

Technical data sheet

EX-TEC[®] PM 4

Device data	
Dimensions (W x D x H)	approx. 60 x 144 x 35 mm, without swan neck
Weight	approx. 300 g, depending on equipment

Certificates	
Certificate	EC type TÜV 09 ATEX 555077 X II2G Ex d e ib IIB T4 Gb basic device without leather bag for: CH ₄ , C ₃ H ₈ , C ₄ H ₁₀ , C ₆ H ₁₄ , C ₉ H ₂₀ , JFUEL II2G Ex d e ib IIC T4 Gb basic device with leather bag for: CH ₄ , C ₃ H ₈ , C ₄ H ₁₀ , C ₆ H ₁₄ , C ₉ H ₂₀ , JFUEL, H ₂ BVS 09 ATEX G 002 X (applies to Warning %LEL, CH ₄ , C ₃ H ₈ , C ₉ H ₂₀)

Device elements	
Display	monochromatic, 132 x 65 pixels
Buzzer	frequency 2.4 kHz, volume 75 dB (A) / 1m
Signal light	red
Pump capacity	vacuum > 150 mbar, volume flow approx. 5 – 15 l/h
Interface	via HG 4 docking station with interface
Operation	menu guided, three keys

Operating conditions	
Operating temperature	-20 °C – +40 °C
Storage temperature	-25 °C – +55 °C
Humidity	5 – 90 % r.h., non-condensing
Atmospheric pressure	800 – 1200 hPa
Protection rating	IP54

Power supply	
Power supply	NiMH rechargeable or disposable alkaline batteries, type Mignon (AA)
Operating time, typical	at least 8 h
Charging time	approx. 12 h (fully charged) depends on capacity
Charging voltage	12 V DC
Charging current	360 mA (pulsated)

Gas types	
Standard	methane CH ₄ (ppm / % LEL / % vol.)
Optional	propane C ₃ H ₈ (ppm / % LEL / % vol.)
	acetylene C ₂ H ₂ (% LEL)
	butane C ₄ H ₁₀ (ppm / % LEL)
	hexane C ₆ H ₁₄ (ppm / % LEL)
	nonane C ₉ H ₂₀ (ppm / % LEL)
	hydrogen H ₂ (ppm / % LEL)
	jet fuel (ppm / % LEL)
	town gas (ppm / % LEL / % vol.)

Catalytic combustion sensor LEL range	
Measuring range	0 – 4.4 % vol. (CH ₄), 0 – 100 % LEL
Resolution	0.05 % vol.
Response times	t ₅₀ < 5 s (CH ₄), t ₉₀ < 12 s (CH ₄) (pump devices)
Warm-up time	≤22 s
Measuring error	±2 % LEL (short-term stability as per EN 60079-29-1) ±4 % LEL (long-term stability as per EN 60079-29-1)
Interference	all flammable gases
Lifetime, expected	5 years

Thermal conductivity sensor % vol. range	
Measuring range	0 – 100 % vol. (CH ₄)
Resolution	1 % vol.
Response times	t ₉₀ < 10 s (CH ₄) (pump devices)
Warm-up time	≤22 s
Measuring error	5 % (as per EN 60079-29-1)
Interference	all gases with a different thermal conductivity
Lifetime, expected	5 years

Semiconductor sensor ppm range	
Measuring range	0 – 22000 ppm (CH ₄)
Resolution	1 ppm
Response times	t ₉₀ < 7 s (pump devices)
Warm-up time	approx. 1 min
Measuring error	30 %
Interference	all flammable gases
Lifetime, expected	5 years

106642 – 06-06-2012 – Subject to technical changes.