

KwikSense

Smart Digital Gas Transmitter

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



Delivering
Excellence
for over 30
years

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 plants.

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



• Industry standard 4-20mA analog output



• 3 potential free relay contacts



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



<Sensor Technologies Available

- Electrochemical
- Pellistor
- Solid State
- NDIR
- PID
- MPS

<Non-intrusive Calibration

<Bright OLED display

Multiple Variants Singular Reliability

KwikSense Lite Digital Gas Transmitter



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

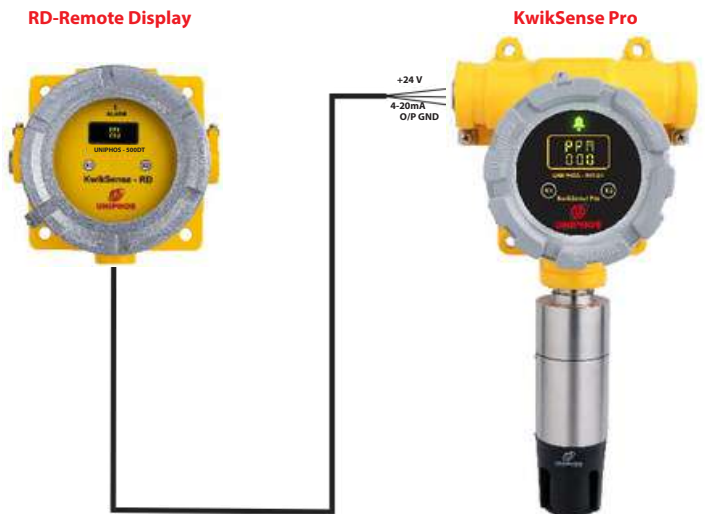
The KwikSense Lite comes with a single gas swappable sensor facility and a single potential free relay contact for alarm.

MED certification is applicable for Oxygen and Flammable gases.

Specifications

- < Swappable Smart Sensor for single gas
- < Sensor Technologies available: EC, PEL, NDIR, PID & SS
- < Industrial standard 4-20 mA output
- < Tri-color LEDs indicate alarm

KwikSense RD Remote Display



The 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
- < It accepts industry standard 4-20mA input available from detector and provides RS-485 MODBUS and 4-20mA output to connect with the controller
- < 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



