

OSHFV-Series

OS-HFV50 Model



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

The OSHFV-Series are infrared temperature sensors with a built-in 6-digit backlit LCD display, simultaneous analog/digital outputs, Dual Laser Sighting, Superior Optical resolution and free OMEGAonline software. The OSHFV-Series features very high temperature measurement ranges from 0 up to 1600°C. These ranges are perfect for measuring surfaces of very hot equipment like furnaces, hot extrusion equipment and more!



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
- 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

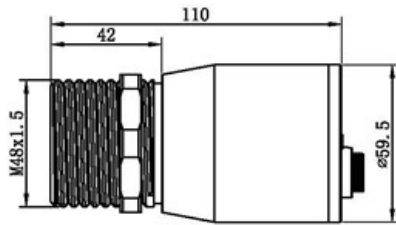
Analog Output	4~20mA
Digital Output	0°C to 70°C
Maximum Loop Resistance	500 Ω
Power Supply	24 VDC ±20%
Current Draw	Max. 100 mA
Display	6 digit backlit LCD display
Cable Length	3 m (standard, 4-cores), 5 m

Measurement Specifications

Temperature Range	LT SF/CF: 0°C ~ 1300°C (32°F to 1652°F) H1: 600°C ~ 1600°C (1112°F to 2912°F)
Spectral Response	LT: 8 ~ 14µm H1: 1µm
Optics Resolution (90% energy)	LT, 60 : 1 H1, 300 : 1
Accuracy*1	LT: ≥20°C, ±1% of reading or ±1.5°C, whichever is greater H1: ±(0.5% of reading +2°C)
Repeatability	LT: ±0.5% of reading or ±1°C, whichever is greater H1: ±0.3% of reading +1°C
Temperature Resolution	0.1 °C
Response Time (95% signal)	LT: 150 ms H1: 5 ms
Emissivity (adjustable)	0.100 ~ 1.000, in 0.001 increments
Signal processing	Peak hold, valley hold, average

*1 At 23°C ± 5°C, emissivity LT = 0.95, H1 = 1.00

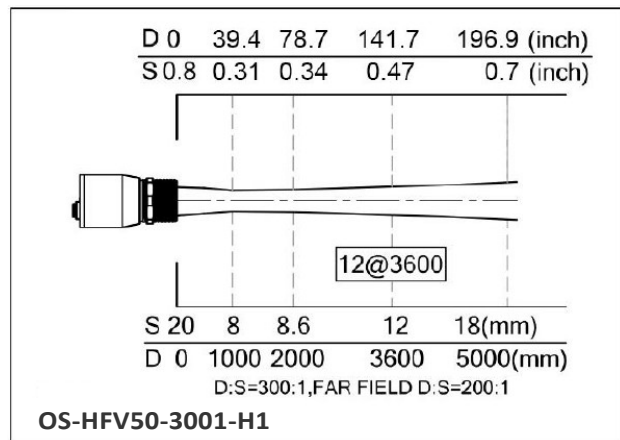
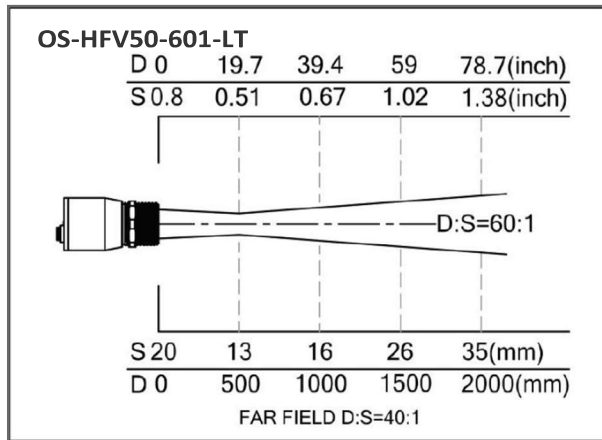
Dimensions



Control Panel

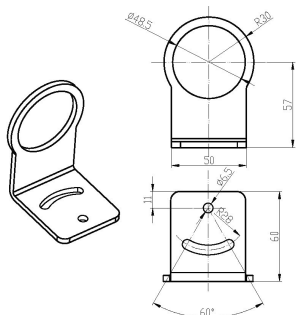


Optical Specifications



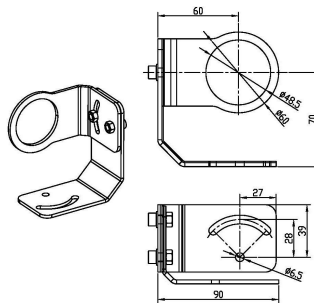
Accessories

Fixed Bracket



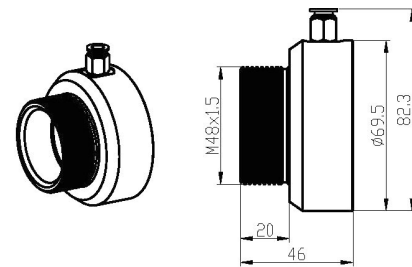
OS-HFV-FMB

Adjustable Bracket (Option)



OS-HFV-AMB

Air Purge Collar (Option)



OS-HFV-APC