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

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 Ex d 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.

MONITORED GASES LIST
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