

The Monitoring Solution Approved for Use in Explosive Atmosphere

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 **MST Technology** 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 program 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 meters between sensor and Sat-Ex unit are possible
- ◆ Rapid replacement – no downtime thanks to quick and easy sensor replacement



Quick Facts

Applications:

- ◆ Gas Detection in Hazardous Area (Class 1 Div 1 Group B,C,D)
- ◆ 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

Sat-Ex

Configurations:

Sat-Ex / Interfaces	analog	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

Table 1

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 meter Part Number 20202.0091.00.00
- ◆ 2 meter Part Number 20202.0090.00.00
- ◆ 1 meter Part Number 20202.0092.00.00

for Combustible

- ◆ 3 meter Part Number 20202.0094.00.00
- ◆ 2 meter Part Number 20202.0093.00.00
- ◆ 1 meter Part Number 20202.0095.00.00

Technical Overview

Facilities requirements

Electrical Supply 12 to 24 VDC

Power Consumption max. 2.4 W

Wiring

Standard-Version Shielded 4- wire cable (2x2x0.5 mm² / 17 AWG)

R-Versions Shielded 10- wire cable (5x2x0,5 mm² / 17 AWG)

Digital Sat-Ex

Network Standardized LonTalk® protocol

Data Transmission 78 kBit per second

Wiring Topologies Free (loop recommended)

Analog Sat-Ex

Interface 4 – 20 mA

Fault 0 – 2.0 mA

Alarm Relay Outputs (optional)

Contacts 3 x SPST

Ratings 250 VAC / 30 VDC, 2A

Enclosure Explosion proof housing

Protection Class

IP 66

Dimensions

(L x W x H) 300 x 143 x 143 mm

(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.

Pressure 700 - 1100 hPa

Operational Cell Life > 1 year (standard conditions)

Applicable Standards RFI/EMC:

EN 55022, EN 50082-2

ATEX: EX II 2 G EEX d
ib IIC T4

UL Class 1, Div 1, Group B,C,D (pending)