

Uniphos

KwikSense

Smart Digital Gas Transmitter



Engineered to deliver in the most challenging conditions and safeguard your valuable assets.



Delivering Excellence

Uniphos KwikSense Pro Smart Digital Gas Transmitter

The KwikSense Pro smart digital gas transmitter is a field mountable gas detector suitable for the detection and continuous monitoring of hazardous gases in industrial plant locations.

A truly universal transmitter, it is compatible with any one of our more than 100 smart gas sensors, which include oxygen, toxic gases, combustible gases and volatile organic compounds (VOCs).



• Digital Communication on MODBUS over RS-485 / HART over 4-20mA



• 3 potential free relay contacts



• Industry standard 4-20mA analog output



• Pre-Calibrated Smart Sensor capable of swapping between any sensor technology



- **Sensor Technologies available**
 - Electrochemical
 - Pellistor
 - Solid State
 - NDIR
 - PID
- **Non-intrusive Calibration**
- **Bright OLED display**

Multiple Variants Singular Reliability

Uniphos KwikSense Lite Digital Gas Transmitter



The Uniphos KwikSense Lite Transmitter offers user a low-cost solution to their gas monitoring needs.

KwikSense Lite comes with a single gas swappable sensor facility and a single potential free relay contact for alarm.

Specifications

- Swappable Smart Sensor for single gas
- Sensor Technology – Comes in five technologies i.e., EC/PEL/NDIR/PID/SS
- Industrial standard 4-20 mA output helps to connect with all the controllers
- Tri-color LEDs have been provided to signal the alarm condition

Uniphos KwikSense RD Remote Transmitter



The Uniphos KwikSense RD enables users to duplicate the transmitter display at a second remote location.

This is particularly useful if the gas transmitter is located in a location where its display is difficult to view or in case a second display is required.

It can act as a controller or as a bridge between the detector and controller.

Specifications

- Configuration via non-intrusive magnetic wand
- Industrial standard RS-485 MODBUS / 4-20 mA output and input are available to connect controller as well as the detector
- Tri-color LEDs have been provided to signal the alarm condition

