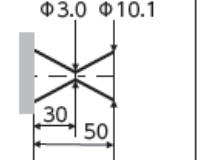
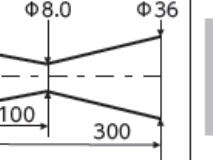
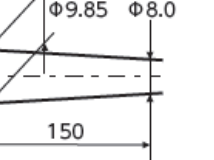
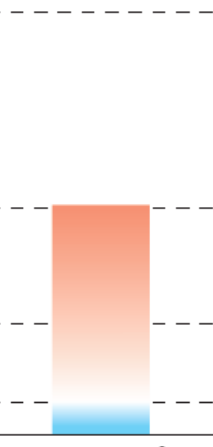
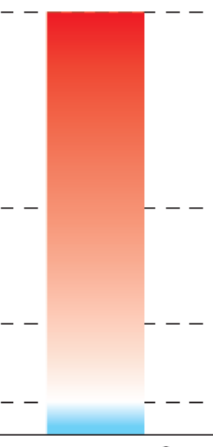
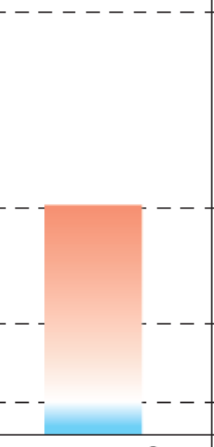
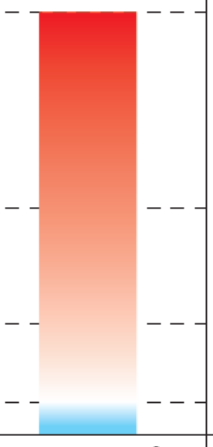
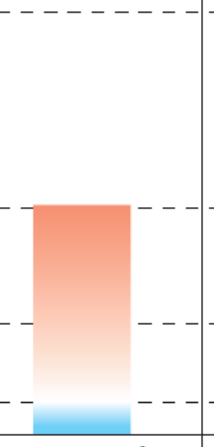
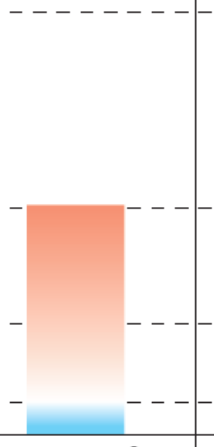
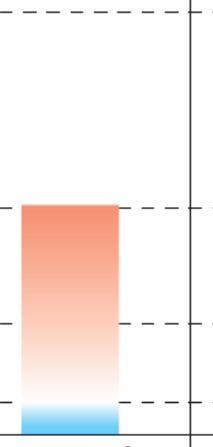

Infrared radiation is collected by an IR detector and temperature is calculated by the output signal of the IR detector



## ■ HORIBA's Core Technologies



# Product Lineup

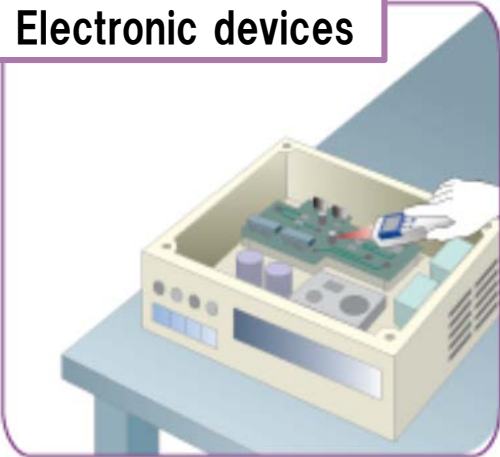
Type	Handheld			Stationary				Built-in
Model	IT-545N	IT-545NH	IT-545S	IT-480F/P	IT-480N/W	IT-480S	IT-480L	IT-470F-H
Appearance								
Field of View	$\Phi 40/500\text{mm}$ 	$\Phi 40/500\text{mm}$ 	$\Phi 2.5/30\text{mm}$ 	$\Phi 35/1000\text{mm}$ 	$\Phi 40/500\text{mm}$ 	$\Phi 3/30\text{mm}$ 	$\Phi 8/100\text{mm}$ 	$\Phi 8/150\text{mm}$ 
Temperature Range	 -50~500°C	 -50~1000°C	 -50~500°C	 -50~1000°C	 -50~500°C	 -50~500°C	 -50~500°C	 -50~200°C
Accuracy (0 to 200°C)	$\pm 1^\circ\text{C}$			$\pm 1^\circ\text{C}$				$\pm 0.6^\circ\text{C}$
Output	—			4-20mA, USB				4-20mA / Optical Output



