

Microtector III G888

Modern
personal
protection





Microtector III G888 – Your safety is our goal

The development of the Microtector III G888 focused on the requirements of a modern multi-gas detection instrument for use in personal protection. The result is a multi-gas warning device that is safe, robust and practical and has proven itself in daily working conditions.

Advantages **Safety through quality and functionality**

Equipped with high-quality, precise and durable sensors that can be individually adapted to your requirements. Multitude of gas-combinations can be identified to ensure maximum safety of employees.

The well thought-out design of the housing and the menu navigation eases the operation of the multi-gas warning device under difficult conditions. This device features a rotating display, easily turning 180° with just one click. For working in poorly lit conditions, the G888 conveniently features an explosion-protected LED torch.

Remote monitoring keeps employees safe

If the G888 with the radio module is used, teams can be monitored centrally via the portable GfG-Link or using a computer and an USB dongle. Information regarding the measured gas concentrations, alarm levels and the status of the man-down alarm will then be available in real time.

Be prepared for an emergency

In the event of an emergency it is always good to be prepared. The Microtector III G888 is able to simulate an alarm of any gas concentration, in order to train and prepare for a variety of emergency situations.

Maintenance & documentation

The test and docking stations for the Microtector III G888 not only allow location-independent, daily bump tests and regular functional checks, as well as the complete documentation.

G888 - the team player

The Microtector III G888 offers optimum individual protection for everyone working in hazardous and/or enclosed areas. When measuring releases of gas or searching for a gas leak, it is recommended to use the Polytectors III G999 from GfG, which has a built-in pump. The advantage: both devices can be remotely monitored by a computer or GfG-Link.

Designed for difficult working conditions

Sometimes there is a need to work in challenging environments; the Microtector III G888 is equipped to withstand such challenges. Ex zone 1 certified, the Microtector III G888 is dust-tight and water-resistant in accordance to the IP 67 protection class. The rubberized polycarbonate housing makes the detector shock-resistant and will keep your device safe in case of a fall. It is also comfortable to wear, weighing only 275g.

Suitable for long operating times

Depending on the sensor equipment and configuration, the Microtector III G888 has an operating time of up to 65 hours.

Data Logger

With the internal data logger, 30,000 measuring points can be recorded for up to 12 different measured values or additional information, including date, time, transmitter location, alarm triggering and special events.

Made in
Germany

TRIPLE WARNING SIGNAL

Optical (traffic light function),
acoustic and vibration alarm

FUNCTIONAL DESIGN

Non-slip and shock-resistant
housing, water and dust protected
according to IP67

RADIO MODULE (OPTIONAL)

Real-time data and alarm transmission at
868 MHz (Europe) or 915 MHz (Americas)

MAN DOWN ALARM

2 warning levels local plus notification
of supervisor or alarm center*

(*optional with radio module and GfG-Link)

INTUITIVE OPERATION

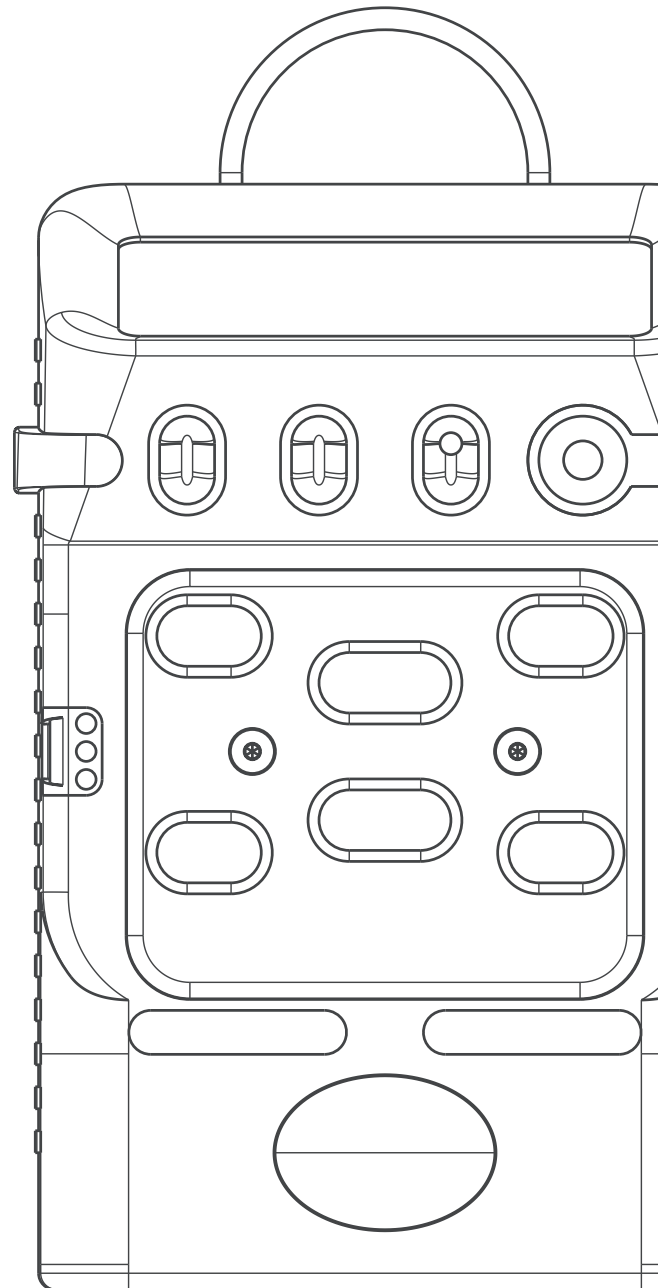
One click for important displays,
convenient menu navigation
with 3 buttons

