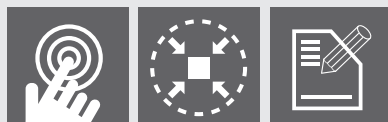


# OIL VAPOR SENSOR S120



**PID**

ACCURATE RESULTS  
Latest PID sensor technology



# Intelligent sensor system — helps you to identify impurities



## S120 FEATURES



**ACCURATE RESULTS**  
Latest PID sensor technology



**TOUCH SCREEN**  
For easy operation



**COMPACT DESIGN**  
Fits into your application



**DATA LOGGER**  
Integrated as option

## S120 BENEFITS

- Can be used for permanent or in portable applications
- Measures down to 0.003 mg/m<sup>3</sup>
- Easy connection through sampling hose and quick connect
- Output signals: - 4 ... 20 mA
  - RS-485, Modbus/RTU
  - Relay switch (NO)
- PID sensor for highest accuracy
- Service and Alarm indication through LED
- Connectable to SUTO displays and data loggers as well as third parties displays and control units
- Integrated 5" touch screen and data logger (option)

The S120 oil vapor sensor monitors the oil content of compressed air and gases permanently or for spot checks when used as portable unit in conjunction with S551. For best accuracy and long term stability, the S120 sensor applies an automatic calibration. Sensor contaminations and sensor life time are monitored and indicated to the user. An 'over range' detection removes the sampling air from the sensor to protect it against contamination.

The simple installation and outstanding performance makes the S120 the ideal choice when oil vapor content needs to be measured and monitored.

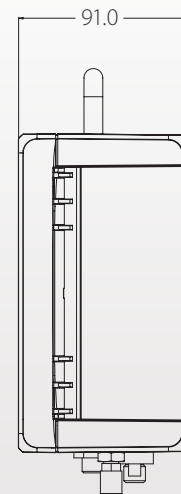
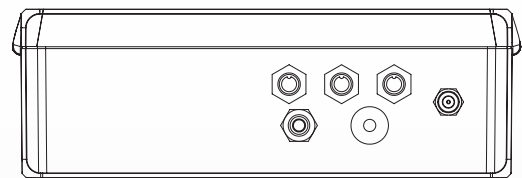
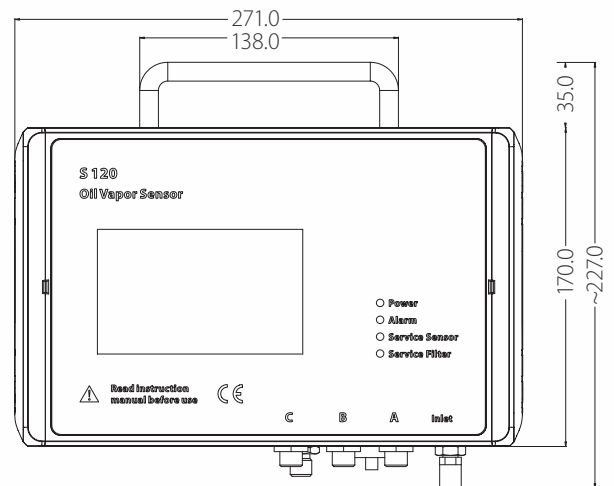
- **Power**
- **Alarm**
- **Service Sensor**
- **Service Filter**

LEDs indicate if pre-set alarms are reached, or if filters and sensors need to be serviced. The service indications start blinking 4 weeks before expiring and turn on permanently when a service is immediately required.

## S120 TECHNICAL DATA

General Specifications	
Measuring medium	Compressed air and gases free of corrosive, aggressive, caustic and flammable constituents
Measuring range	0.003 ... 10.00 mg/m <sup>3</sup> (based on 1000 hPa (a), 20°C, 0% relative humidity)
Resolution	0.001 mg/m <sup>3</sup>
Sensor type	PID (photoionization detector)
Detection limit	0.003 mg/m <sup>3</sup>
Accuracy	5% of reading ±0.003 mg/m <sup>3</sup>
Operating pressure	3 ... 15 barg (higher pressure on request)
Gas humidity	< 40% rel. humidity, no condensation
Sample flow rate	< 2 l/min, measuring gas is released to ambient
Gas connection	6 mm quick connect
Electrical connection	M12 connector
Sensor life time	6000 operating hours. Will be indicated. Sensor exchange by service
Gas temperature	-20 ... +50°C (at inlet)
Ambient conditions	-20 ... +50°C
Transport temperature	-30 ... +70°C
Output signal	4 ... 20 mA (0 ... 10 mg/m <sup>3</sup> ) RS-485, Modbus/RTU Relay: NO, 60 VDC / 1A
Power supply	24 VDC ± 5%, 10 W
Display & data logger	5" touch screen, 100 million values (option)
Application	Downstream of activated carbon filters Downstream of oil-free compressors Wherever upstream drying and filtration is applied
Casing/dimensions	PC, Al alloy, 271 X 205 X 91 mm
Classification	IP65
EMC	According to IEC 61326-1
Settings	Various sensor settings can be performed through SUTO display units or through the related service software
Weight	2400 g
Sample rate	1 s

## S120 DIMENSIONS



## S120 APPLICATIONS

- Medical air
- Pharmaceuticals
- Breathable air for rescue workers and divers
- Food and beverage
- Semiconductor fabs
- Conveyance of hygroscopic food
- High tech processes

# S120 ORDERING



Visit our website or e-mail us:  
[www.suto-itec.com](http://www.suto-itec.com)  
[sales@suto-itec.com](mailto:sales@suto-itec.com)

Please use the following table to assist in placing your order with our sales staff.

S120 OIL VAPOR SENSOR	
Order No.	Description
S604 1201	S120, oil vapor sensor, 0.003 ... 10 mg/m <sup>3</sup> , 4 ... 20 mA output, RS-485, alarm output, 24 VDC supply, incl. power supply
S604 1202	S120-P, oil vapor sensor, 0.003 ... 10 mg/m <sup>3</sup> , 4 ... 20 mA output, RS-485, alarm output, connectable to S551, transport case, incl. power supply
S604 1203	S120, oil vapor sensor, 5" touch screen, 0.003 ... 10 mg/m <sup>3</sup> , 4 ... 20 mA output, RS-485, alarm output, 24 VDC supply, incl. power supply
P604 1205	S120-P, oil vapor sensor, 5" touch screen, 0.003 ... 10 mg/m <sup>3</sup> , 4 ... 20 mA output, RS-485, alarm, 24 VDC supply, incl. transport case, power supply
R200 0120	General service and re-calibration: - General inspection of the unit - Replacement of tubes and fittings - Cleaning of lamp and sensor - Assembly and test of unit - Calibration of oil sensor S120
A554 1203	Zero test filter for S120, 15 barg, with quick connection at both ends.