



GAS DETECTOR

ST150xi

PART.NO. 1221000-1221021

DETECTION OF TOXIC GASES AND OXYGEN

GENERAL DESCRIPTION

- Detection of toxic gases and Oxygen
- Touch screen control, without additional tools
- Reliable sensor technology

The **ST150xi** is a stationary gas detector which is developed to detect a numerous of toxic gasses and Oxygen with a high reliability. This all-round gas detector can be applied at virtually every type of industrial application. Functionality and maintenance of this new generation of gas detector meets today's essential demands for reliability, accuracy and cost reduction.

The **ST150xi** comes standard with a high-quality electrochemical sensor. This type of sensor is available for many different gasses and is perfectly suitable for the detection of the target gas with high precision. This proven sensor technology has demonstrated to function perfectly under the toughest conditions.

The **ST150xi** relies on a specially developed sensor allowing an easy and quick sensor replacement.

The **ST150xi** is equipped a graphic display. The display shows the measured value and various status notifications locally. The capacitive key control gives you an experience similar to a touchscreen and enables easy navigation through the user/calibration menu. The user menu provides different features, such as a zero and span calibration, adjusting alarm set points (local alarm indication through notifications on the display and bright colored LED), showing set points, diagnostic information and simulation of the output signal (4-20mA) for loop testing.

APPLICATIONS:

- + Water Industry
- + Refineries
- + Oil & Gas Industry
- + Food Industry
- + Marine
- + Pharmaceutical Industry
- + Steel Industry
- + Laboratory / Universities

WE OFFER MORE THAN A PRODUCT!

- + Tailored advice
- + Project advice
- + Technical support
- + Training and education
- + Commissioning
- + Onsite service / maintenance / calibration

ORDERING INFORMATION

GAS DETECTOR					
TYPE	RANGE	PART NO.		OPERATING TEMPERATURE	RELATIVE HUMIDITY (N.C.)
		ALUMINUM	STAINLESS STEEL		
ST150xi-O ₂	0-25 Vol.%	1221000/25	1221000/25/SS	-20 to +55 °C	5-95%
ST150xi-H ₂ S	0-30 ppm	1221001/30	1221001/30/SS	-20 to +50 °C	15-90%
ST150xi-H ₂ S	0-50 ppm	1221001/50	1221001/50/SS	-20 to +50 °C	15-90%
ST150xi-H ₂ S	0-100 ppm	1221001/100	1221001/100/SS	-20 to +50 °C	15-90%
ST150xi-CO	0-250 ppm	1221004/250	1221004/250/SS	-20 to +50 °C	15-90%
ST150xi-CO	0-500 ppm	1221004/500	1221004/500/SS	-20 to +50 °C	15-90%
ST150xi-CO	0-250 ppm	1221004/250/LHS	1221004/250/SS/LHS	-20 to +50 °C	15-90%
ST150xi-H ₂	0-1000 ppm	1221005/1000	1221005/1000/SS	-20 to +50 °C	15-95%
ST150xi-NH ₃	0-100 ppm	1221006/100	1221006/100/SS	-20 to +50 °C	15-90%
ST150xi-NH ₃	0-1000 ppm	1221006/1000	1221006/1000/SS	-20 to +50 °C	15-90%
ST150xi-NH ₃ (LL)	0-100 ppm	1221006/100/LL	1221006/100/SS/LL	-20 to +40 °C	15-95%
ST150xi-NH ₃ (LL)	0-1000 ppm	1221006/1000/LL	1221006/1000/SS/LL	-20 to +40 °C	15-95%
ST150xi-Cl ₂	0-5 ppm	1221007/5	1221007/5/SS	-20 to +40 °C	15-90%
ST150xi-Cl ₂	0-50 ppm	1221007/50	1221007/50/SS	-20 to +40 °C	15-90%
ST150xi-ClO ₂	0-1 ppm	1221008/1	1221007/1/SS	-20 tot +50 °C	15-95%
ST150xi-HCN	0-30 ppm	1221010/30	1221010/30/SS	-20 to +50 °C	15-90%
ST150xi-HCl	0-20 ppm	1221011/20	1221011/20/SS	-20 to +50 °C	15-90%
ST150xi-HF	0-10 ppm	1221012/10	1221012/10/SS	-20 to +50 °C	15-90%
ST150xi-H ₂ O ₂	0-50 ppm	1221013/50	1221013/50/SS	-20 to +45 °C	15-90%
ST150xi-NO	0-25 ppm	1221014/25	1221014/25/SS	-20 to +50 °C	15-90%
ST150xi-NO	0-100 ppm	1221014/100	1221014/100/SS	-20 to +50 °C	15-90%
ST150xi-NO ₂	0-20 ppm	1221015/20	1221015/20/SS	-20 to +50 °C	15-90%
ST150xi-SO ₂	0-10 ppm	1221016/10	1221016/10/SS	-20 to +50 °C	15-90%
ST150xi-CH ₄ S	0-20 ppm	1221017/20	1221017/20/SS	-20 tot +50 °C	15-95%
ST150xi-SiH ₄	0-50 ppm	1221018/50	1221018/50/SS	-20 to +40 °C	10-95%
ST150xi-O ₃	0-1 ppm	1221019/1	1221019/1/SS	-20 to +40 °C	15-90%
ST150xi-CH ₂ O	0-10 ppm	1221020/10	1221020/10/SS	-20 tot +50 °C	15-90%
ST150xi-F ₂	0-1 ppm	1221021/1	1221021/1/SS	-20 tot +40 °C	15-90%