SMALL, HANDY DESIGN

Smallest and lightest
7-gas detector

HIGH QUALITY SENSORS

Robust, precise and durable sensors for
toxic/flammable gases/vapours and O₂





Connected Workers, Connected Data

Modern safety concepts are becoming smart. Modern gas detectors are becoming increasingly integrated with data networks and are able to detect a growing number of dangerous situations.

The warning of dangerous, local gas concentrations remains the primary task of portable gas detectors. However, smart safety goes beyond that:

- » It allows for the remote protection of individual workstations and when separated from ones team, depending on the situation
- » Rescue teams receive up-to-date information of the dangerous situation on site
- » On personnel-intensive and nevertheless not 100-percent protection through a colleague (Buddy System) can be dispensed with
- » National and international security compliance requirements are observed
- » Pager function for basic messages and pre-set replies

Security for Local Teams

The Microtor III G888 with a radio model and the mobile monitoring unit, the GfG Link, is the perfect solution for fire brigades, service and repair teams or other groups operating in potentially dangerous areas.

The supervisor is immediately informed of which team member triggered an alarm, and receives the current gas readings. With the man down alarm they are also notified whether or not the team member requires rescuing.

With a radio range of up to 700 meters, it is possible to secure teams at different locations, enabling a quick and targeted response in case of an emergency.



Green: No danger
Yellow: Pre-alarm
Red: Main alarm / Man-down alarm



Safety even for large teams

The GfG-Link is designed to secure small, mobile teams. If it is necessary to ensure the safety of larger workgroups, it is recommended to use the G888/G999 Visual with a USB radio dongle. The software offers all the functions of the GfG-link. However, it allows you to keep a clear overview of the measured values and alarm states of significantly more people on Windows PCs or tablets.

Connected Data in IIoT

The Connected Worker is also part of the Industrial Internet of Things (IIoT) because the data contains valuable information for process optimization and analytics. The difference between fixed and portable gas detectors is becoming less evident in modern safety concepts, which opens the door to new possibilities such as the precise location of victims. The future belongs to *smart GasDetection Technologies*.



The right accessories for every requirement

Docking- and Test stations

The GfG test stations offer fast, automatic and cost-effective execution of daily bump tests including documentation according to DGV information 213-056 (T021) and 213-057 (T023). In addition, the docking stations also enable the required, routine functional checks to be carried out.



Docking station DS400

- » 1x single/multi-gas, 1x air and 1x exhausted gas connection
- » Display and documentation of the adjustment of zero and test gas



TS888/999 test station

- » Can also be used mobile (no PC - 12/24 V power supply)
- » Data logger included
- » Charging function (optional)

Docking station DS404

- » Like the DS400
- » 4x single/multi-gas, 1x air and 1x exhausted gas connection

TX888/999 test station

- » Like the TS888/999
- » Sensitivity adjustment of the sensors
- » Display and documentation of the adjustment of test gas



Individual Job Security

Improving Lone Worker safety is simple. The G888 or G999 multi-gas detectors report measured gas concentrations, alarms and the status of the man-down alarm to the supervisor's mobile GfG-Link or a control centre via radio.