KwikSense
Smart Sensors
 Sensor Technology at its best



Smart Sensor Modules available for Gases

Code	Gas Name	Range	Resolution	Type
074A	Acetic Acid	0-30 ppm	0.1 ppm	EC
099C	Acetylene	0-100% LEL	1% LEL	Pellistor
082A	Ammonia	0-100 ppm	1 ppm	EC
082B	Ammonia	0-1000 ppm	1 ppm	EC
099V	Butadiene	0-50 ppm	1 ppm	PID
099S	Butadiene	0-100% LEL	1% LEL	NDIR
061A	Bromine	0-20 ppm	0.1 ppm	EC
099D	Butanol	0-100% LEL	1% LEL	Pellistor
025A	Carbon Dioxide	0-5% v/v	0.01 %v/v	NDIR
025B	Carbon Dioxide	0-100% v/v	1% v/v	NDIR
021A	Carbon Disulfide	0-50 ppm	1 ppm	PID
021B	Carbon Disulfide	0-100 ppm	1 ppm	EC
020D	Carbon Monoxide	0-100 ppm	1 ppm	EC
020E	Carbon Monoxide	0-200 ppm	1 ppm	EC
020F	Carbon Monoxide	0-300 ppm	1 ppm	EC
020B	Carbon Monoxide	0-500 ppm	1 ppm	EC
020A	Carbon Monoxide	0-1000 ppm	1 ppm	EC
020C	Carbon Monoxide	0-2000 ppm	1 ppm	EC
060B	Chlorine	0-10 ppm	0.1 ppm	EC
060A	Chlorine	0-20 ppm	0.1 ppm	EC
062A	Chlorine Dioxide	0-1 ppm	0.1 ppm	EC
097A	Ethylene	0-1500 ppm	5 ppm	EC
083A	ETO	0-20 ppm	0.1 ppm	EC
098A	Formaldehyde	0-10 ppm	0.1 ppm	EC
099H	Hydrocarbon	50-1000 ppm	1 ppm	SS
099G	Hydrocarbon (Methane)	500-10000 ppm	10 ppm	SS
099A	Hydrocarbon	0-100% LEL	1% LEL	Pellistor
090A	Hydrogen	0-1000 ppm	1 ppm	EC
090B	Hydrogen	0-100% LEL	1% LEL	EC
090C	Hydrogen	0-100% LEL	1% LEL	Pellistor
070A	Hydrogen Chloride	0-20 ppm	0.1 ppm	EC
075B	Hydrogen Cyanide	0-30 ppm	0.1 ppm	EC
075A	Hydrogen Cyanide	0-100 ppm	1 ppm	EC
030A	Hydrogen Sulphide	0-100 ppm	1 ppm	EC
099O	Iso-Butane	0-100% LEL	1% LEL	Pellistor
099B	LPG	0-100% LEL	1% LEL	Pellistor
099T	LPG	0-100% LEL	1% LEL	NDIR
099P	MEK	0-100% LEL	1% LEL	NDIR
035A	Mercaptan	0-20 ppm	0.1 ppm	EC
099E	Methane	0-100% LEL	1% LEL	NDIR
099F	Methane	0-100% v/v	1% v/v	NDIR
099K	Methanol	0-100 ppm	1 ppm	EC
099M	Methanol	0-500 ppm	1 ppm	EC
099U	Methanol	0-100% LEL	1% LEL	PID
051A	Methyl Bromide	0-200 ppm	1 ppm	SS
087A	Mono Methyl Amine	0-100 ppm	1 ppm	EC
099N	N-Butane	0-100% LEL	1% LEL	Pellistor
081A	Nitrogen Dioxide	0-20 ppm	0.1 ppm	EC
010A	Oxygen	0-25% v/v	0.1 %v/v	EC
015A	Ozone	0-1 ppm	0.01 ppm	EC
055A	Phosgene	0-1 ppm	0.01 ppm	EC
050A	Phosphine	0-10 ppm	0.01 ppm	EC
050B	Phosphine	0-20 ppm	0.1 ppm	EC
050C	Phosphine	0-20 ppm	0.01 ppm	EC
099I	Propane	0-100% LEL	1% LEL	NDIR
099J	Propane	0-100% LEL	1% LEL	Pellistor
099L	Propylene	0-2% v/v	0.01% v/v	NDIR
053A	Silane	0-15 ppm	1 ppm	EC
040A	Sulphur Dioxide	0-20 ppm	0.1 ppm	EC
100C	VOC (Benzene)	0-20 ppm	0.1 ppm	PID
100F	VOC (Benzene)	0-1000 ppm	1 ppm	PID
100B	VOC (Isobutylene)	0-40 ppm	0.1 ppm	PID
100E	VOC (Isobutylene)	0-100 ppm	1 ppm	PID
100A	VOC (Isobutylene)	0-1000 ppm	1 ppm	PID
100D	VOC (Isobutylene)	0-4000 ppm	1 ppm	PID
100G	VOC (VCM)	0-100 ppm	1 ppm	PID



- Multiple Sensor Technologies; Electrochemical, NDIR, Pellistor, PID and Solid State
- Easy to calibrate with plug and play capability

KwikSense Smart sensors are at the heart of the cutting edge technology of the KwikSense Gas Transmitters. Their unique plug-n-play feature across all sensing technologies and transportable calibration results in savings in regular maintenance and calibration.

EC: Electro Chemical, NDIR: Non-Dispersive Infrared, PID: Photo Ionization Detection, SS: Solid State

Note : Please contact us for any other special gas requirements other than that specified in the table.

Do more with an exclusive range of Accessories

KwikSense

Premium Accessories

There are a range of accessories for the KwikSense transmitter that can be used in a wide variety of applications. These include mounting bracket, collection cone, duct mounting kit and weather shield/ calibration adapter.



Weather Shield Cum Calibration Adaptor

Designed to protect the sensor from changes in environmental conditions. This is recommended to be fitted to a KwikSense transmitter sensor for outdoor exposed applications.



Pipe Mounting Bracket

Allows the KwikSense transmitter to be installed onto a dedicated mounting post or existing structure at the desired location.