*The standard CO sensor is cross sensitive to H₂. The LHS version (Low Hydrogen Sensitivity), offers a highly improved selectivity relative to H₂.

**The standard NH₃ sensor is not suited for applications where continuous (low) concentrations of NH₃ are present. The LL version (Long Life) is more resistant against above-average exposure to NH₃ and offers an extended life-time.

ORDERING INFORMATION

SPARE PARTS / CONSUMABLES			
SPARE GAS SENSOR	PART NO.	RANGE	DESCRIPTION
Type O ₂	I229700	0-25 Vol.% O ₂	Oxygen Vol.% sensor
Type H ₂ S	I229701	30 / 50 / 100 ppm H ₂ S	Hydrogen sulfide ppm sensor
Type CO	I229704	250 / 500 ppm CO	Carbon monoxide ppm sensor
Type CO (LHS)	I229704/LHS	250 / 500 ppm CO	Carbon monoxide ppm sensor (LHS) Low H ₂ Sensitivity
Type H ₂	I229705/1000	0-1000 ppm H ₂	Hydrogen ppm sensor
Type NH ₃	I229706/100	0-100 ppm NH ₃	Ammonia ppm sensor
Type NH ₃	I229706/1000	0-1000 ppm NH ₃	Ammonia ppm sensor
Type NH ₃ (LL)	I229706/100/LL	0-100 ppm NH ₃	Ammonia ppm sensor (LL) Long Life
Type NH ₃ (LL)	I229706/1000/LL	0-1000 ppm NH ₃	Ammonia ppm sensor (LL) Long Life
Type Cl ₂	I229707	5 / 50 ppm Cl ₂	Chlorine ppm sensor
Type ClO ₂	I229708	1 ppm ClO ₂	Chlorine dioxide ppm sensor
Type HCN	I229710	0-30 ppm HCN	Hydrogen cyanide ppm sensor
Type HCl	I229711	0-20 ppm HCl	Hydrogen chloride ppm sensor
Type HF	I229712	0-10 ppm HF	Hydrogen fluoride ppm sensor
Type H ₂ O ₂	I229713	0-50 ppm H ₂ O ₂	Hydrogen peroxide ppm sensor
Type NO	I229714	25 / 100 ppm NO	Nitrogen monoxide ppm sensor
Type NO ₂	I229715	0-20 ppm NO ₂	Nitrogen dioxide ppm sensor
Type SO ₂	I229716	0-10 ppm SO ₂	Sulfur dioxide ppm sensor
Type CH ₄ S	I229717	0-20 ppm CH ₄ S	Methyl Mercaptan ppm sensor
Type SiH ₄	I229718	0-50 ppm SiH ₄	Silane ppm sensor
Type O ₃	I229719	0-1 ppm O ₃	Ozone ppm sensor
Type CH ₂ O	I229720	0-10 ppm CH ₂ O	Formaldehyde ppm sensor
Type F ₂	I229721	0-1 ppm F ₂	Fluor ppm sensor

