

## SPECIFICATION SHEET FOR HCI SENSOR TYPE HCI/M-20

### PERFORMANCE CHARACTERISTICS

Nominal Range	0 – 20 ppm
Maximum Overload	ND
Expected Operation Life	2 years in air
Output Signal	400 ± 150 nA/ppm
Resolution	0.2 ppm
Temperature Range	- 20 °C to 45 °C
Pressure Range	Atmospheric <sup>1)</sup>
Pressure Coefficient	No data
T <sub>90</sub> Response Time	< 60 sec
Relative Humidity Range	15 % to 90 % R.H. non-condensing
Typical Baseline Range (pure air, 20°C)	-0.5 to +0.5 ppm
Maximum Zero Shift (+20°C to +40°C)	ND
Expected Long Term Output Drift	< 2 % signal loss/month
Recommended Load Resistor	10 - 20 Ohm
Bias Voltage	Not allowed
Repeatability	< 2 % of signal
Output Linearity	Linear
Humidity Effect <sup>1)</sup>	< 0.7 ppm

<sup>1)</sup> Abrupt changes in rel. humidity causes a short term transient signal

### CROSS-SENSITIVITY DATA

Interfering Gas	Concentration	Reading
CO	1000 ppm	0 ppm
H <sub>2</sub>	1%	0 ppm
Isopropanol	vapor	0 ppm
Ethylene	100 ppm	0 ppm
SO <sub>2</sub>	100 ppm	0 ppm
H <sub>2</sub> S	20 ppm	31 ppm
NO	25 ppm	0 ppm
NO <sub>2</sub>	20 ppm	0 ppm

Performance data conditions:  
20 °C, 50% RH and 1013 mbar

### APPLICATIONS

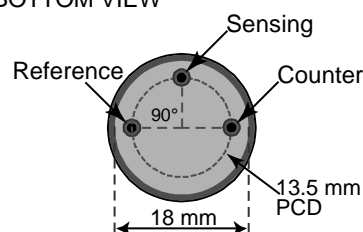
Safety and Environmental Control  
For Portable Gas Detectors

### PHYSICAL CHARACTERISTICS

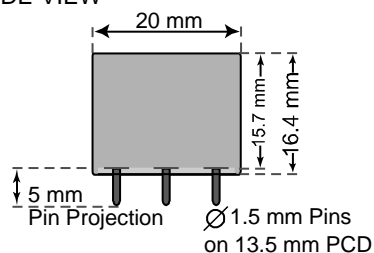
Weight	~ 5.4 g
Position Sensitivity	None
Storage Life	Six months in container
Recommended Storage Temperature	5 °C – 20 °C
Warranty Period	12 months from date of dispatch

### Miniature-Size Outline Dimensions

BOTTOM VIEW



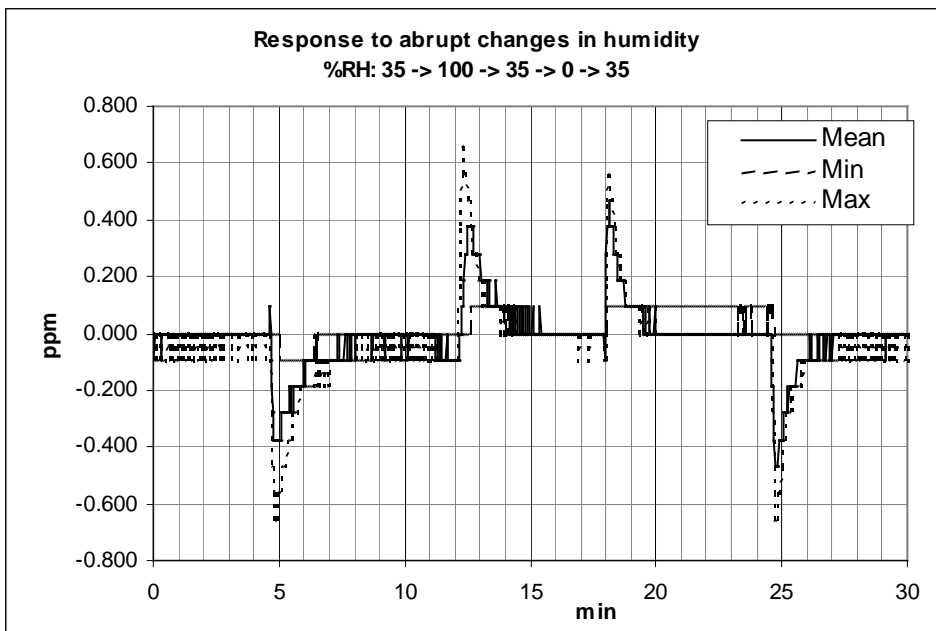
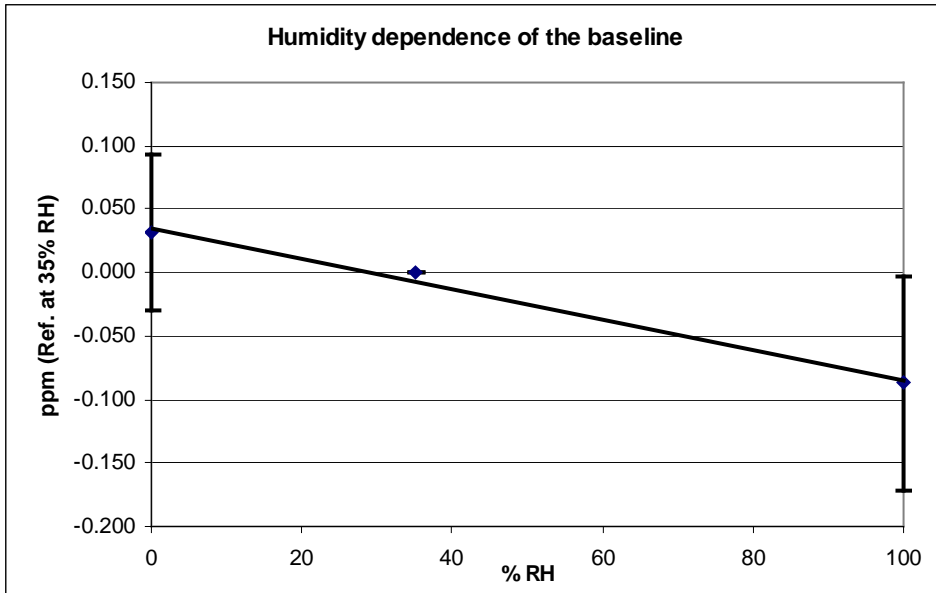
SIDE VIEW



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### HUMIDITY DEPENDENCE

The baseline is virtually not depending on the relative humidity. But abrupt changes in humidity lead to a small short-term transient signal. Thereby a sudden increase in humidity leads to a negative peak.



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