



PDM MULTI DOCK MANUAL

BUMP & DOCKING STATION

CONTENTS

| | |
|---------------------------|---|
| Contents | 2 |
| Warning | 3 |
| 1. Overview | 4 |
| 2. PDM Dock Configuration | 5 |
| 3. Log Configuration | 7 |
| 4. Specification | 8 |
| 5. Limited Warranty | 9 |



WARNING

- Any unauthorized attempt to repair or modify the product, or any other cause of damage beyond the range of the intended use, including damage by fire, lightening, or other hazard, voids liability of the manufacturer.
- Do not use if the device appears to be damaged.
- Use the device in a clean environment, which has no hazardous gases.
- Do not use the expired gas cylinders.
- Ensure to use the certified gas cylinders.
- Ensure gas types and concentrations match with manuals and devices.
- Severe vibration or shock to the device may cause a sudden reading change and cause the device malfunction.
- Do not allow water and liquids to reach this device.

READ THE OPERATION MANUAL BEFORE USE

- Before operation, read the manual carefully and follow all the instructions.
- IR link only works when it is placed at the bay 1 on the docking station.
- The device only operates when the power LED turns green.
- Before upgrading firmware, connect the plug to avoid any data loss and malfunction by unexpected power off. And the file name is fixed as below.

1. OVERVIEW

The WatchGas PDM Docking Station keeps monitor correctly configured and tested and fully functional without the actual presence of a certified service technician. Bump testing portable monitors is becoming more and more prevalent in the market. Ensuring sensors are responding to a known concentration of gas remains the best way to verify the monitor has not become impeded. WatchGas PDM docking station provides bump testing, event management and calibration from a simple to use multi-unit station and gives fleet or safety managers the ability to update configurations on large fleets. It also maintains the all important event logs that demonstrate users are working within company requirements.

| | |
|--|---|
| Gas usage controlled | Lowers the cost of bump testing |
| Manages calibration | Manages calibration and stores records of the event |
| Flexible | Can monitor a wide array of test parameters and detector settings, providing excellent traceability |
| All data is stored in a USB stick | Simple to transfer the data |
| Rechargeable battery or power | Ideal for in-vehicle or multi-site use |
| Holds up to 4 PDM's at once | Faster testing of larger fleets |

Power

- Built-in internal battery for 1000 of bump tests
- Automatic shutdown mode (default: 5 minutes)
- Press Calibration or Bump test button for a second to turn on

Buttons

Bump Test :

1. Press the yellow button for a second to execute Bump test
2. Automatic gas injection
3. Check normal operation of the sensor and alarm

Calibration:

1. Press the green button for a second to execute Calibration mode
2. Calibrate the sensor to match with the type of the gas

Bump Test + Calibration:

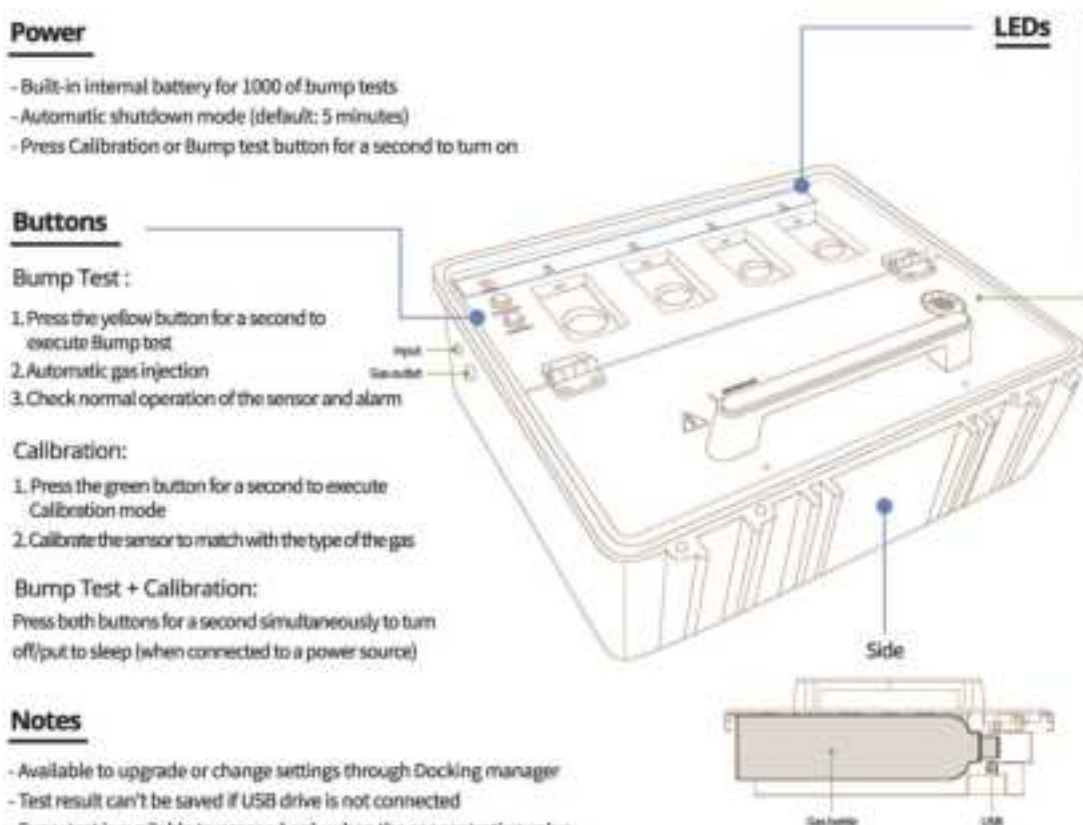
Press both buttons for a second simultaneously to turn off/put to sleep (when connected to a power source)

