

Overview

- Compact Thermal Camera Module products adopted by shutter-less NUC (Nonuniformity Correction)
- Three products which cover from wide to telephoto field of view available. (LW10F42-UT : this model uses medium telephoto lens)
- Thanks to high performance lenses and original temperature computation format, able to measure temperature of the dedicated points. and output both temperature data and thermal image data at the same time

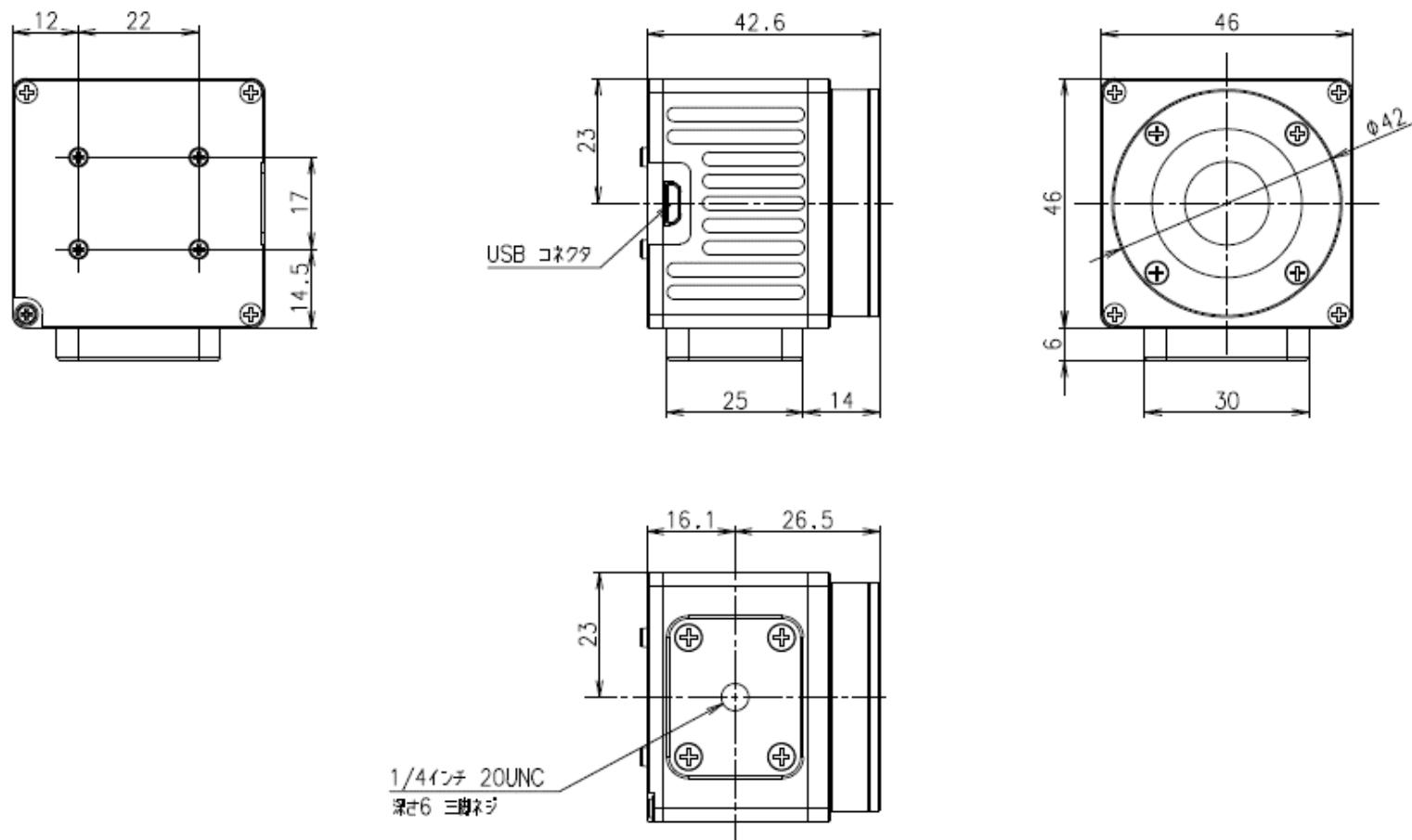
Specifications

■Detector	Uncooled microbolometer	■Image processing	OFF/2D/3D (16bit temperature/8bit thermal image mode)
Detector type		Noise reduction (DNR)	Adjustable(at 8bit thermal image mode)
Wavelength	8~14 μ m	GAMMA	Auto/Manual(at 8bit thermal image mode)
		Histogram average	
■Image/Optical			
Effective pixel	80 x 80 pixel	■Interface	USB2.0 (UART 2ports)
NETD	100mK (typical)	Interface	UART communication
Lens Focal Length	f=3.7mm F/1.1	Interface connector	Micro USB Type-B connector (USB cable not attached)
Field of view (FOV)	42° (H) x 42° (V)	Output data	1)16bit temperature data 2) 8bit thermal image data 3)16bit temperature + 8bit thermal image data 1)2)3): selectable
Focus	Adjustable	communication protocol	Tamron original protocol
Minimum object distance	50cm	Frame rate	1/2/4/8 fps
■Temperature measurement			
Temperature correction	Tamron's original temperature computation format	■General	5V DC (via USB)
Thermal image temperature range	-40°C~200°C	Power requirement	Max 1.0W
Temperature measurement range	10°C~100°C	Power consumption	Performance temperature/humidit 0°C ~ +60°C / 20 ~ 80% (no condensation)
Temperature measurement accuracy	10°C~60°C: ±2°C	Operating temperature/humidity	-20°C ~ +70°C / 20 ~ 80% (no condensation)
	※Ambient Temperature : 10°C~40°C	Storage temperature	-20°C ~ +70°C
	10°C~100°C: ±5°C	Dimensions (W x H x D)	46 x 46 x 42.6mm
	※Ambient Temperature : 0°C~60°C	Weight	Approx 153g
	※Not able to guarantee absolute temperature	Dust/Water proof	equivalent to IP52 level
	Variance may occur due to difference in measurement conditions		
■Temperature analysis function			
Temperature analysis area	6400 pixel (always measures temperature each pixel)		

※Specifications and design subject to change without notice

Dimensions

unit:mm



Model name	Tamron co.Ltd	Category	Issue	page
LW10F42-UT		LW IR Thermal camera module	2022/10	1/1