POLYTECTOR III G999

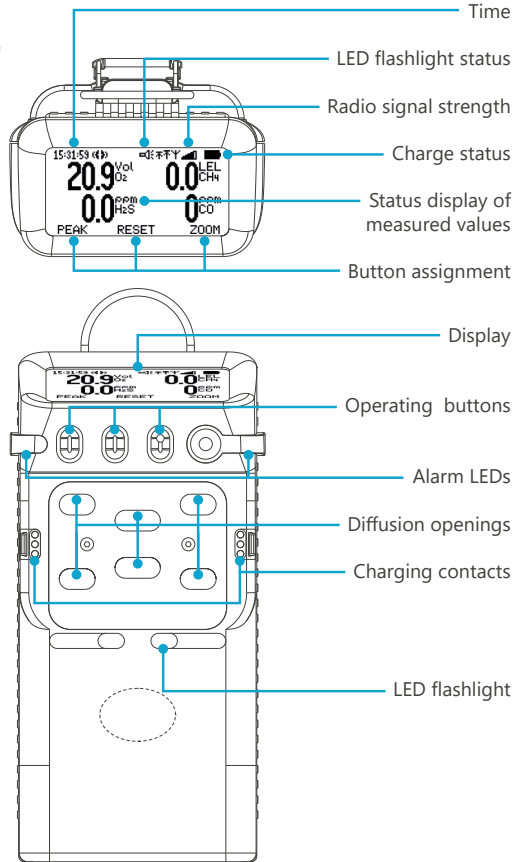# **Quick Reference Guide**

Measurement method
Sensor-dependent

Environmental conditions (operation)
Permitted operating temperature: -20 to +50 °C
Permitted humidity: 5 to 95 % r. h.
Permitted air pressure: 70 to 130 kPa

Power supply
NiMH battery module
(5.2 V 2100 mAh; rechargeable)

Operating time
Max. 130 hours
(Depending on equipment, use, sensors
and age of the battery)

Housing
Material: rubberized plastic
Dimensions: 68 x 136 x 39 mm (W x H x D)
Weight: max. 395 g
Protection class: IP67

! **The device must not be charged or opened
potentially explosive areas!**

! **Charging contacts must always be kept clean!**
Dirt can be removed with a damp cloth (clear water).

Do not use solvents or cleaning agents!

- Time
- LED flashlight status
- Radio signal strength
- Charge status
- Status display of measured values
- Button assignment
- Display
- Operating buttons
- Alarm LEDs
- Diffusion openings
- Charging contacts
- LED flashlight

ATEX certification			
Polytector III G999C	ⓔ I M2 Ex ia db I Mb	ⓔ II 2G Ex ia db IIC T4 Gb	−20 °C ≤ Ta ≤ +50 °C
Polytector III G999E/P	ⓔ I M1 Ex ia I Ma	ⓔ II 1G Ex ia IIC T4 Ga	−20 °C ≤ Ta ≤ +50 °C
Polytector III G999M	ⓔ I M1 Ex ia da I Ma	ⓔ II 1G Ex ia da IIC T4 Ga	−20 °C ≤ Ta ≤ +40 °C
	ⓔ I M2 Ex ia db I Mb	ⓔ II 2G Ex ia db IIC T4 Gb	−20 °C ≤ Ta ≤ +50 °C

Switch on	Press the right button for approx. 1 second.
Self test	After switching on, the visual and acoustic alarm, the displays of the sensors/gas types used incl. set alarm thresholds are tested. If the inspection periods for the bump test, adjustment and annual maintenance are exceeded, an information and warning message appears. **Attention:** If the date for the respective control period is exceeded, the following message appears: "Bump test/maintenance overdue" or "Recalibration needed". Press the middle button NEXT to acknowledge the message and have the device tested or checked at the next opportunity.
Switch off	Press the right button for approx. 5 seconds. Release the button again after the end of the countdown (the display only shows "Switch off").

Alarm type	Sensors	Alarm levels	Description
Current value (CV)	» Oxygen » flammable gases » toxic gases	3 3 2	Are triggered immediately when the current gas concentration exceeds or falls below (O_2) a specified value. The current value alarms can be set individually.
Short-term exposure value (STEL)	» toxic gases	1	The short-term exposure value (STEL) shows the average value of the last 15 minutes.
Long-term exposure value (TWA)	» toxic gases	1	The long-term exposure value (TWA) monitors exposure over 8 hours.

Rotating the display by 180°	Briefly press the left and right buttons simultaneously to rotate the display by 180°. This makes it easier to read the display when the device is worn on the body.
Zoom display of STEL, TWA, current and maximum value	To view individual values in the zoom display, briefly press the right button (**ZOOM**). By briefly pressing the right button several times, all sensors and the battery charge status are displayed in succession. By pressing and holding the right button (**ZOOM**) in the zoom display, you can switch to the detailed view to additionally display the maximum, short-term and long-term values.
Display of PEAK value » activate	In PEAK mode, maximum values (O_2 = minimum value) are permanently displayed. Pressing the left button (**PEAK**) activates PEAK mode. The PEAK symbol 不不 appears in the display. In the zoom display, the PEAK value is then shown in the upper left corner instead of the max. value (measured since PEAK was activated).
» reset	If (**RESET**) is pressed in PEAK mode or in the zoom display, the PEAK memory is reset to the current gas concentration.
» deactivate	Pressing (**PEAK**) again deactivates PEAK mode.
Flashlight or manual alarm	Pressing and holding the left button (**PEAK**) activates one of two possible modes: the LED flashlight or the manual alarm. The function is selected in advance in the system options menu of the service menu. LED flashlight: Press the left button for 3 seconds = on. Press the left button briefly = off. Manual alarm: Press the left button for 3 seconds to activate the alarm. The question "Are you OK?" appears. Pressing the left button **NO** holds the alarm. Pressing the right button **YES** ends the alarm. The query can be opened again at any time by pressing the middle button (**RESET**).
Main menu	Pressing and holding the middle button (**RESET**) opens the main menu. Here, program parameters can be set. There are various submenus to choose from in the main menu: » Loc (= selection of the operation location) » User (= selection of employee) » AutoCal (= zero point adjustment with ambient air (AIR) or test gas (GAS)) » Service menu (= parameter settings) » Sensor-Overview (= overview of existing sensors) » System-Information (= type, serial number, firmware version, radio setting) The functions of the buttons are explained by information in the display above them.
Access code	Some menu items are only accessible via an access code. It prevents important functions from being changed accidentally or by unauthorised persons. There is no alarm in service mode. For further information on the setting options, please refer to the operations manual.