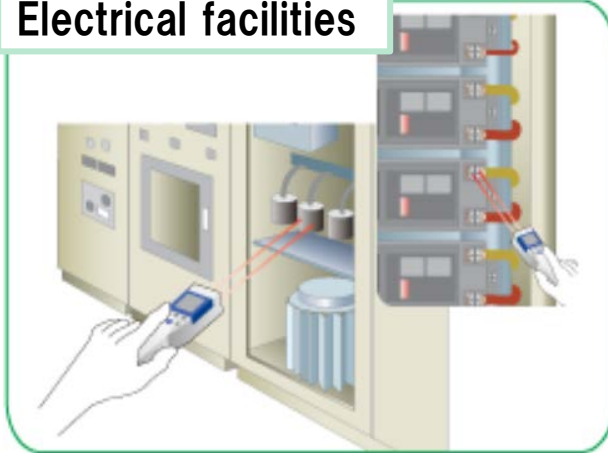
# Application Examples

## Handheld type IT-545 Series

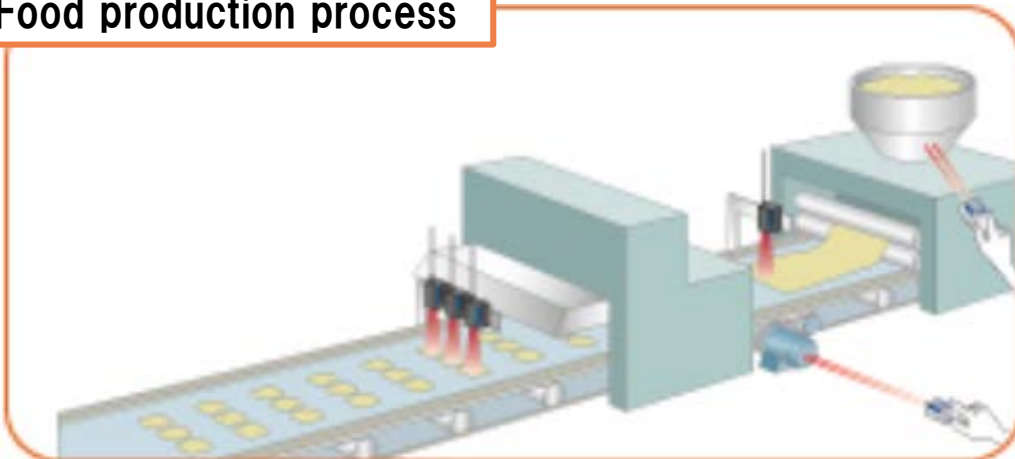
Electronic devices



Electrical facilities

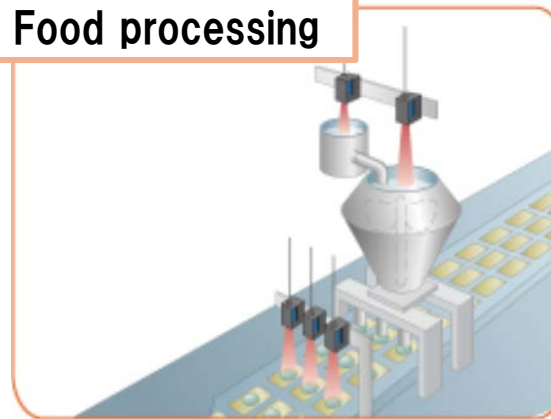


Food production process

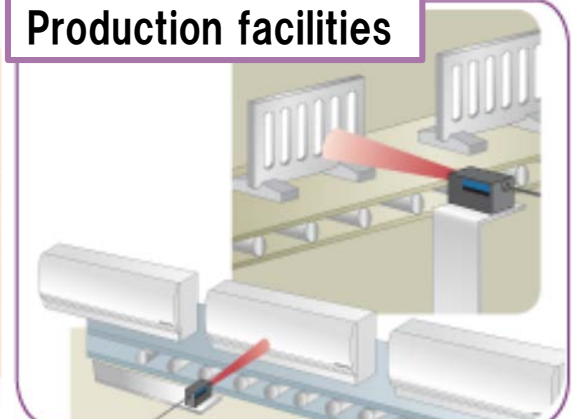


## Stationary type IT-480 Series

Food processing



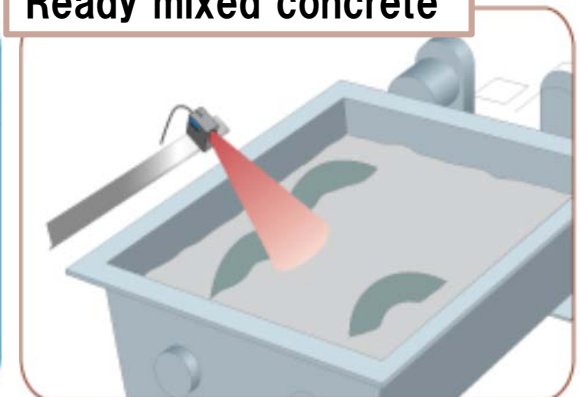
Production facilities



Endurance test for tires



Ready mixed concrete



Omoshiro-okashiku  
Joy and Fun



Danke

Grazie

Tack ska du ha

ありがとうございました

Dziękuję

Gracias

Σας ευχαριστώ πάρα πολύ

**THANK YOU**

ขอบคุณครับ

Obrigado

Большое спасибо

Cảm ơn

**Merci**

감사합니다

நன்றி

Terima kasih

谢谢

धन्यवाद

شُكْرًا