Ordering code	Gas Name	Range	Resolution	Technology
074A				
099C	Acetic Acid	0-30 ppm	0.1 ppm	EC
082A	Acetylene	0-100% LEL	1% LEL	Pellistor
082B	Ammonia	0-100 ppm	1 ppm	EC
099V	Ammonia	0-1000 ppm	1 ppm	EC
099S	Butadiene	0-50 ppm	1 ppm	PID
061A	Butadiene	0-100% LEL	1% LEL	NDIR
099D	Bromine	0-20 ppm	0.1 ppm	EC
025A	Butanol	0-100% LEL	1% LEL	Pellistor
025B	Carbon Dioxide	0-5% v/v	0.01 %v/v	NDIR
021A	Carbon Dioxide	0-100% v/v	1% v/v	NDIR
021B	Carbon Disulfide	0-50 ppm	1 ppm	PID
020D	Carbon Disulfide	0-100 ppm	1 ppm	EC
020E	Carbon Monoxide	0-100 ppm	1 ppm	EC
020F	Carbon Monoxide	0-200 ppm	1 ppm	EC
020B	Carbon Monoxide	0-300 ppm	1 ppm	EC
020A	Carbon Monoxide	0-500 ppm	1 ppm	EC
020C	Carbon Monoxide	0-1000 ppm	1 ppm	EC
060B	Carbon Monoxide	0-2000 ppm	1 ppm	EC
060A	Chlorine	0-10 ppm	0.1 ppm	EC
062A	Chlorine	0-20 ppm	0.1 ppm	EC
097A	Chlorine Dioxide	0-1 ppm	0.1 ppm	EC
083A	Ethylene	0-1500 ppm	5 ppm	EC
083B	ETO	0-20 ppm	0.1 ppm	EC
098A	ETO	0-100 ppm	1 ppm	EC
099A	Formaldehyde	0-10 ppm	0.1 ppm	EC
099G	Hydrocarbon (Methane)	0-100% LEL	1% LEL	Pellistor
Ask	Hydrocarbon (Methane)	500-10000 ppm	10 ppm	SS
099H	Hydrocarbon (MPS)	0 - 100% LEL	1% LEL	MPS
090A	Hydrocarbon	50-1000 ppm	1 ppm	SS
090B	Hydrogen (IIC)	0-1000 ppm	1 ppm	EC
090C	Hydrogen (IIC)	0-100% LEL	1% LEL	EC
070A	Hydrogen (IIC)	0-100% LEL	1% LEL	Pellistor
075B	Hydrogen Chloride	0-20 ppm	0.1 ppm	EC
075A	Hydrogen Cyanide	0-30 ppm	0.1 ppm	EC
072A	Hydrogen Cyanide	0-100 ppm	1 ppm	EC
030A	Hydrogen Fluoride	0 - 10 ppm	0.1 ppm	EC
030B	Hydrogen Sulphide	0-100 ppm	1 ppm	EC
099O	Hydrogen Sulphide	0-20 ppm	1 ppm	EC
099B	Iso-Butane	0-100% LEL	1% LEL	Pellistor
099T	LPG	0-100% LEL	1% LEL	Pellistor
099P	LPG	0-100% LEL	1% LEL	NDIR
099E	MEK	0-100% LEL	1% LEL	NDIR
099F	Methane	0-100% LEL	1% LEL	NDIR
099K	Methane	0-100% v/v	1% v/v	NDIR
099M	Methanol	0-100 ppm	1 ppm	EC
099U	Methanol	0-500 ppm	1 ppm	EC
035A	Methanol	0-100% LEL	1% LEL	PID
051A	Mercaptan*	0-20 ppm	0.1 ppm	EC
087A	Methyl Bromide	0-200 ppm	1 ppm	SS
099N	Mono Methyl Amine	0-100 ppm	1 ppm	EC
Ask	N-Butane	0-100% LEL	1% LEL	Pellistor
081A	Methanol	0 - 100 ppm	1 ppm	EC
010A	Nitrogen Dioxide	0-20 ppm	0.1 ppm	EC
015A	Oxygen	0-25% v/v	0.1 %v/v	EC
071A	Ozone	0-1 ppm	0.01 ppm	EC
055A	Phosphorus Trichloride	0-10 ppm	1 ppm	EC
050A	Phosgene	0-1 ppm	0.01 ppm	EC
050B	Phosphine	0-10 ppm	0.01 ppm	EC
050C	Phosphine	0-20 ppm	0.1 ppm	EC
050D	Phosphine	0-20 ppm	0.01 ppm	EC
050E	Phosphine	0-5000 ppm	10 ppm	EC
073A	Phosphine	0-2000 ppm	1 ppm	EC
099I	Phosphorus Oxychloride	0-20 ppm	1 ppm	EC
099J	Propane	0-100% LEL	1% LEL	NDIR
099L	Propane	0-100% LEL	1% LEL	Pellistor
053A	Propylene	0-2% v/v	0.01% v/v	NDIR
040A	Silane	0-15 ppm	1 ppm	EC
022A	Sulphur Dioxide	0-20 ppm	0.1 ppm	EC
100C	Vinyl Chloride (Vinyl Chloro Monomer)	0-100 ppm	1 ppm	EC
100F	VOC (Benzene)	0-20 ppm	0.1 ppm	PID
100B	VOC (Benzene)	0-1000 ppm	1 ppm	PID
100E	VOC (Isobutylene)	0-40 ppm	0.1 ppm	PID
100A	VOC (Isobutylene)	0-100 ppm	1 ppm	PID
100D	VOC (Isobutylene)	0-1000 ppm	1 ppm	PID
100G	VOC (Isobutylene)	0-4000 ppm	1 ppm	PID
	VOC (VCM)	0-100 ppm	1 ppm	PID



- Multiple Sensor Technologies; Electrochemical, NDIR, Pellistor, PID, Solid State & MPS
- 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: Electrochemical, NDIR: Non-Dispersive Infrared, PID: Photo Ionization Detection, SS: Solid State, MPS: Molecular Property Spectrometer

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 cum calibration adapter.



