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novasens Infrared Sensor IR502GACV40

At a glance

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



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 100 mm x 18 mm diameter with M18 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, 0-10 VDC selectable on controller	
Weight	210 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, 40 mm additional tube	
Conformity	RoHS-conformity	
Model	0200241	

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



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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



s e n s o r t e c h n i k

Variants and Options

IR502G

IR502GAC



Detection of small measurement spots over large measuring distances. Distance / spotsize = 10 0mm/2 mm Quality, moisture-resistant germanium optics

ArtNr. 0200231

Water cooled sensor housing



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

ArtNr. 0200236

Sensor cable extension





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

ArtNr. 0200209

Air filter F110



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



Including plugs, per meter

ArtNr. 0200225

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.

Replacement air filter F110 for all nova-

sens sensors with air cooling and lens

cleaning with compressed air

ArtNr. 0200215

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