Notes

- Available to upgrade or change settings through Docking manager
- Test result can't be saved if USB drive is not connected
- Every test is available to proceed only when the concentration value is below 1st alarm

LEDs

| LED | Description |
|--------------------|---------------------|
| Unit LEDs | |
| ● Cycling | Charging |
| ● ON | Testing |
| ● ON | Test failed |
| ● ON | Test Succeeded |
| ● ON and Blinking | Updating Firmware |
| ● ON | Standby mode |
| Power LED | |
| ● Blinking (5 sec) | No USB based memory |
| ● ON | Low Battery |



Process

1. Lift the gas cover handle and connect with appropriate gas
2. Check USB connection
3. Test after checking the gas pressure gauge (Max. of 56L bottle: 500PSI)

Troubleshooting

Solutions for the most common problems

1. IR panel at the top of the detector needs to be cleaned
2. Check the remaining gas on the Gas pressure gauge
3. Try to keep the Docking station away from bright light. It could disturb the IR communication between Docking station and detector
4. If the problem still occurs, please inquire of Watchgas

2. PDM Dock Configuration

EASY TO MAINTAIN

| | |
|-------------------------------------|--|
| Changeable alarm levels | Ensures compliance with changing regulations or company procedure |
| WatchGas PDM Docking Station | Keeps monitors correctly configured without service or technician team |
| 'Bump test due' indication | Alerts the user and team members that the monitor is not compliant |

USER FRIENDLY

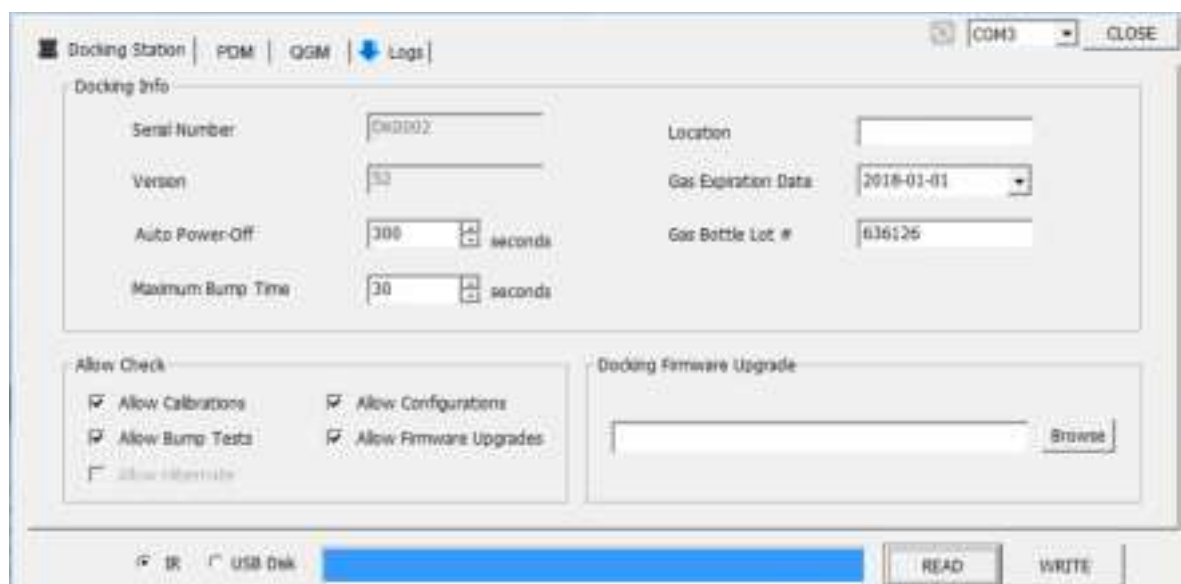
| | |
|--------------------------------|-------------------------------|
| Compact and lightweight | Non-intrusive |
| Single button operation | Delivers simplicity for users |
| | Reduces training time |