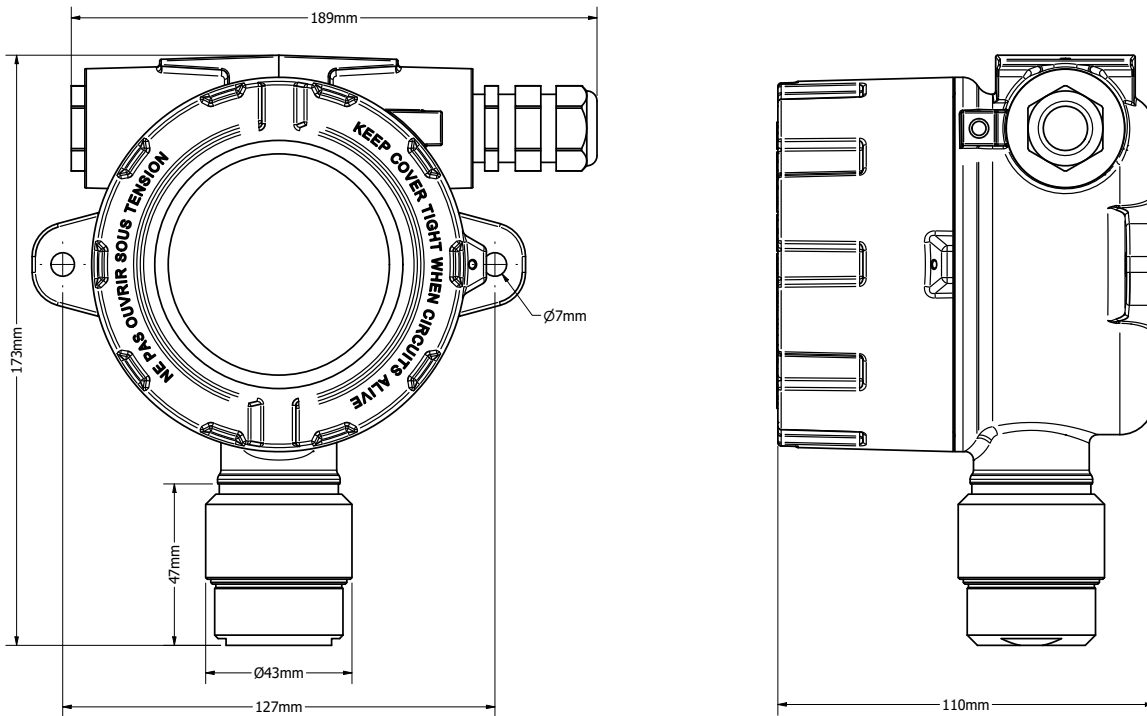
ORDERING INFORMATION

ACCESSORIES			
TYPE	IMAGE	PART NO.	DESCRIPTION
Signal cable		4002427	2 core shielded cable, 2 x 0,75 mm ² (flexible cores), per meter.
Duct mounting set		4002723	Duct mounting set for mounting in ventilation ducts.
Splash Guard for ST150xi		4002702	Splash Guard ST480xi / ST150xi, for enviromental sensor protection, incl. splash water.
Inline flow adapter for ST150xi		1229262	Inline flow adapter ST480xi / ST150xi, for sample applications, SS.
Protective hood		4002714	Protective hood SS, for optimal protection in "wet" production areas, dim. 315 x 300 x 138 mm.
Isolation set EMC/RFI		4002440	Isolation plate EMC/RFI, 160 x 160 mm.
Protective bracket		4002713	SS bracket, extra protection for use in e.g. warehouses.
Calibration adapter for ST150xi		1229261	Stainless Steel calibration flow adapter; for ST480xi / ST150xi.

