

# GasHawk

Personal Gas Monitor

TX7000



**TROLEX**

Engineered for efficiency. Built to last  
P5593.1602



# The world's foremost personal gas detector for mining

Everything we've learned in 60 years of serving the mining industry goes into our products. That's why GasHawk is tough, reliable and easy to use - and delivered at a cost that allows you to give your people the best protection available at honest prices.

- Inductive charging system with no exposed contacts, which eliminates charge failure due to corrosion, build-up of dirt and dust, and failure to engage contacts
- Charging intervals are massively reduced - with up to 7 days continuous use even with infra-red sensors operating
- Intrinsically safe battery pack can be changed-out even in the hazardous area
- Up to 6 gases monitored simultaneously
- Optional integrated pump for remote sampling and confined space entry applications
- Bright, clear illuminated display for easy viewing in varying light conditions
- Full data-logging and easy-download feature allows you to demonstrate compliance
- Multiway stack charger for space-saving desktop charging

# Charge less

GasHawk delivers up to a full week's battery life even with infra-red sensors installed. The unit employs superior engineering for operational efficiency, with its inductive wireless charging system and a hot-swap battery that can be changed out even in the hazardous area. GasHawk delivers long lasting protection so that your people can produce more and charge less.

GasHawk provides reliable accurate monitoring in the harshest conditions. IP67 rated and IECEx/ATEX M1/Ma approved, GasHawk is tough, rugged and built to last.

To find out how long your GasHawk will run continuously before needing to be charged contact us to discuss your preferred configuration.

[sales@trolex.com](mailto:sales@trolex.com)



You pay **80% less** than from our competitors

All consumables for GasHawk are passed on to our customers at cost price – which means on average you pay a massive 80% less than from our competitors. All replacement cells are included in this offer which will typically reduce your cost of ownership by over 50%.



TX7002  
5 Way Horizontal Charge Station

# Up to six gases

A wide range of toxic and flammable gases can be monitored simultaneously, and selected gases have STEL and TWA alerts. Any exceeded gas set point triggers an audible warning, multi colour LED visual and vibrating alerts to the user. Alarm set point levels can be configured to suit local working conditions.

Designed for rapid response using a choice of advanced gas detection technologies:



SENSOR A		Range	Type	Resolution	Repeatability	Nominal drift
O <sub>2</sub>	Oxygen	0 to 25% v/v	Electrochem	0.1 v/v	<0.1%	5%/2 years

#### SENSOR B

CO	Carbon Monoxide	0 to 500 ppm	Electrochem	0.1ppm	<0.1ppm	25ppm/1 year
CO	Carbon Monoxide	0 to 2000 ppm	Electrochem	0.1ppm	<0.1ppm	25ppm/1 year
CL <sub>2</sub>	Chlorine	0 to 10 ppm	Electrochem	0.1ppm	<0.1ppm	0.1ppm/1 year
H <sub>2</sub>	Hydrogen	0 to 1000 ppm	Electrochem	0.1ppm	<0.1ppm	20ppm/1 month
H <sub>2</sub> S	Hydrogen Sulphide	0 to 100 ppm	Electrochem	0.1ppm	<0.1ppm	20ppm/1 year
NO	Nitric Oxide	0 to 250 ppm	Electrochem	0.1ppm	<0.1ppm	5ppm/1 month
NO <sub>2</sub>	Nitrogen Dioxide	0 to 20 ppm	Electrochem	0.1ppm	<0.1ppm	0.4ppm/1 month
SO <sub>2</sub>	Sulphur Dioxide	0 to 20 ppm	Electrochem	0.1ppm	<0.1ppm	2ppm/1 year
CO	Carbon Monoxide	0 to 500 ppm	Dual Electrochem	0.1ppm	<0.1ppm	25ppm/1 year
+						
H <sub>2</sub> S	Hydrogen Sulphide	0 to 200 ppm				20ppm/1 month

