

## novasens Infrared Sensor IR501AC

### At a glance

- Detection of larger measuring areas by the ratio distance / spot size 1:1
- Connection for compressed air supply for air cooling and lens cleaning
- Robust and inured sensor housing
- 3 m sensor cable, extendable up to 40 m
- Very small and compact design for installation in confined space

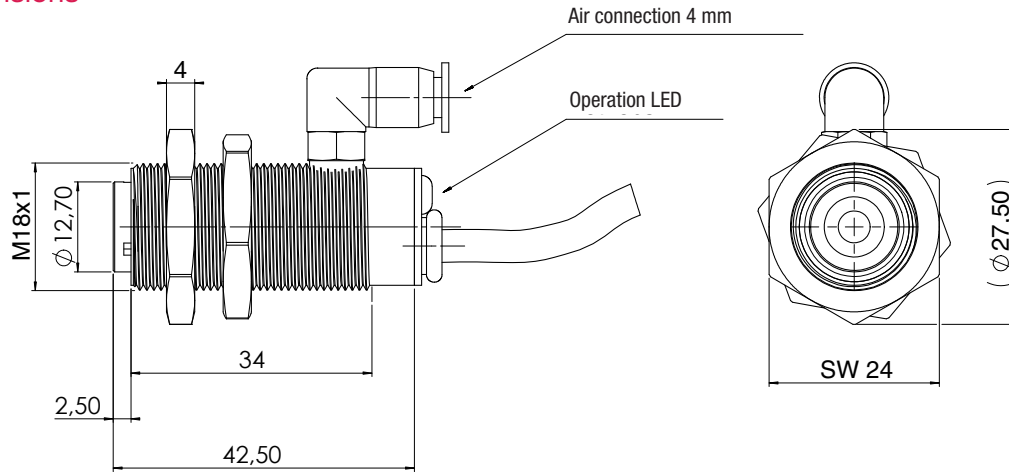


### Specifications

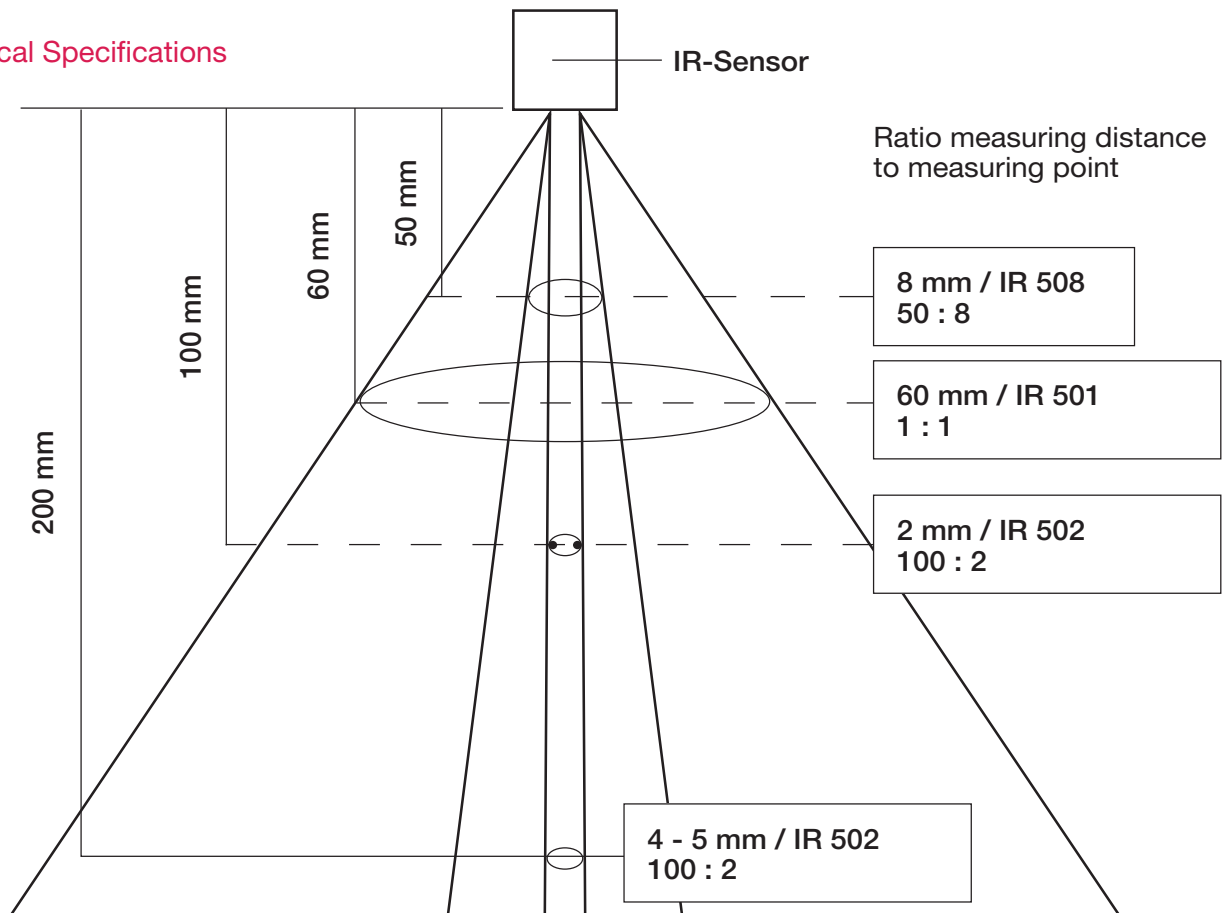
Measuring range / Field of application	-40°C to +1000°C Temperature Measurement System novasens 2050 0-250 % Hotmelt Control System novasens 2000
Spectral range	8- 14 µm
Emissivity correction	1,0 to 0,1 adjustable on controller
Dimensons	Length 43 mm x 18 mm diameter with M18 x 1 thread
Permissible moisture	95% not condensing
Permissible ambient temperature	-20°C to +50°C
Distance to measuring spot	1:1 e.g 30 mm distance = 30 mm spot
Accuracy	+/- 1% of reading
Repeat accuracy	0,5°C (0-100°C), 1,0°C (over 100°C)
Reaction time	40 ms
Resolution	1/10°C
Outputs	0-20 mA, 4-20 mA, 0-10 VDC selectable on controller
Weight	180 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, air filter F110
Conformity	RoHS-conformity
Model	0200207

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

### IR501



Sensor for detecting a larger measuring spot. Measuring distance to spot size 1:1.

ArtNr. 0200207

### IR501S



Very fast sensor with extra short response time of 3 ms. Measuring distance to spot and sensor size as sensor IR501

ArtNr. 0200287

### IR501ACS



Data as IR501S, with additional compressed air supply for air cooling and lens cleaning

ArtNr. 0200233

### IR501SWL



Very fast sensor with extra short response time of 3ms. Measuring distance to spot and sensor size as sensor IR501. Rectangular spot: 4 x 13 mm  
Measuring distance: 5 - 100 mm  
Operation: very fast error message for adhesive failure, adhesive dot count, order quantity measurement in %

ArtNr. 0200288

### 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

Specifications are subject to change.