Sat-Ex

**The monitoring solution
approved for use in
explosive atmosphere**

Applications:

- Gas detection in hazardous area (Zone 1 and 2)
- Gas cabinets
- Valve manifold box, equipment enclosure, ambient breathing zone, gas storage room, OEM equipment

Advantages:

- Available for a wide range of gases
- 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

The Sat-Ex gas detection unit provides the ideal solution for monitoring corrosive, combustible, and toxic gases in areas subject to explosive atmospheres. The unit is approved according to ATEX classification ⟨Ex⟩ II 2G Ex d [ib] IIC T4 for use in Zone 1 and Zone 2.

As the Sat-Ex unit can be combined with a wide range of Honeywell Analytics' intelligent sensors, the full repertory of their features and capabilities is now available for use in explosive atmospheres.

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.

A change of the control parameters does not interrupt any of the processes monitored.
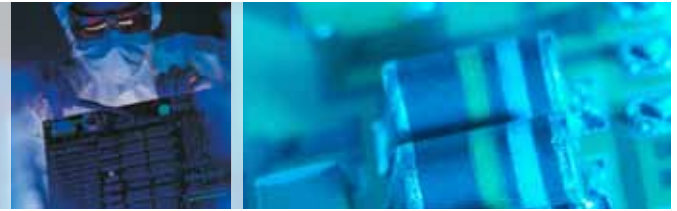
Using hall-effect sensors, the Sat-Ex unit can be activated with a magnetic wand. Programming and adjustments or maintenance activities do not require opening of the enclosure.

Features:

- Daily self test – assures proper operation of the sensor
- Permanent ROM – original data set is stored within the sensor, including gas type, gas calibration, default settings and manufacturing date
- Remote mounting – distances up to 3 metres between sensor and Sat-Ex unit are possible
- Rapid replacement – no downtime thanks to quick and easy sensor replacement

Technical Summary

Facilities Requirements

Electrical supply	12 to 24 VDC
Power consumption	max. 2,4 W
Wiring	
Standard-version	Shielded 4 wire cable
	(2 x 2 x 0,5 mm2 / 17 AWG)
R-versions	Shielded 10 wire cable
	(5 x 2 x 0,5 mm2 / 17 AWG)
Digital Sat-Ex	
Network	Standardised LonTalk® protocol
Data transmission	78 kBit per second
Wiring topologies	Free (loop recommended)
Analogue Sat-Ex	
Interface	4 – 20 mA
Fault	0 – 2.0 mA
Alarm relay outputs (optional)	
Contacts	3 x SPST
Ratings	250 VAC / 30 VDC, 2 A
Enclosure	Explosionproof housing
Protection class	IP 66 in combination with spray deflector
Dimensions	300 x 143 x 143 mm
L x W x H	(11.8 x 5.6 x 5.6 in)
Weight	< 3,5 kg (7.7 lbs)

Performance Specifications

Alarm settings	Dual level user settable
Operating temperature	- 20°C to + 40°C
	(-4°F to + 104°F)
Relative humidity	20 – 90% r.h. (non-condensing)
Pressure	900 - 1100 hPa
Operational cell life	> 1 year (standard conditions) Cell type dependant
Applicable standards RFI/EMC	EN 50270:2006
ATEX Certification	⟨Ex⟩ II 2G Ex d [ib] IIC T4

Schematic of FTIR

Sat-Ex / Interfaces	Analogue	Digital	Relay outputs	Gas Type: corrosive, toxic	Gas Type: combustible
Sat-Ex 4-20 mA	x			x	
Sat-Ex 4-20 mA/R	x		x	x	
Sat-Ex 4-20 mA/C	x				x
Sat-Ex 4-20 mA/C/R	x		x		x
Sat-Ex FTT		x		x	
Sat-Ex FTT/R		x	x	x	
Sat-Ex FTT/C		x			x
Sat-Ex FTT/C/R		x	x		x

Options

Duct Mount Adapters

4" duct	Part Number 9902-4000
6" duct	Part Number 9902-4010
8" duct	Part Number 9902-4020
10" duct	Part Number 9902-4030
12" duct	Part Number 9902-4040

Sensor Extension Cables

3 metre	Part Number 20202.0091.00.00
2 metre	Part Number 20202.0090.00.00
1 metre	Part Number 20202.0092.00.00

For Combustible

3 metre	Part Number 20202.0094.00.00
2 metre	Part Number 20202.0093.00.00
1 metre	Part Number 20202.0095.00.00
Spray Deflector	Part Number 20202.4010

Endorsements and Accreditations

Thank you for reading this data sheet.

For pricing or for further information, please contact us at our UK Office, using the details below.

🇬🇧 UK Office
Keison Products,
P.O. Box 2124, Chelmsford, Essex, CM1 3UP, England.
Tel: +44 (0)330 088 0560
Fax: +44 (0)1245 808399
Email: sales@keison.co.uk