GfG-Link 10

- » Monitoring of up to 10 employees
- » 868 MHz band (Europe/Africa); 915 MHz band (North and South America)
- » Range max. 700 m
- » Pager function



USB-Dongle

for wireless connection incl. G888/G999 Visual software

- » Monitoring range up to 700 m
- » 868 MHz band (Europe/Africa); 915 MHz band (North and South America)
- » Operating system: Windows

Additional Products



Smart Charger Cap

- » Adapter for manual test gas feeding
- » Data interface and connection to PC
- » Charging function



Polytector III G999

- » For toxic and flammable gases and O₂
- » Additional sensor combinations incl. PID and Hybrid (CC/HL)
- » Radio range dependent on interference influences (max. free field 700 m)
- » Pager function



Charger DIC888/999

- » Smart charge control for optimum charge status and long battery life



Transport and storage case

- » Suitable for GfG single and multi-gas test bottles
- » Space for TS888/999 or TX888/999 and accessories



G888/G999 Visual

- » Safeguarding teams and individual workplaces
- » Monitor measured values and alarms via PC or Tablet
- » Motion status and man-down alarm
- » Possibility of alarm simulation
- » Operating system: Windows



« Bump tests
made easy. »

TECHNICAL DATA: MICROTECTOR III G888

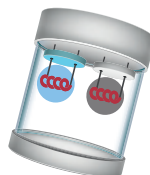
Measuring principle:

Electrochemical (EC)
for toxic gases and oxygen



Catalytic Combustion (CC)

for flammable gases and vapours (up to 100% LEL)



Infrared (IR)

for flammable gases and vapours and carbon dioxide



Sample gas supply:

Via diffusion opening

Display:

Illuminated LCD full graphic display, automatic size adjustment for optimum reading, display of battery capacity, gas concentration as current value and peak value

Alerting:

Depending on gas type 3 or 2 instantaneous value and 2 exposure value alarms, battery alarm with visual and audible signal as well as display, color of display depending on alarm status (orange/red) Horn: 103 dB(A) (can be reduced to 90 dB(A))

Zero point and sensitivity adjustment:

Manually or automatically with adjustment program if necessary test gas supply via „SMART CAP“ with 0.5...0.6 slpm

Radio:

Optional 868 MHz for EU; range approx. 700 m (free field)
Optional 915 MHz for USA; range approx. 300 m (free field)

Power supply:

NiMH rechargeable battery module; 2.6 V 2100 mAh; rechargeable

Operating time*

Without a radio:

ca. 13h (EC+WT_{PS}+IR)
ca. 21h (EC+WT_{PS})
ca. 65h (EC)
ca. 13h (EC+WT_{PS}+IR)
ca. 21h (EC+WT_{PS})
ca. 65h (EC)
ca. 23h (EC+IR)
ca. 23h (EC+IR)

With radio:

ca. 10h (EC+WT_{PS}+IR)
ca. 14h (EC+WT_{PS})
ca. 26h (EC)
ca. 15h (EC+IR)

* PS: Power Save Mode

*The operating time applies to new battery modules at operating temperatures of +20°C and without consideration of other energy consumers (lamps, alarms, etc.). Power Save Mode (PS) of the catalytic combustible sensors can optionally be switched off.

Climatic conditions

For the operation: -20...+50°C | 5...95 % r.h. | 70...130 kPa
For storage: -25...+55°C | 5...95 % r.h. | 70...130 kPa (recommended 0...+30°C)

Case

Material: Rubberized polycarbonate
Dimensions: 68 x 100 x 39 mm (W x H x D)
Weight: Up to 275 g (depending on sensor equipment)
Protection class: IP67

Approvals / Tests

Labeling and ignition protection types: G888C Ⓔ I M2 Ex ia db I Mb Ⓔ II 2G Ex ia db IIC T4 Gb -20°C ≤ Ta ≤ +50°C

EU Type Examination Certificate: BVS 15 ATEX E 064 X

IECEx Certificate of Conformity: IECEx BVS 15.0056 X

Electromagnetic compatibility: DIN EN 50270:2015

Interference emission: Type class I
Interference immunity: Type class II



GfG Gesellschaft für Gerätebau mbH

Klönnestraße 99 | 44143 Dortmund | Germany

Phone: +49 231 56400-0

Fax: +49 231 56400-895

E-mail: info@gfg-mbh.com

www.gasmessung.de

smart
GasDetection
Technologies