Weather Shield cum Calibration Adapter



Designed to protect the sensor from water splashes And 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.



Flow Through Adapter

Allows KwikSense transmitter to be used with gas sampling system, making it suitable for process gas monitoring applications.



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 NA
Sensor technology	EC/PEL/NDIR/PID/SS/MPS	EC/PEL/NDIR/PID/SS	18V to 30 VDC
Operating Voltage	18V to 30 VDC	18V to 30 VDC	µController based instrument (non intrusive operation)
System Type	µController based instrument (non intrusive calibration)	µController based instrument (non intrusive calibration)	8 x 2 OLED Display
Display	8 x 2 OLED Display	8 x 2 OLED Display	NA
Sampling type	Diffusion	Diffusion	NA (Industrial std. 4-20mA input)
Sensor	Swappable Smart Sensor	Swappable Smart Sensor for single gas	Tri-color LED
LED's	Tri-color LED	Tri-color LED	Two user settable alarms 4-20mA
Alarms	Two user settable alarms	Two user settable alarms	MODBUS over RS-485
Output	4-20mA MODBUS over RS-485 HART over 4-20 mA	4-20 mA	
Relays	3-potential free contacts	1-potential free relay	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	Flameproof Cast Aluminium alloy	Flameproof Cast Aluminium alloy/SS-316
Ingress protection	IP 66	IP 66	IP 66
Dimensions (mm)	Approx. 155 X 145 X 100 (WO cable gland & stopper)	Approx. 250 x 170 x 105 (WO cable gland & stopper)	Approx. 250 x 170 x 105 (WO cable gland & stopper)
Wire con guration	3/4 wires	3 wires	3/4 wires
Interface	Calibration & con guration via non-intrusive magnetic wand	Calibration & con guration via non-intrusive magnetic wand	Con guration via non-intrusive magnetic wand
Operating Temp.	-40 to +65 ° C (depend on sensor)	-40 to +65 ° C (depend on sensor)	-40 to +65 ° C (depend on sensor)
Operating Pressure	Ambient ± 10 %	Ambient ± 10 %	Ambient ± 10 %
Operating Humidity	0-95 %RH (Extended exposure to extreme humid conditions may degrade sensor performance)		
Cable entries	1/2" NPT (M20) - 2 entries / 3/4" NPT (M25) - 2 entries	1/2" NPT (M20) - 2 entries / 3/4" NPT (M25) - 2 entries	1/2" NPT (2 entries) & 3/4" NPT (1 entry)
Certi cations	1. ATEX 4. CE 2. IECEx 5. HART 3. SIL2	1. ATEX 4. CE 2. IECEx 3. MED	1. ATEX 2. IECEx
Weight	2.3 Kg (Approx.)	2.6 kg (Approx.)	2.2 kg (Approx.) SS : 5.0 kg (Approx.)

Certifications: KwikSense Pro

<ATEX  certified by SGS BASEEFA
 II 2 G Ex db IIC T6 Gb (Tamb = -40°C to +55°C)
Ex db IIC T5 Gb (Tamb = -40°C to +70°C)
Ex db IIC T4 Gb (Tamb = -40°C to +85°C)
- Not applicable with remote sensor option
<IECEx Certified Certificate No: IECEx BAS 14.0148X
Ex db IIC T6 Gb (Tamb = -40°C to +55°C)
Ex db IIC T5 Gb (Tamb = -40°C to +70°C)
< Ex db IIC T4 Gb (Tamb = -40°C to +85°C)
<SIL-2 Certified
<HART Registered



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

KwikSense Lite and KwikSense RD

<ATEX  certified by SGS BASEEFA
 II 2 G Ex db IIC T6 Gb (Tamb = -40°C to +55°C)
Ex db IIC T5 Gb (Tamb = -40°C to +70°C)
Ex db IIC T4 Gb (Tamb = -40°C to +85°C)
- Not applicable with remote sensor option
MED Certified is applicable for KwikSense Lite only
<IECEx Certified
Ex db IIC T6 Gb (Tamb = -40°C to +55°C)
Ex db IIC T5 Gb (Tamb = -40°C to +70°C)
Ex db IIC T4 Gb (Tamb = -40°C to +85°C)