TEST GASES AND ACCESSORIES		
TYPE	PART NO.	DESCRIPTION
BUGAS, 100 Vol.% N ₂	9990524	Nitrogen, 100 Vol.%, 110 gas liters
BUGAS, 20,9% O ₂ / N ₂	9990537	Synthetic air, 20,9% O ₂ / 79% N ₂ , 110 gas liters
BUGAS, 100 ppm CO	9990522	Carbon monoxide, 100 ppm in air, 110 gas liters
BUGAS, 10 ppm H ₂ S	9990540	Hydrogen sulfide, 10 ppm in air; 58 gas liters
BUGAS, 25 ppm H ₂ S	9990507	Hydrogen sulfide, 25 ppm in air; 58 gas liters
BUGAS, 10 ppm HCN	9990509	Hydrogen cyanide, 10 ppm in air; 58 gas liters
BUGAS, 50ppm NH ₃	9990538	Ammonia, 50 ppm in air; 110 gas liters
BUGAS, 25 ppm NO	9990510	Nitrogen oxide, 25 ppm in air; 58 gas liters
BUGAS, 5 ppm NO ₂	9990512	Nitrogen dioxide, 5 ppm in air; 58 gas liters
BUGAS, 10 ppm SO ₂	9990515	Sulphur dioxide, 10 ppm in air; 110 gasliters
BUGAS, 200 ppm H ₂	9990542	Hydrogen, 200 ppm in air; 110 gas liters
Gas hose	1225819	Flexible tubing, Ø 6mm, per meter
Flow regulator brass	9990600	Flow regulator Chrome / brass nickleplated (applicable for 58/110 gas liters), fixed flow 0,5 l/min
Flow regulator SS	9990601	Fixed Flow regulator SS (applicable for 58/110 gas liters), fixed flow 0,5 l/min

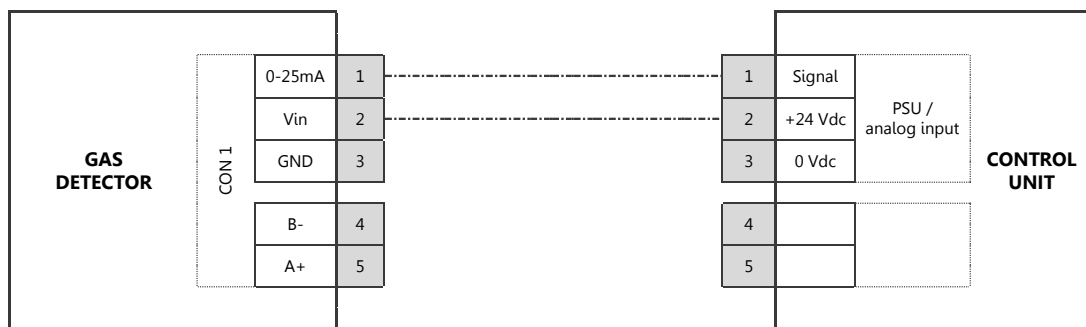
Buveco offers a wide range of test gases, if the required test gas is not listed, please contact us.

DIMENSIONS



CONNECTION DIAGRAM GAS DETECTOR

ST150xi used as 4-20mA transmitter (2 wires)



SPECIFICATIONS

PRODUCT	ST150xi
Gas type	Oxygen and Toxic gases
Sensor type	Electrochemical sensor
Range	See table "Order information" for ranges
Display	Digital graphic display with backlight
Status LED display	Green: OK, Red: Alarm, Yellow: SF (System Failure), Blue: User menu active
Power supply	17.5-30VDC (max. 40 mA)
Outputs	Analogue: 4-20 mA (<2.4 mA system failure, >20 mA overrange)
Signal cable	2-wire shielded, 0.75 ... 2.5 mm ² (excluding earth connection and Modbus)
Cable gland	Standard Brass, optional SS (thread M20 x 1.5)
Load impedance	max. 300 Ω at 24 VDC
Operating temperature	See table "Order information"
Relative humidity	See table "Order information"
Pressure range	Toxic: Atmospheric \pm 10%, Oxygen: 80 to 120 kPa
Enclosure	Aluminum with coating, optional SS
Dimensions	173 x 189 x 110 mm (HxWxD)
Weight	2.0 kg (Alu), 3.35 kg (SS)
Ingress Protection	IP 66 (Sensor IP 6x)
Enclosure gas sensor	SS 316
CE marking	Electromagnetic Compatibility (Directive 2014/30/EU)
Manufacturer	BUVECO Gasdetection BV, a Consilium Group Company

