

### Available Narrow Band Filtertyps for TPS

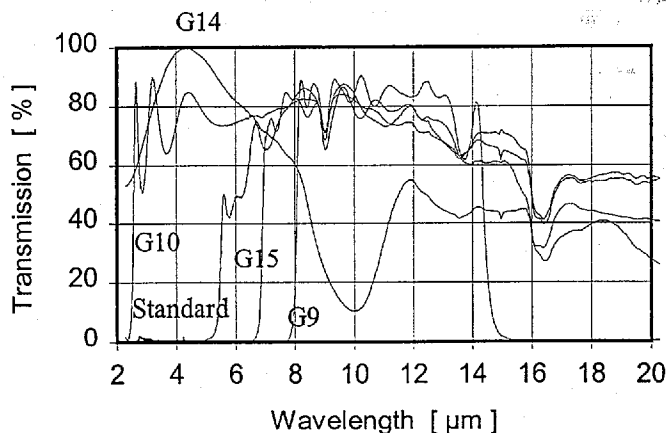
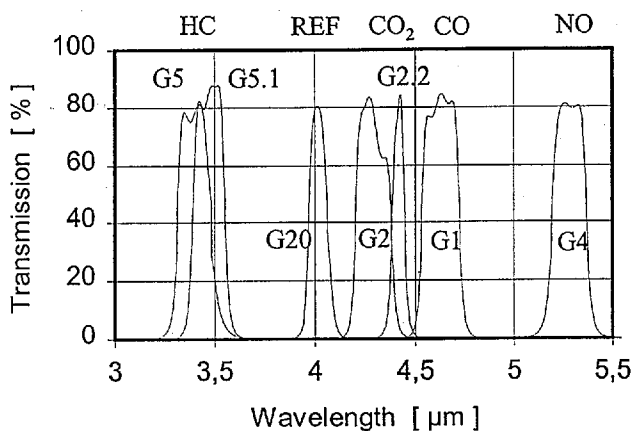
The Heimann range of infrared detectors includes various types suitable for different applications. The individual types come with filters fit for their specific use. All dual element types are fitted with the standard window, which will allow transmissions between 5-14  $\mu\text{m}$ . The single element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

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

Type	Application	Centre Wave Length CWL ( $\mu\text{m}$ )	HPB ( $\mu\text{m}$ )	Rest Transmission in Blocking range below CWL	Rest Transmission in Blocking range above CWL
G1	CO	4,64 ( $\pm 1,0\%$ )	0,18 ( $\pm 0,02\%$ )	0,1%	1,0%
G2	CO <sub>2</sub>	4,26 ( $\pm 1,0\%$ )	0,18 ( $\pm 0,02\%$ )	0,1%	1,0%
G4	NO	5,30 ( $\pm 1,0\%$ )	0,18 ( $\pm 0,02\%$ )	0,1%	1,0%
G5	HC	3,40 ( $\pm 2,0\%$ )	0,18 ( $\pm 0,02\%$ )	0,1%	1,0%
G7	Freon	10,90 ( $\pm 0,5\%$ )	0,24 ( $\pm 0,03\%$ )	0,1%	1,0%
G20	Reference	4,00 ( $\pm 2,0\%$ )	0,09 ( $\pm 0,02\%$ )	0,1%	1,0%

Type	Transmission Range
Standard	5,5-14 $\mu\text{m}$
G9	8-14 $\mu\text{m}$
G10	3-13 $\mu\text{m}$
G12	1-16 $\mu\text{m}$
G14	3-5 $\mu\text{m}$
G15	6,5-14 $\mu\text{m}$

Coated Silicon  
Coated Silicon  
Coated Silicon  
Coated Silicon  
Coated Silicon



#### Narrow Band Filters

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.

#### 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..