Available Narrow Band Filtertyps for TPS

The Heimann range of infrared detectors includes various types suitable for different applications. The individual types come with filters fit for their specific use. All dual element types are fitted with the standard window, which will allow transmissions between 5-14 µm. The single element series can be obtained with either broad band filters or very narrow band filters.

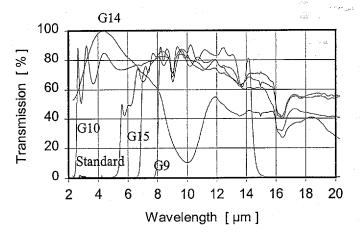
	Filter T1		Filter T2
TPS 252	G20	1	G2
TPS 252	G20	1	G1
TPS 252	G20	1	G4
TPS 253	G20	1	G2
TPS 253	G20	1	G1
TPS 253	G20	1	G4

Туре	Application	Centre Wave Length CWL (µm)	HPB (µm)	Rest Transmission below CWL	in Blocking range above CWL
G1	СО	4,64 (±1,0%)	0,18 (±0,02%)	0,1%	1,0%
G2	- 5- 5- CO ₂	4,26 (±1,0%)	0,18 (±0,02%)	0,1%	1,0%
G4	NO	5,30 (±1,0%)	0,18 (±0,02%)	0,1%	1,0%
G5	HC ·	3,40 (±2,0%)	0,18 (±0,02%)	0,1%	1,0%
G7	Freon	10,90 (±0,5%)	0,24 (±0,03%)	0,1%	1,0%
G20	Reference	4,00 (±2,0%)	0,09 (±0,02%)	0,1%	1,0%

Coated Silicon Coated Silicon Coated Silicon Coated Silicon Coated Silicon

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		Standard G9 G10 G12 G14 G15		8 3 1	5-14 μm -14 μm -13 μm I-16μm 3-5μm 5-14μm	
	100 -	HC	REF	CO ₂ CO	NO	
Transmission [%]	80 - 60 - 60 - 60 - 60 - 60 - 60 - 60 -		5.1 G20	G2.2 G2 G1	G4	
	;	3,5	4	4,5	5 5	5,5

Transmission Range



Narrow Band Filters

Type

Narrow band filters are designed for the detection and measurement of atmospheric gases. Many gases show a specific absorption line in the mid to far infrared range. With a filter which allows the monitoring of this specific gas absorption, the measurement of gas concentration is possible. Filters G1 to G9 are variants, which can be built into TPS 2524. All these filters are made of coated silicon.

Wavelength [µm]

Broad Band Filters

A number of broad band filters are available for users who like to fit their own filter in front of the detector. Broad band filters can be made of either substrate filters, which use the materials transmission property or coated silicon..