



Electro Optical Components, Inc.

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smartGAS
MIKROSENSORIK

Preliminary

Preliminary Datasheet	
B3-600105-03000	
BASIC EVO	SF6 1000 ppm
General features	
Measurement principle:	Non Dispersive Infra-Red (NDIR), dual wavelength
Measurement range:	0..1000 ppm Full Scale (FS)
Gas supply:	by diffusion (atmospheric pressure)
Dimensions:	62 mm x 37 mm x 30 mm (L x W x H)
Warm-up time:	< 2 minutes (start up time) < 11 minutes (fade in finished) < 30 minutes (full specification)
Measuring response	related to Pa = 1013 hPa, Ta = 25 °C
Response time (t ₉₀):	Appr. 30 s
Digital resolution (@ zero):	1 ppm
Detection limit (3 σ):	≤ 10 ppm
Repeatability:	≤ ± 15 ppm
Linearity error (straight line deviation):	≤ ± 20 ppm
Long term stability (span):	≤ ± 30 ppm over 12 month period
Long term stability (zero):	≤ ± 25 ppm over 12 month period
Influence of T and P	related to Pa = 1013 hPa, Ta = 25 °C
Temp. dependence (zero):	≤ ± 1.5 ppm per °C
Temp. dependence (span):	≤ ± 3 ppm per °C
Pressure dependence:	+ 0.100 % / hPa
Electrical inputs and outputs	
Supply voltage:	3.3V .. 6.0V DC
Supply current (peak):	< 400mA @ 3.3V, < 240mA @ 5.0V
Inrush current:	< 450mA
Average power consumption:	< 800 mW
Digital output signal:	Modbus ASCII / RTU via UART, autobaud, autoframe
Calibration:	zero and span by SW
Climatic conditions	
Operating temperature:	-20 .. + 40 °C
Storage temperature:	-20 .. + 60 °C
Air pressure:	800 .. 1150 hPa
Ambient humidity:	0 .. 95 % relative humidity (not condensing)