The HTS Multichannel Sensors comprise two or four independent sensor chips for a multichannel gas concentration measurement. Typically one to three of the optical channels contain a gas specific filter window and the other channel, equipped with a filter with center wavelength where no gas absorption occurs, serves as reference. On request we can also provide Multichannel Sensors with customer filters (thickness should be close to 0.5 mm).

Parameter | HTS Q21 | HTS E21 | HTS E31 | Unit
---|---|---|---|---
number of channels | 4 | 2 | 2 | 

element size | 1,2² | 1,2² | 2,1² | mm²

electric response | 63 | 63 | 115 | V mm²/W

sensitivity | 44 | 44 | 26 | V/W

resistance \( R_{TP} \) | 84 | 84 | 88 | k Ohm

TC of resistance \( R_{TP} \) | 0.02 | 0.02 | 0.02 | % / K

noise | 37 | 37 | 38 | nV/ Hz²

detectors \( D_{TP} \) | 1.4 \( 10^8 \) | 1.4 \( 10^8 \) | 1.5 \( 10^8 \) | cm Hz² / W

time constant | 10 | 10 | 18 | ms

thermistor reference | 100 | 100 | 100 | kOhm

temperature coeff. of thermistor \( B \) | 3940 | 3940 | 3940 | K

operating temperature | -20..120 | °C

storage temperature | -40..120 | °C

1) without filter, \( T_{obj}=100°C, DC \)
2) at \( T_{amb}=25°C \)
3) \( 25°C, 50°C \)

Ordering Information:
- HTS / package type / chip type / w/wo thermistor / F desired filters
- e.g.: HTS E21 F3.91 / F4.26

Please contact Heimann Sensor also for:
- IR lamps,
- light concentrators or
- high precision broad-band IR sources.