#### SENSOR C

CO	Carbon Monoxide	0 to 500 ppm	Electrochem	0.1ppm	<0.1ppm	25ppm/1 year
CO	Carbon Monoxide	0 to 2000ppm	Electrochem	0.1ppm	<0.1ppm	25ppm/1 year
CL <sub>2</sub>	Chlorine	0 to 10 ppm	Electrochem	0.1ppm	<0.1ppm	0.1ppm/1 year
H <sub>2</sub>	Hydrogen	0 to 1000 ppm	Electrochem	0.1ppm	<0.1ppm	20ppm/1 month
H <sub>2</sub> S	Hydrogen Sulphide	0 to 100 ppm	Electrochem	0.1ppm	<0.1ppm	20ppm/1 month
NO	Nitric Oxide	0 to 50 ppm	Electrochem	0.1ppm	<0.1ppm	5ppm/1 month
NO <sub>2</sub>	Nitrogen Dioxide	0 to 20 ppm	Electrochem	0.1ppm	<0.1ppm	0.4ppm/1 month
SO <sub>2</sub>	Sulphur Dioxide	0 to 20 ppm	Electrochem	0.1ppm	<0.1ppm	2ppm/1 year

#### SENSOR D

CH <sub>4</sub>	Methane	0 to 5% v/v	Catalytic	0.1% v/v	<0.1%	0.1% v/v/1 month
CH <sub>4</sub>	Methane	0 to 100% LEL (4.4%)	Catalytic	0.1% v/v	<0.1%	0.1% v/v/1 month
CH <sub>4</sub>	Methane	0 to 100% LEL (5%)	Catalytic	0.1% v/v	<0.1%	0.1% v/v/1 month
CH <sub>4</sub>	Methane	0 to 5% v/v	Infra Red	0.1%v/v	± 0.5% v/v	± 1%/1 month
CH <sub>4</sub>	Methane	0 to 100% LEL (4.4%)	Infra Red	0.1% v/v	± 0.5% v/v	± 1%/1 month
CH <sub>4</sub>	Methane	0 to 100% LEL (5%)	Infra Red	0.1% v/v	+ 0.5% v/v	+ 1%/1 month
CH <sub>4</sub>	Methane	0 to 5% v/v	Dual Infra Red	0.1% v/v	± 0.5% v/v	± 1%/1 month
+						
CO <sub>2</sub>	Carbon Dioxide	0 to 5% v/v				± 1%/1 month
CH <sub>4</sub>	Methane	0 to 100% LEL (4.4%)	Dual Infra Red	0.1% v/v	± 0.5% v/v	± 1%/1 month
+						
CO <sub>2</sub>	Carbon Dioxide	0 to 5% v/v				± 500ppm/1 month
CH <sub>4</sub>	Methane	0 to 100% LEL (5%)	Dual Infra Red	0.1% v/v	±0.5% v/v	±1%/1 month
+						
CO <sub>2</sub>	Carbon Dioxide	0 to 5% v/v				+ 500ppm/1 month

# Technical Details

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Operating temperature:	-20°C to +50°C
Storage temperature:	-20°C to +60°C
Humidity:	0 to 95% RH (non condensing)
Pressure range:	800 mBar to 1100 mBar ambient
Housing:	Moulded polymer with integral resilient over mould
Ingress protection:	IP67
Net weight:	350g 375g with pump
Battery:	Sealed prismatic Lithium Ion with wireless charging. Hot-swap intrinsically safe battery pack can be changed in the hazardous area
Battery run time:	Up to 168 hours with LED IR and electrochemical cells installed Up to 20 hours with catalytic and electrochemical sensors installed
Battery charge time:	6 hours with automatic charge management for continuous standby charging
Display:	52mm x 42mm high definition graphic LCD with automatic power down and LED rear illumination
Controls:	Two sealed push buttons for all field functions, profiled for operation with gloved hands
Alarms:	<ul style="list-style-type: none"><li>• Flashing wide angle LED indicator with modulated indication of gas risk present</li><li>• Audible alarm 95db at 300mm</li><li>• Low battery warning</li><li>• User selectable confidence tone interval</li><li>• Power ON indicator, Green flashing LED</li><li>• Calibration and service due prompt</li><li>• STEL and TWA pre-set alarms</li></ul>
Data functions:	<ul style="list-style-type: none"><li>• Automatic data log of sensor signals, alarm events and parameter changes; 30-64 days dependant upon configuration</li><li>• Real time clock and display showing HH:MM</li><li>• Language options to user specification</li><li>• Peak signal retention for each gas sensor</li><li>• STEL and TWA auto calculation with prescribed alarm level in accordance with EH40 standards</li></ul>
Pressure compensation:	Active atmosphere pressure compensation for the O <sub>2</sub> , CO <sub>2</sub> and Infrared CH <sub>4</sub> sensors
T90 response time:	30 seconds nominal (dependant upon the gas type)
Certification:	<ul style="list-style-type: none"><li>• GasHawk is covered by certificate numbers: CML 15ATEX2122X and IECEx CML 15.0062X.</li><li>• For full certification details, please refer to the GasHawk user manual.</li></ul>



