

# TAMRON

## LW IR Thermal Camera Module LW10F90-E

### 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. (LW10F90-E : this model uses wide type 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

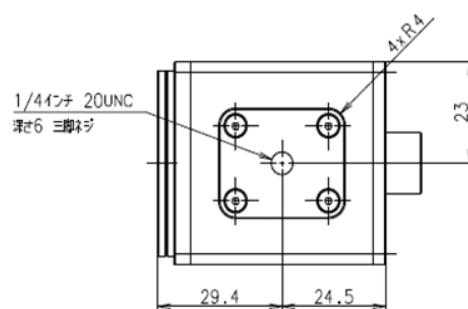
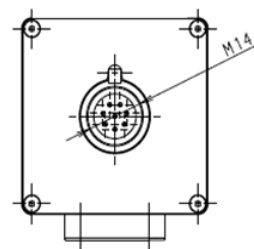
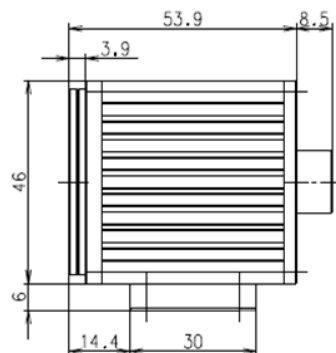
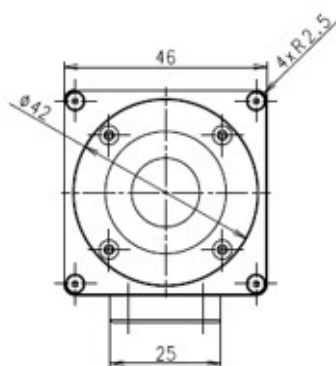
### Specifications

|   |  |   |  |
|---|--|---|--|
| <b>■ Detector</b><br>Detector type Uncooled microbolometer<br>Wavelength 8~12 μm  |  | <b>■ Image processing</b><br>Noise reduction (DNR) OFF/2D/3D (at 8bit thermal image mode)<br>GAMMA Adjustable(at 8bit thermal image mode)<br>Histogram average Auto/Manual(at 8bit thermal image mode)  |  |
| <b>■ Image/Optical</b><br>Effective pixel 80 x 80 pixel<br>NETD 80mK (typical)<br>Lens Focal Length f=1.9mm F/1.3<br>Field of view (FOV) 90° (H) x 90° (V)<br>Focus Fixed<br>Minimum object distance 80cm   |  | <b>■ Interface</b><br>Interface 10BASE-T/100BASE-TX PoE Ethernet<br>Interface connector M12 8-pin connector<br>(The waterproof cable which converts from 8pin to RJ45 male is included)<br>Output data 1)16bit temperature data (UDP protocol)<br>2) 8bit thermal image data (UDP protocol)<br>3)16bit temperature + 8bit thermal image data(UDP protocol)<br>1)2)3): selectable                  |  |
| <b>■ Temperature measurement</b><br>Temperature correction Tamron's original temperature computation format<br>Thermal image temperature range -40°C~200°C<br>Temperature Measurement range 10°C~100°C<br>Temperature measurement accuracy 10°C~60°C: ±2°C<br>※Ambient Temperature : 10°C~40°C<br>10°C~100°C: ±5°C<br>※Ambient Temperature : 0°C~60°C<br>※Center area only (9 x 9 pixel)<br>※Not able to guarantee absolute temperature<br>Variance may occur due to the difference in measurement conditions |  | communication protocol Tamron original protocol<br>Frame rate 1/2/4/8 fps   |  |
| <b>■ Temperature analysis function</b><br>Temperature analysis area 6400 pixel<br>(always measures temperature each pixel)  |  | <b>■ General</b><br>Power requirement Power over Ethernet(PoE) ,IEEE802.3 af<br>Max 1.5W<br>Performance temperature/humidity 0°C ~ +60°C / 20 ~80% (no condensation)<br>Operating temperature/humidity -20°C ~ +70°C / 20 ~80% (no condensation)<br>Storage temperature -20°C ~ +70°C<br>Dimensions (W x H x D) 46 x 46 x 54mm<br>Weight Approx 171g<br>Dust/Water proof equivalent to IP67 level |  |

※Specifications and design subject to change without notice

### Dimensions

unit: mm



Model name

LW10F90-E

Tamron co.Ltd

Category

LW IR Thermal camera module

Issue

2020/8

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