

# Sat-Ex

ATEX gas detection transmitter to detect toxic, corrosive and combustible gases



## INTRODUCTION

The most common failure in catalytic sensors is performance degradation caused by exposure to certain poisons. It is therefore essential that any gas monitoring system should not only be calibrated at the time of installation, but also checked regularly and re-calibrated as necessary. Checks must be made using an accurately calibrated standard gas mixture so that the zero and "span" levels can be set correctly on the controller.

Ease of sensor swapping and calibration can also deliver savings. This can be highlighted by the auto recognition "Plug and Play" sensor capabilities of devices which use smart pre-calibrated sensors. These sensors can be taken out into the field and changed over in just one minute.

The **Sat-Ex** is a product designed to meet various gas detection and life safety requirements. The large LCD screen of the **Sat-Ex** unit displays gas concentration and alarm condition. Monitoring, maintenance functions, individual configuration and calibration settings can be chosen from a range of programme menus.

### Advantages:

- Available for any kind of detected gas
- Fast, reliable, specific gas detection
- Continuous real-time monitoring
- Interchangeable intelligent sensor cell
- No dynamic gas calibration required
- Low cost of ownership
- No moving parts to wear down or replace
- Directly compatible with LonWorks®
- Sensor diagnostics

## MONITORED GASES LIST

Ash3 – B2H6 – BBr3 – BCL3 BF3 – Br2  
C12H2704P – C2H3CL3 – C2H4O – C2H8N2  
C4H11As – CH6N2 – CL2 – CLF3 – CLO2  
CO – COCL2 – DMA – F2 – GeH4 – H2  
H2S – H2Se – H3CLSi – HBr – HCL – HCN  
HF – HMDS – N2H4 – NH3 – NO – NO2  
O2 – O3 – PH3 – POCL3 – Si2H6 – SiCL4  
SiF4 – SiH2CL2 – SiH4 – SiHCL3 – SO2 – TDMAT  
TEOS – TMB – TMP – WF6 & COMBUSTIBLE GASES  
50-100% LEL).



### With pyrolyzer module:

C4F6 – C5F8 – CH3F – DCE 1.2 – NF3 – SF6

## TECHNICAL FEATURES

- Sensor type:** electrochemical  
**Sensor lifetime:** > 1 year (typical)  
**Voltage:** 12 to 24 VDC  
**Consumption:** max 2.4W  
**Analogue Signal Output:** 4-20mA  
**Relay outputs:** 3 x SPST (Single-Pole Single-Throw)  
 • Max. ratings: 250 VAC / 30 VDC, 2A  
**Graphic display:** 122 x 32 dots with backlight  
**Keypad:** 6 touch-sensitive membrane function keys  
**Physical dimensions LxWxD:** 300 x 143 x 143 mm  
**Weight:** 3,5 kg (7.7 lbs)  
**Housing Protection Class:** IP 65  
**RFI / EMC:** EN 55022 & EN 50082-2  
**ATEX classification:**  
 EX II 2 G EEx d ib II C T4 for use in Zone 1 and Zone 2.  
 A UL approval (UL Class 1, Div 1, Group B, C, D) is pending  
**ATEX Junction box:**  
**Standard version:** 20230-0100  
**4-20mA version + relay:** 20230-0105  
**Temperature:** -20°C up to +40°C (-4°F up to +104°F)  
**Humidity:** 20 up to 90% r.h.