Sat-Ex

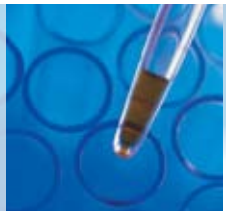
Honeywell





The monitoring solution approved for use in explosive atmosphere

Sat-Ex





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 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

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 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.

As the Sat-Ex unit can be combined with the whole 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



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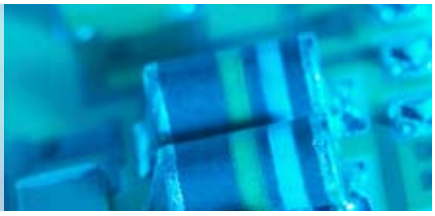
Technical Summary





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	700 - 1100 hPa
Operational cell life	> 1 year (standard conditions)
Applicable standards RFI/EMC:	EN 55022, EN 50082-2 BVS 04 ATEX E 101 X:II 2 G EEX d ib IIC T4 UL Class 1, Div 1, Group B,C,D (pending)

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

LNS POWERED by ECHELON

ISO 14001 TÜV SÜD ISO 9001 OHSAS 18001

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Our Product Range







Fixed Gas Monitoring

Honeywell Analytics offers a wide range of fixed gas detection solutions for a diverse array of industries and applications including: Commercial properties, industrial applications, semiconductor manufacturers, energy plants and petrochemical sites:

- Detection of flammable, oxygen and toxic gases (including exotics)
- Innovative use of 4 core sensing technologies – paper tape, electrochemical cell, catalytic bead and infrared
- Capability to detect down to Parts Per Billion (ppb) or Percent by Volume (%v/v)
- Cost effective regulatory compliance solutions

Portable Gas Monitoring

When it comes to personal protection from gas hazards, Honeywell Analytics has a wide range of reliable solutions ideally suited for use in confined or enclosed spaces. These include:

- Detection of flammable, oxygen and toxic gases
- Single gas personal monitors – worn by the individual
- Multi-gas portable gas monitors – used for confined space entry and regulatory compliance
- Multi-gas transportable monitors – used for temporary protection of area during site construction and maintenance activities

Technical Services

At Honeywell Analytics, we believe in the value of great service and customer care. Our key commitment is providing complete and total customer satisfaction. Here are just a few of the services we can offer:

- Full technical support
- Expert team on hand to answer questions and queries
- Fully equipped workshops to ensure quick turnaround on repairs
- Comprehensive service engineer network
- Training on product use and maintenance
- Mobile calibration service
- Customised programmes of preventative/ corrective maintenance
- Extended warranties on products

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