

High Field of View, High Temp, Fixed IR Sensor with 6-digit LCD and analog/digital outputs

Features

- Wide Temperature range: 0°C ~ 1600°C
- Superior Optical resolution up to 300:1
- Spot sizes down to 1 mm
- 5 ms response time
- Dual Laser Sighting
- 4 ~ 20mA output
- Simultaneous analog and digital outputs
- Adjustable signal processing
- 6-digit backlit LCD display
- OMEGAonline Software



General Specifications

Environmental Rating	IP 64
Ambient Temperature	0°C to 70°C
Storage Temperature	-20°C to 80°C
Relative Humidity	10 to 95%, non-condensing
Cable Temperature	-20°C to 80°C
Weight	500g (without cable)

Electrical Specifications

Analog Output	4~20mA
Digital Output	TTL / USB
Maximum Loop Resistance	500 Ω
Power Supply	24 VDC ± 20%
Current Draw	max. 100 mA
Display	6-digit backlit LCD display
Cable Length	3 m (standard, 4-cores), 5 m / 10 m

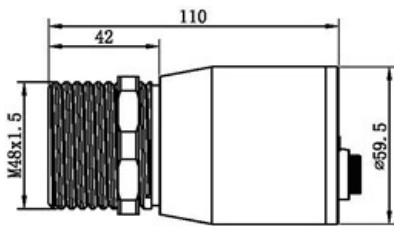
Measurement Specifications

Temperature Range	LT SF/CF: 0°C ~ 900°C (32°F to 1652°F) LR: 0°C ~ 1300°C (32°F to 2372°F) H1: 600°C ~ 1600°C (1112°F to 2912°F) H2: 300°C ~ 1300°C (572°F to 2372°F) H3: 100°C ~ 600°C (212°F to 1112°F)
Spectral Response	LT/LR: 8 ~ 14µm H1: 1µm H2: 1.6µm H3: 2.3µm
Optics Resolution (90% energy)	LT, 60 : 1 (SF) / 75 : 1 (CF) LR, 120 : 1 H1, 300 : 1 H2, 300 : 1 H3, 140 : 1 (SF,CF2) ; 120:1 (FF)
Accuracy*1	LT/LR: ≥20°C ±1% of reading or ±1.5°C, whichever is greater H1/H2/H3: ±(0.5% of reading +2°C)

Repeatability*1	LT/LR: $\pm 0.5\%$ of reading or $\pm 1^\circ\text{C}$, whichever is greater H1/H2/H3: $\pm(0.3\%$ of reading $+1^\circ\text{C}$)
Temperature Resolution	0.1 $^\circ\text{C}$
Response Time (95% signal)	LT/LR: 150 ms H1/H2/H3: 5 ms
Emissivity (adjustable)	0.100 ~ 1.000, in 0.001 increments
Signal processing	peak hold, valley hold, average

*1 At $23^\circ\text{C} \pm 5^\circ\text{C}$, emissivity LT/LR = 0.95, H1/H2/H3 = 1.00

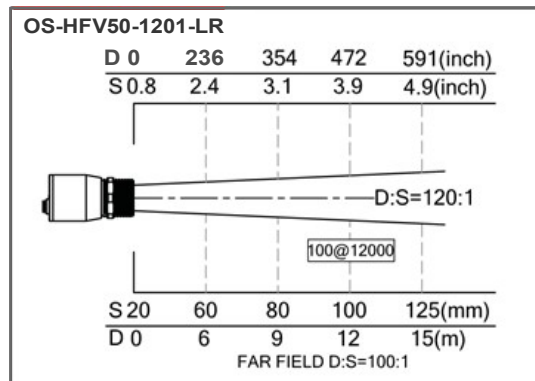
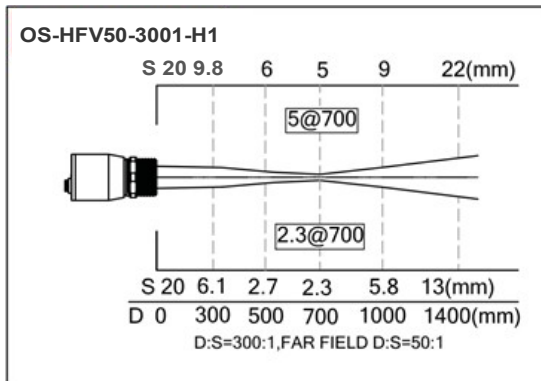
Dimensions(mm)



Control Panel

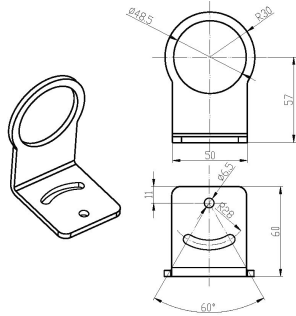


Optical Specifications



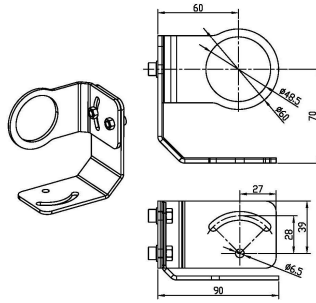
Accessories

Fixed Bracket



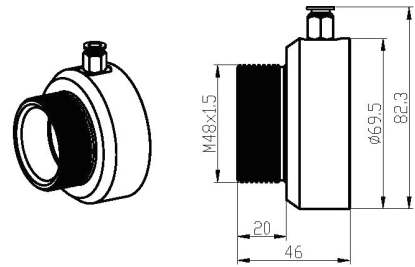
OS-HFV50-FMB

Adjustable Bracket (Option)



OS-HFV50-AMB

Air Purge Collar (Option)



OS-HFV-APC