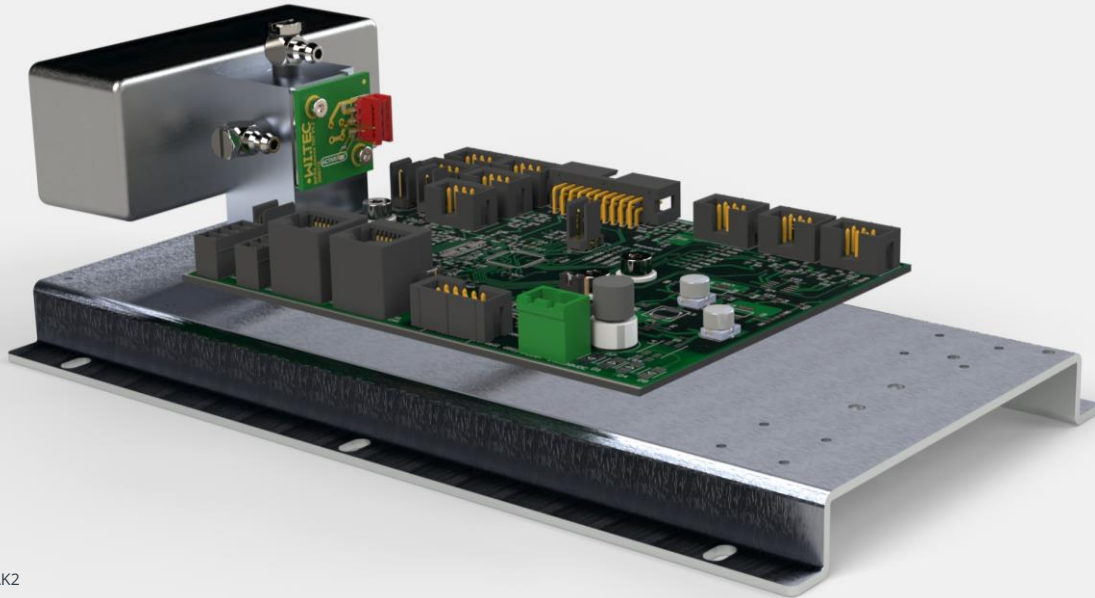


SF₆



INFRA.sens® AK2

Applications

- > Gas-insulated switchgear
- > Process control
- > Instrumentation

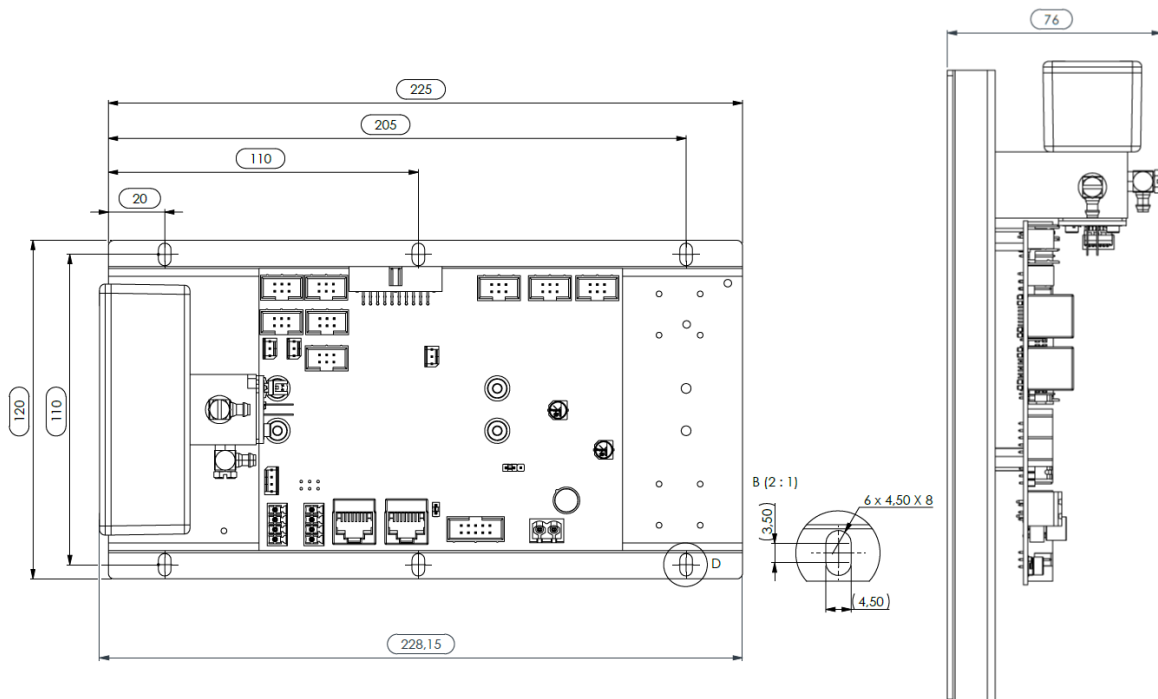
Options

- > O2.sens (Oxygen sensor)
- > HUMI.sens® (Humidity sensor)
- > Analogboard (0-10V)
- > Thermobox

Features & Benefits

- > rugged sensor design
- > No cross sensitivity to CF4
- > low power consumption <2W @ 24V
- > different Interfaces (RS232, CANbus)
- > pressure compensated (600-1200mbar)
- > Including MARS-Tool (Wi.Tec Software)

Dimensions



For more and most recent information please have a look on our website at www.witec-sensorik.de/en/

INFRA.sens® SF₆-AK2/P

SF₆

	gas channel 1*	gas channel 2*	gas channel 3*	Option**		
Single Gas Module	SF ₆			O ₂	P	H
Dual Gas Module				O ₂	P	H
Triple Gas Module				O ₂	P	H

* one gas per column selectable

** P = pressure sensor, H = humidity sensor

List of measurement ranges

Measurement range*	CO ₂	CO	N ₂ O	CH ₄	C _n H _m	CF ₄	SF ₆	H ₂ O
100Vol.%							✓	
50Vol.%							✓	
30Vol.%							✓	
20Vol.%								
10Vol.%								
5Vol.%								
1Vol.%								
5000ppm								
2000ppm								
1000ppm								
500ppm								
300ppm								
100ppm								
50ppm								
10ppm								

* Full scale value (F.S.)

For other measuring ranges please refer to our further datasheets



THE GAS MEASUREMENT COMPANY

!CAUSE IT MAKES .SENS

Subject to change without notice. // 2022-02 Rev.02

INFRA.sens[®] SF₆-AK2/P

SF₆

General features	
