

# Dockingstation DS400

for MICROTECTOR II

## Short-form Manual

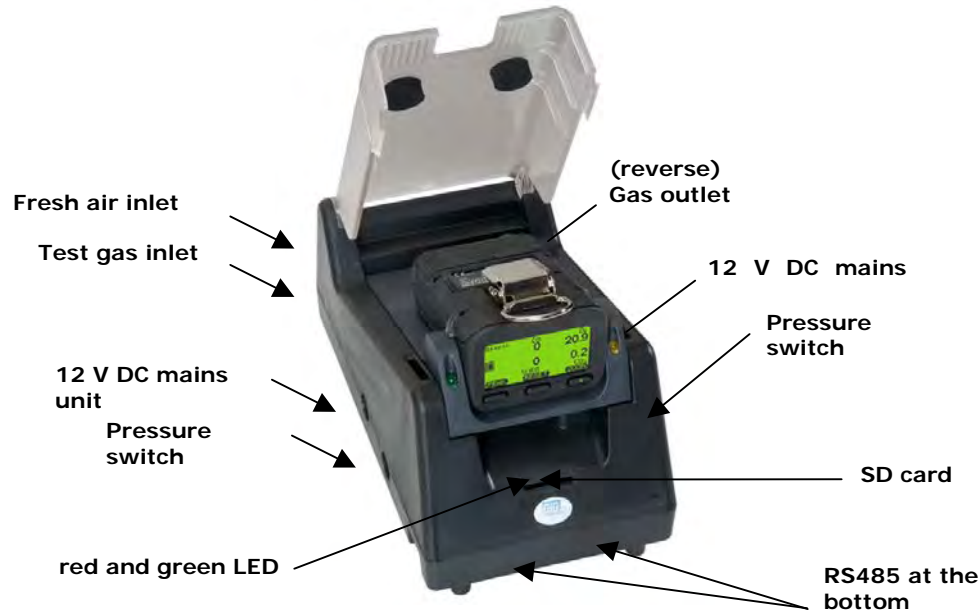
211-000.35\_OMShort\_DS400.doc  
Firmware Version 2.08

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**Application** The Docking Station DS400 is an automatic equipment for bump test, adjustment and recharging of the gas detector Microtector II.



**Positioning/ Mounting** Place the Docking Station on a hard level surface. Make sure that the test gas is vented easily and without back pressure. Test gas supply is effected by means of the pump built into the Docking Station. Before use, connect the mains unit and, if required, the RS485. Insert the SD card, and connect gas: Fresh air and test gas. For connection of test gas use a suitable gas bottle/can with the proper fitting and hose. For connection of fresh air supply please use a CO<sub>2</sub> absorption filter. For bump test and adjustment, a gas mixture is being used: Example: 2 Vol.-% CO<sub>2</sub>, 2.2 Vol.-% CH<sub>4</sub>, 15 Vol.-% O<sub>2</sub> and 100 ppm CO, balance: N<sub>2</sub>.

**Handling** Before the first use, the Docking Station DS400 is parameterised by means of the configuration software. Controlling of the Docking Station is effected by means of the pushbuttons of the detector. The display of the detector is used as status indication resp. for reading of data. For bump test and adjustment the settings of the configuration software are being used.

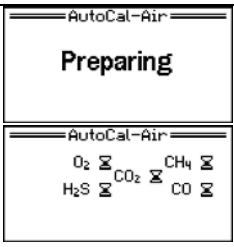
**Bump test** For doing the bump test turn the detector on and put it into the Docking Station. The bump tests starts automatically after 10 seconds.  
**Test interval** The test interval is determined according to T021/T023; it will be reset by every bump test and adjustment.



**Bump test:** The following parameters are being tested:

- Time
- Audible alarm (horn)
- Visual alarm / alarm LED
- Response time for alarm 1 and 2, response sensitivity
- T<sub>50</sub> time (time to reach 50% of test gas concentration)
- Detector error
- Setting of bump test interval

**Adjustment:** Turn the detector on and put it into the Docking Station. If no further action is effected, the bump test starts after 10 seconds. Pushing **AutoCal** (middle key) within these 10 seconds starts the adjustment routine.  
**Test interval:** The test interval for the adjustment is defined according to T021/T023.

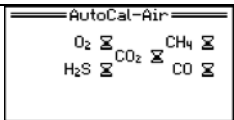


**Adjustment:** Adjustment includes the following settings:

- Adjustment of zeropoint
- Start of adjustment with test gas
- Purging of sensors
- Detector error

**Charging of re-chargeable battery pack:** For recharging the detector, turn the instrument off and put it into the Docking Station. Charging starts automatically.  
**Yellow LED:** Charging  
**Permanent light:** Quick charge  
**Flashing:** Trickle charge  
**Green LED: On:** Voltage supply for charge module is turned on  
**Off:** Detector is in the Docking Station  
Bump test or adjustment is activated

**Test evaluation/ Signalisation** Signalisation of test results is done on the display of the detector. During the tests the display indicates which sensors/gases are being tested/adjusted and which sensors/gases were already tested/adjusted.



Once bump test or adjustment are completed, the display shows a report:

- Sensor not existing -> Indication as -
- Fault appearing -> Indication by means of red backlight illumination

When the bump test or the adjustment is completed, the test result is indicated by means of a red -Test failed- or green -Test passed- LED.

**SD card:** All information about bump test and adjustment are stored on a SD card (if present)

**Data transfer:** The data can be transferred to a PC by means of a card reader or a connection cable.