

## novasens Infrared Sensor IR502GAC

### At a glance

- Robust sensor for use in very hot or dirty environments
- Connection for compressed air supply for air cooling and lens cleaning
- Detection of small measurement spots over large measuring distances
- Quality, moisture-resistant germanium optics
- 3 m sensor cable, extendable up to 40 m
- Compact design

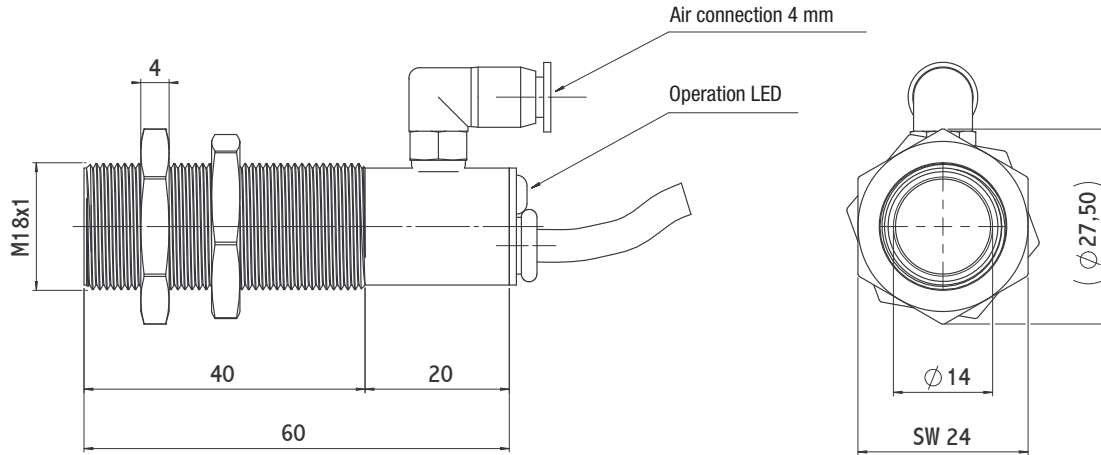


### Specifications

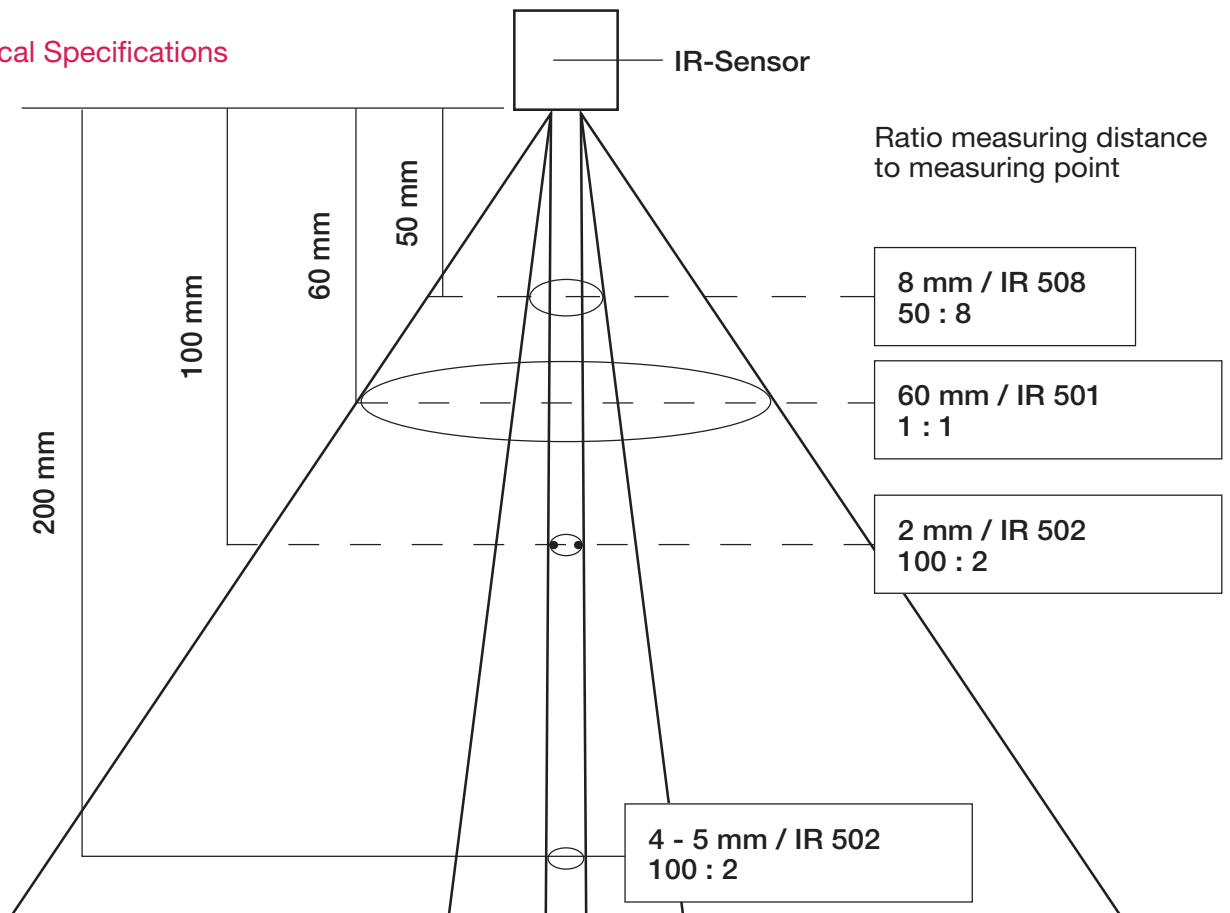
Measuring range / Field of application	-40°C to +1000°C Temperature Measurement System novasens 2050 0-250 % Hotmelt Control System novasens 2000
Spectral range	8 - 14 µm
Emissivity correction	1,0 to 0,1 adjustable on controller
Dimensions	Length 62 mm x 18 mm diameter with M1 8 x 1 thread
Permissible moisture	95% not condensing
Permissible ambient temperature	-20°C to +170°C
Distance to measuring spot	100 mm : 2 mm
Accuracy	+/- 1% of reading
Repeat accuracy	0,5°C (0-100°C), 1,0°C (over 100°C)
Reaction time	60 ms
Resolution	1/10°C
Outputs	0-20 mA, 4-20 mA, 0-10VDC selectable on controller
Weight	190 Grams (sensing head with 3 m cable including plugs)
Protection class	IP64
Delivery scope	Sensing head with 3 m cable including plugs and mounting screws, with air filter F110
Conformity	RoHS-conformity
Model	0200236

The sensor works as a part with the complete Infrared Temperature Measurement System novasens 2050 or the Hotmelt Control System novasens 2000.