EFFICIENT

| | |
|---|---|
| Wide operating temperature range | Effective in a wide variety of harsh environments: 41 to + 104°F (5 to + 40°C) |
| IP Rating | IP66 and IP67 |

NOTE

Users can change settings, upgrade firmware and download log events through the Docking Station IR-Link**



- Docking PC Programs are as above image.
- To interact with Docking Station, ensure to instal the Docking Station software and have the IR Link cable** plugged into the computer. Place the topside of the IR Link face down on the detector bay #1.

* IR-Link only operates on the bay #1 and power should be on.

** IR-Link is available seperately.

DOCKING INFO

| | |
|---|--|
| Serial S/N: | Factory Serial S/N |
| Version: | Docking station firmware version |
| Auto Power-Off (Max 3600 seconds): | Auto Power-Off |
| Maximum Bump Time: | Default: 30 / Min: 20 / Max: 120 seconds |
| Location: | Configure a location of the docking station installed. |
| Gas Expiration Date: | Set up the expiration date of a gas cylinder manually. |
| Gas Bottle Lot #: | Set up a bottle serial number manually. |

ALLOW CHECK

Users can enable/disable the following options by checking each box.
Calibration/Bump test/Hibernation/Configuration(Detector)/Firmware Upgrade

Read: Retrieve the stored settings

Write: Update the adjusted settings

OPTION (SET BY DOCK)

User ID configuration

Calibration Interval (0~365 days): Set up an interval of the calibration alert

Bump Station Interval (0~24 hours): Set up an interval of the self test.

Low/HIGH Alarms: (Default is as below)

| Alarms | O ₂ | H ₂ S | CO |
|--------|----------------|------------------|--------|
| LOW | 1%vol | 5 ppm | 25 ppm |
| HIGH | 23% vol | 5 ppm | 25 ppm |

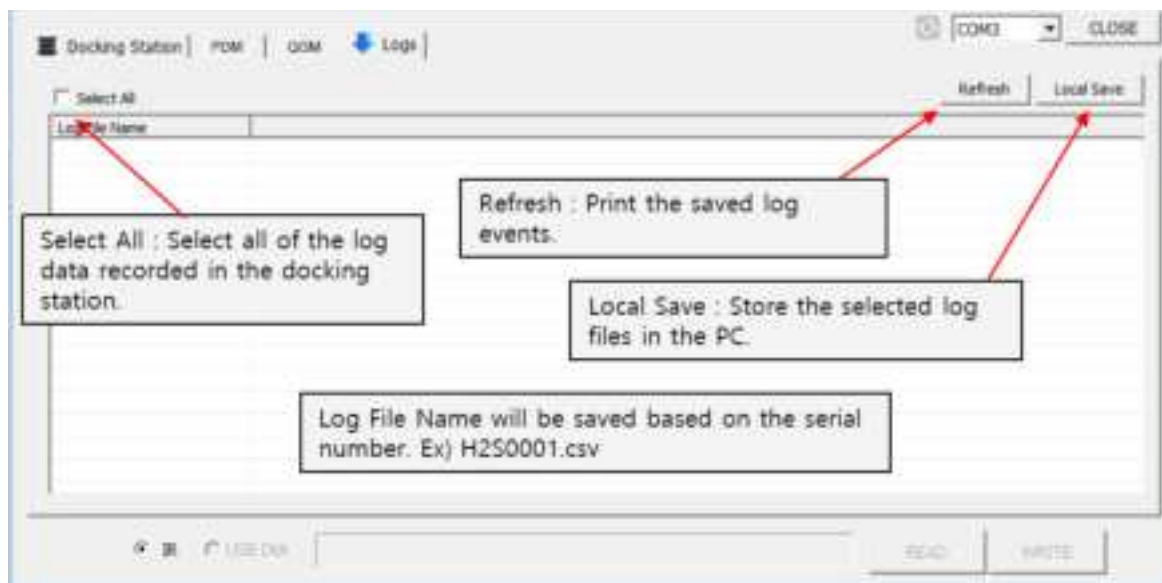
Display: Choose either displaying “Sensor Reading” or “Sensor life remaining.”