Collection Cone

Designed for use with gases lighter than air.



Duct Mounting Kit

Used to mount the transmitter in HVAC systems, allowing monitoring of gases inside it.

General Specifications

Parameter	KwikSense Pro	KwikSense Lite	KwikSense RD
Sensor technology	EC/PEL/NDIR/PID/SS	EC/PEL/NDIR/PID/SS	NA
Operating Voltage	18V to 30 VDC	18V to 30 VDC	18V to 30 VDC
System Type	µController based instrument (non intrusive calibration)	µController based instrument (non intrusive calibration)	µController based instrument (non intrusive operation)
Display	8 x 2 OLED Display	8 x 2 OLED Display	8 x 2 OLED Display
Sampling type	Diffusion	Diffusion	NA
Sensor	Swappable Smart Sensor	Swappable Smart Sensor for single gas	NA (Industrial std. 4-20mA input)
LED's	Tri-color LED	Tri-color LED	Tri-color LED
Alarms	Two user settable alarms	Two user settable alarms	Two user settable alarms
Output	HART over 4-20mA or MODBUS over RS-485 and 4-20mA	4-20 mA	RS-485 MODBUS / 4-20mA
Relays	3-potential free contacts	1-potential free contact (opt.)	3-potential free contacts
Load resistance	600 Ω (max)	600 Ω (max)	600 Ω (max)
Power Consumption	< 3 W	< 3 W	< 3 W
Enclosure	Flameproof Cast Aluminium alloy/SS-316	Flameproof Cast Aluminium alloy	Flameproof Cast Aluminium alloy/SS-316
Ingress protection	IP 66	IP 66	IP 66
Dimensions (mm)	155 X 145 X 100 approx. (WO cable gland & stopper)	Approx. 250 x170 x 105 (WO cable gland & stopper)	Approx. 250 x170 x 105 (WO cable gland & stopper)
Wire configuration	3/4 wires	3 wires	3/4 wires
Interface	Calibration & configuration via non-intrusive magnetic wand	Calibration & configuration via non-intrusive magnetic wand	Configuration via non-intrusive magnetic wand
Operating Temp.	-20 to 65 ° C	-20 to 65 ° C	-20 to 65 ° C
Operating Pressure	Ambient ± 10 %	Ambient ± 10 %	Ambient ± 10 %
Operating Humidity	0-95 %RH (non-condensing)	0-95 %RH (non-condensing)	0-95 %RH (non-condensing)
Cable entries	½" NPT (2 entries) / ¾" NPT (2 entries)	½" NPT (2 entries) / ¾" NPT (2 entries)	½" NPT (2 entries) & ¾" NPT (1 entry)
Certifications	1. ATEX 2. IECEx 3. SIL2 4. HART Registered	1. ATEX 2. IECEx 3. MED	1. ATEX 2. IECEx
Weight	2.5 kg (Approx.)	2.5 kg (Approx.)	2.5 kg (Approx.)

Certifications: KwikSense Pro

- ATEX  certified by SGS BASEEFA
 II 2 G Ex db IIC T6 Gb (T_{amb} = -20°C to +40°C)
Ex db IIC T5 Gb (T_{amb} = -20°C to +55°C)
- IECEx Certified
Ex db IIC T6 Gb (T_{amb} = -20°C to +40°C)
Ex db IIC T5 Gb (T_{amb} = -20°C to +55°C)
- SIL-2 Certified
- HART Registered 

KwikSense Lite and KwikSense RD

- ATEX  certified by SGS BASEEFA
 II 2 G Ex db IIC T6 Gb (T_{amb} = -20°C to +40°C)
Ex db IIC T5 Gb (T_{amb} = -20°C to +55°C)
Ex db IIC T4 Gb (T_{amb} = -20°C to +85°C)
- IECEx Certified
Ex db IIC T6 Gb (T_{amb} = -20°C to +40°C)
Ex db IIC T5 Gb (T_{amb} = -20°C to +55°C)
Ex db IIC T4 Gb (T_{amb} = -20°C to +85°C)

Due to continuous development, we reserve the right to change specifications without prior notice.



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