Dimensions (pictured at actual size)



# Order reference

## GasHawk unit

Complete with: workwear clip, test gas hood and connecting tube

### Product options:

<b>TX7000</b>								
ATEX/IECEX Group I		19					No pump	00
ATEX/IECEX Group II		20					With pump	01
<b>SENSOR A</b>			<b>SENSOR B</b>			<b>SENSOR C</b>		<b>SENSOR D</b>
No Sensor	00	No Sensor	00	No Sensor	00	No Sensor	00	
O <sub>2</sub> 25% v/v	01	CO 500 ppm	01	CO 500 ppm	01	CH <sub>4</sub> 5% v/v IR	04	
		CL <sub>2</sub> 10 ppm	02	CL <sub>2</sub> 10 ppm	02	CH <sub>4</sub> 100% LEL (4,4%) IR	05	
		H <sub>2</sub> 1000 ppm	03	H <sub>2</sub> 1000 ppm	03	CH <sub>4</sub> 100% LEL (5%) IR	06	
		H <sub>2</sub> S 100 ppm	04	H <sub>2</sub> S 100 ppm	04	CH <sub>4</sub> 5% v/v + CO <sub>2</sub> 5% v/v	07	
		NO 250 ppm	05	NO 250 ppm	05	CH <sub>4</sub> 100% LEL (4,4%) + CO <sub>2</sub> 5% v/v	08	
		NO <sub>2</sub> 20 ppm	06	NO <sub>2</sub> 20 ppm	06	CH <sub>4</sub> 100% LEL (5%) + CO <sub>2</sub> 5% v/v	09	
		SO <sub>2</sub> 20 ppm	07	SO <sub>2</sub> 20 ppm	07	CH <sub>4</sub> 5% v/v	10	
		CO 500 ppm + H <sub>2</sub> S 200 ppm	08	CO 2000 ppm	08	CH <sub>4</sub> 100% LEL (4.4%)	11	
		H <sub>2</sub> S 100 ppm + SO <sub>2</sub> 20 ppm	09			CH <sub>4</sub> 100% LEL (5%)	12	
		CO 2000 ppm	10					

### Typical sensor combinations

16:30	CH <sub>4</sub> %v/v	0
	O <sub>2</sub> %v/v	20.9
	H <sub>2</sub> S ppm	0
	CO ppm	0
12 DAYS		

16:30	CH <sub>4</sub> %v/v	0
	O <sub>2</sub> %v/v	20.9
	H <sub>2</sub> S ppm	0
	CO ppm	0
	CL <sub>2</sub> ppm	0
12 DAYS		

16:30	CH <sub>4</sub> %v/v	0
	O <sub>2</sub> %v/v	20.9
	CO ppm	0
	SO <sub>2</sub> ppm	0
12 DAYS		

16:30	%LEL	0
	O <sub>2</sub> %v/v	20.9
	H <sub>2</sub> S ppm	0
	CO ppm	0
12 DAYS		

# Wireless Battery Charger

Complete with universal mains power supply. 90 to 264V AC, 12V DC input.

TX7001.00 .

## POWER CONNECTOR

UK 01

EU 02

AUS 03

USA 04

12V Vehicle 05



# 5 way Horizontal Charge Station

Complete with universal mains power supply. 90 to 264V AC, 12V DC input.

Multiway wireless battery charging.

TX7002.00 .

## POWER CONNECTOR

UK 01

EU 02

AUS 03

USA 04

12V Vehicle 05



Pre-connected charge station for simultaneous charging of up to five GasHawks. User configurable for table-top foot mounting, wall mounting, or integration into a standard 19 inch rack system.

## 6 way Vertical Charge Station

Complete with universal mains power supply. 90 to 264V AC, 12V DC input.

TX7003.00 .