| Gas | O ₂ | H ₂ S | CO |
|-----|----------------|------------------|--------|
| | 18%vol | 10 ppm | 50 ppm |

Read: Retrieve the stored settings

Write: Update the adjusted settings

3. Log Configuration



EVENT LOGGER PDM (FOR THE LAST 30 ALARMS)

| Event Date | Event Time | Bump Test | Threshold | Sensor Read | Alarm |
|------------|------------|-----------|-----------|-------------|------------|
| 2018/04/05 | 12:20:41 | No | 00:00:10 | 30.0 | HIGH Alarm |
| 2018/04/05 | 12:20:51 | No | 00:00:07 | 15.4 | LOW Alarm |
| 2018/04/05 | 12:21:10 | No | 00:00:00 | 30.0 | HIGH Alarm |
| 2018/04/05 | 12:22:41 | No | 00:00:04 | 30.0 | HIGH Alarm |
| 2018/04/05 | 12:22:47 | No | 00:00:04 | 15.0 | LOW Alarm |
| 2018/04/15 | 13:27:52 | No | 00:00:10 | 30.0 | HIGH Alarm |
| 2018/04/15 | 13:30:10 | No | 00:00:00 | 30.0 | HIGH Alarm |
| 2018/04/15 | 13:34:20 | No | 00:00:10 | 30.0 | HIGH Alarm |
| 2018/04/15 | 13:42:23 | No | 00:00:00 | 30.0 | HIGH Alarm |
| 2018/04/15 | 13:42:58 | Yes | 00:00:07 | 30.0 | HIGH Alarm |
| 2018/04/15 | 13:46:27 | No | 00:00:00 | 30.0 | HIGH Alarm |

PDM

Serial Number: S00110100 Sensor Type: CO

Firmware Version: 1.2.0 Low Alarm: 15.5

Over High Message: High Alarm: 23.0

Display: Sensor Reading Cal Calibration: 10.0

Shake: Off Cal Threshold: 90

Self Test/Wait: No Cal Interval (day): 100

Bump Interval (day): 100

WatchGas

4. Specification

| | |
|--|--|
| Size | 47 x 41 x 22cm (18.50 x 16.14 x 8.66 in.) |
| Weight (without gas cylinder) | 8.2kg |
| Operating Temperature | 5 to + 40°C (41 to + 104°F) |
| Warranty | Full 2 years |
| Battery Type | Rechargeable Lithium Ion |
| Battery Life | 1,000 Bump Tests |
| LEDS | 5 red / green / orange LEDs (1 for each unit, 1 for power) |
| Memory | USB 8GB Standard |
| Log Capacity | Approximately Up to 5 million tests (8GB, removable USB memory) |
| Tests Performed | Bump Test and Calibration |
| Information Stored | Bump/Cal Logs, Individual Monitor Event Logs, Firmware and Unit Configurations |
| Gases Available* | CO, H ₂ S, O ₂ , NH ₃ , SO ₂ en H ₂ |
| Unit Compatibility | Works with WatchGas PDM |
| Calibration Gas | Compatible with 36cm cylinders |
| Charging Adaptor | 12V, 3A |

* Los gases están disponibles por separado de WatchGas o su distribuidor.

5. LIMITED WARRANTY

WatchGas warrants this product to be free of defects in workmanship and materials under normal use and service for two years from the date of purchase from the manufacturer or from the product's authorized reseller.

The manufacturer is not liable (under this warranty) if its testing and examination disclose that the alleged defect in the product does not exist or was caused by the purchaser's (or any third party's) misuse, neglect, or improper installation, testing, or calibrations. Any unauthorized attempt to repair or modify the product, or any other cause of damage beyond the range of the intended use, including damage by fire, lightening, water damage or other hazard, voids liability of the manufacturer.

In the event that a product should fail to perform up to manufacturer specifications during the applicable warranty period, please contact the product's authorized reseller or WatchGas service center at +31 (0)85 01 87 709 to repair/return information.

FOR MORE (ORDER) INFORMATION

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