## Dimensions



## Optical Specifications



## Pressure chart for air cooling and lens cleaning with compressed air

Pressure (bar)	Ambient temperature in °C	Pressure (bar)	Ambient temperature in °C
0,0	up to 50°C	1,0	105°C
0,1	above 50°C	1,2	120°C
0,2	60°C	1,4	140°C
0,3	70°C	1,7	150°C
0,7	90°C	2,0	170°C

## Variants and Options

### IR502G



Detection of small measurement spots over large measuring distances.  
Distance / spotsize = 100 mm / 2 mm  
Quality, moisture-resistant germanium optics

ArtNr. 0200231

### IR502GACV40



Very robust sensor for use in very hot or dirty environments. Air cooling and lens cleaning by compressed air. 40 mm additional tube against contamination and interference

ArtNr. 0200241

### IR508G



Data as IR502G  
Distance / spot 50:8  
Example: measuring distance 50 mm = 8 mm spot size

ArtNr. 0200209

### Water cooled sensor housing



For use in very hot ambient temperatures, or directly on a heat source. Attachment with rotatable T-piece for water supply, screw for all sensing heads

ArtNr. 0200239

### Sensor cable extension



Including plugs, per meter

ArtNr. 0200225

### Air filter F110



Replacement air filter F110 for all novasens sensors with air cooling and lens cleaning with compressed air

ArtNr. 0200215

### IR502GS/IR508GS



Data as IR502G/IR508G, with faster response time of 5 ms

ArtNr. 0200232

### IR502GW



Side cable output for sensors IR502G and IR508G, for use in confined areas.

ArtNr. 0200237

Specifications are subject to change.