### POWER CONNECTOR

UK 01

EU 02

AUS 03

USA 04

12V Vehicle 05



Pre-connected charge station for simultaneous charging of up to six GasHawks in a space saving vertical stacking, foot mounting format.

## Bump Test Station

- Input ports for test gas connection
- Gas application push button for convenient and safe operation
- No electrical power required - can be used in the hazardous area
- Single or dual gas input channels

TX7004.00 .

### GAS CHANNELS

SINGLE 01

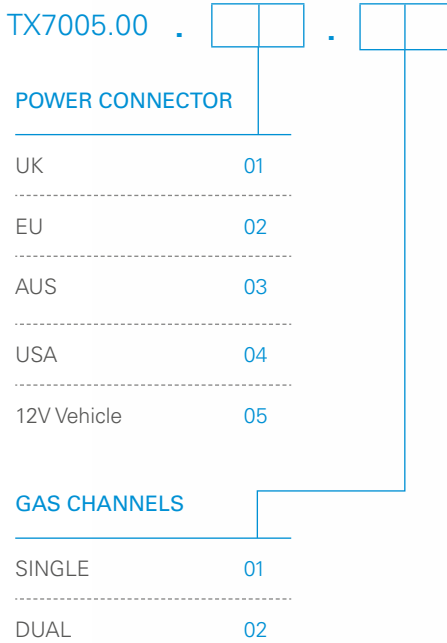
DUAL 02



Rapid and convenient gas response testing of Gashawk prior to deployment. Equally suitable for individual users or multi-user validation checks.

# Universal Docking Station

- Combined bump test, calibration and charging with PC datacomms in a convenient simple to use package
- Single or dual input ports for test gas connections
- USB datacomms, datalog transfer with web server using Trolex HawkEye PC application tool
- Instrument setup from PC and cloning function
- Gas application switch for convenient and safe operation
- USB connecting lead
- Universal mains power supply. 90 to 264V AC, 12V DC
- Secure in-vehicle docking for rough terrain applications.



# Accessories

## Belt Holster

**TX7006**

Complete with instrument docking clip and screws



## Battery Pack (Additional)

**TX7010.19 Group I (ATEX/ IECEx)**

**TX7010.20 Group II (ATEX/ IECEx)**

Complete with protective pouch and Allen key



## Chest Harness

**TX7008**

Complete with instrument docking clip and screws



## Organiser Storage Case

### TX7011

Protective organiser case for general storage with compartments for:

- GasHawk instrument
- Spare battery pack
- Test gas hood with 3m flexible pipe
- Charger
- Mains power supply
- HawkEye USB application stick
- Belt holster clip
- User manual



## Protective Case

### TX7013

Leather carrying case for additional protection in extreme operating conditions

## Pump Hood Filters (Replacement)

### P5593.87

Pack of five



## Telescopic Sample Probe

### TX7012

With 3m flexible tube





## Confined Space Entry Equipment Case

### TX7007

Impact protected carrying case with shoulder strap and heavy duty zip fastener. Shock resistant foam insert with pre-formed compartments for GasHawk and a range of accessories for field use.

Please order the PUMP version of GasHawk separately: Page 10 (e.g. TX7000.xx.xx.xx.xx.xx.01)

GasHawk comes complete with:

- Test gas hood with 1m long flexible tube
- Workwear clip
- Pump hood with filter disc
- Flexible suction tube with fittings
- Five replacement pump hood filter discs
- Hydrophobic line filter
- User manual

Please order additional accessories to preference:

TX7010.19 Spare battery with protective pouch. Group I (ATEX/ IECEx)  
TX7010.20 Spare battery with protective pouch. Group II (ATEX/ IECEx)  
TX7012 Telescopic sample probe  
TX7008 Chest harness kit



TIROLEX



GasHawk

0.0	92%	19:16
21.1	%v/v	CH4
0.0	%v/v	O2
0.0	ppm	CO
	ppm	H2S

167 DAYS

#SupportMining

Trolex's commitment to the mining industry goes back over 60 years. We believe that now is the time for suppliers to stand up and show their support for the industry where it matters most – on the bottom line.

We have committed to supplying all consumables for GasHawk at cost price – which is why you get exactly the same product from us at an average of 80% less than our competitors.

For more information on what you could save with GasHawk visit:

**[www.trolex.com/GasHawk](http://www.trolex.com/GasHawk)**

Engineered for efficiency. Built to last

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