Measurement principle	Non-dispersive infrared (NDIR); dual beam; dual wavelengths
Measurement range	see list of measurement ranges
Gas flow	0.1 – 1.5 l/min
Dimensions	228.15mm x 120mm x 76mm
Weight	approx. 490g
Tube connector	4/6mm tube
Lifetime of IR radiation source	> 40 000h
Measuring response ¹	
Warm-up time	1 min (initial), <15 min ²
Response time(t ₉₀)	1.5s – 15s ³
Detection limit (3·σ)	≤ 0,1Vol.% ⁴
Linearity error	≤ 1.0Vol.% (0.5% M.V. 0.5% F.S.)
Repeatability	≤ ± 0.2Vol.%
Zerostability	< ± 2% F.S./24h
Spanstability	< ± 2% F.S./24h
Temp. Influence zero	≤ 0.5Vol.%/10K ⁵
Temp. Influence span	≤ 0.5Vol.%/10K ⁵
Cross sensitivity	≤ 0.1Vol.% @100Vol.% CF ₄ ⁶
Pressure influence	≤ 0.1%/10hPa of reading ⁷
Electrical inputs and outputs	
Supply voltage	24 (15 – 30) VDC
Supply current (peak)	< 0.1A
Average power consumption	< 2W
Digital output signal	RS 232 (ASCII) or CANbus
Climatic conditions	
Operating temperature	5 – 45 °C ⁸
Storage temperature	-20 – 60 °C
Air pressure	600 – 1200 hPa (mbar)
Ambient humidity	0 – 95% rel. humidity (not condensing)

F.S. full scale // M.V measured value ¹ related to P_a = 1020hPa ; T_a= 25°C ; flow = 1l/min ² full specification, demands to environmental conditions

³ depends on digital filter settings ⁴ at zero point ⁵ with zero and span temperature compensation ⁶ other gases on request ⁷ with pressure compensation

⁸ stable climatic conditions recommended, please check dew point considerations



THE GAS MEASUREMENT COMPANY

!CAUSE IT MAKES .SENS

Subject to change without notice. // 2022-02 Rev.02