

## Technical data sheet

### VARIOTEC<sup>®</sup> EGA

Device data	
Dimensions (W x D x H)	approx. 148 x 57 x 205 mm approx. 148 x 57 x 253 mm with supporting bracket
Weight	approx. 1000 g, depending on equipment

Certificates	
Certificate	TÜV 07 ATEX 553353 X II2G Ex d e ib IIB T4 Gb basic device without leather bag for: CH <sub>4</sub> , C <sub>3</sub> H <sub>8</sub> , C <sub>4</sub> H <sub>10</sub> , C <sub>9</sub> H <sub>20</sub> , CO II2G Ex d e ib IIC T4 Gb basic device with leather bag for: CH <sub>4</sub> , C <sub>3</sub> H <sub>8</sub> , C <sub>4</sub> H <sub>10</sub> , C <sub>9</sub> H <sub>20</sub> , CO, H <sub>2</sub>

Device elements	
Display	monochromatic graphic display, 320 x 240 pixels
Buzzer	frequency 2.4 kHz, volume 80 db (A) / 1 m
Signal light	red
Pump capacity	vacuum > 250 mbar, volume flow approx. 50 l/h
Interface	USB
Memory	8 MB
Operation	ON/OFF key, 3 function keys, jog dial

Operating conditions	
Operating temperature	-20 °C – +40 °C
Storage temperature	-25 °C – +60 °C (temperatures above 40 °C reduce the lifetime of the sensors)
Humidity	5 – 90 % r.h., non-condensing
Atmospheric pressure	800 – 1100 hPa
Protection rating	IP54

<b>Power supply</b>	
Power supply	NiMH rechargeable or disposable alkaline batteries, type Mignon (AA)
Operating time, typical	at least 8 h
Charging time	approx. 3 h (complete charge) depending on capacity
Charging voltage	12 V DC, max. 1 A

<b>Data transmission</b>	
Communication	USB

<b>Gas types</b>	
Standard	methane CH <sub>4</sub>

<b>Thermal conductivity sensor CxHy % vol. range</b>	
Measuring range	0 – 100 % vol. (CH <sub>4</sub> )
Resolution	1 % vol.
Response times	t <sub>50</sub> < 9 s    t <sub>90</sub> < 17 s (CH <sub>4</sub> )
Measuring error	3 % (as per EN 60079-29-1)
Interference	all gases with a different thermal conductivity
Lifetime, expected	5 years

<b>Semiconductor sensor ppm range</b>	
Measuring range	0 – 10000 ppm (CH <sub>4</sub> )
Resolution	1 ppm / 2 ppm / 20 ppm / 200 ppm
Response times	t <sub>90</sub> < 7 s
Warm-up time	approx. 1 min
Measuring error	30 %
Interference	all flammable gases
Lifetime, expected	5 years

<b>Gas chromatograph CH<sub>4</sub>, C<sub>2</sub>H<sub>6</sub>, C<sub>3</sub>H<sub>8</sub></b>	
Measuring range	0 – 12000 ppm
Resolution	1 ppm
Warm-up time	approx. 1 min
Measuring error	±30 %
Separating capacity	25 ppm
Measurement time	4 min
Lifetime, expected	5 years

106967 – 21-11-2012 – Subject to technical changes.