Operating Manual

Breathing Air Monitor

Puracon Light

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Version: 2026

Product information

Type designation

Serial No.

Date of construction

Purchase information

Purchase date

First commissioned on

Warranty period

Dealer's stamp

Warranty

L&W will uphold warranty claims made during a period of 12 months from the invoice date.
If the product was purchased from an official L&W dealer, the date on the dealer's invoice is valid. Warranty claims can only be made on presentation of the original invoice.
Should verifiably defective parts have been delivered, we will decide to either replace the parts or repair them. The resulting transport and assembly costs will be invoiced.
No reduction of the purchase price or changes to the contract can be made. The parts for which a claim is being made should be kept safe by the purchaser and, when requested, sent to us at their cost. Replaced parts become the property of L&W. If maintenance work is carried out without our knowledge or permission by the purchaser or a third party, we are absolved from any liability for warranty claims. As a matter of principle, warranty claims can only be made by the initial purchaser.

Manufacturer in terms of 2014/68/EU

The full name and address of the manufacturer is: :

Lenhardt & Wagner GmbH

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68623 Hüttenfeld / Germany

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TABLE OF CONTENTS

A

General Information

We strongly recommend reading this manual thoroughly prior to operation and follow all the safety precautions precisely. Damage resulting from any deviation from these instructions is excluded from warranty and liability for this product. Carry out other commissioning steps only if you have fully understood the following contents.

Before commissioning and using the unit, carry out all the essential preliminary work and measures concerning legal regulations and safety. These are described on the following pages of this operation manual.

Description of marks and warning signs

The following warning signs are used in this document to identify the corresponding warning notes which require particular attention by the user. The warning signs are defined as follows:

Caution
Indicates an imminently hazardous situation which, if not avoided, could result in serious injury, physical injury or death.

Warning
Indicates a potentially hazardous situation which, if not avoided, could result in physical injury or damage to the product or environment.

Note
Indicates additional information on how to use the unit.

Scope of Delivery Puracon Light

The humidity sensor is used to monitor humidity levels in compressed air systems. It measures the humidity of the air flowing through the system and indicates when limit values are exceeded via LEDs.

Pressure ranges

50 - 350 bar

Specifications

- High-quality aluminum housing
- Moisture sensor (0 - 50 mg/m³)
- LED status indication in red / yellow / green

USB-C charging port with charging cable and plug

Optiones

- Filling connection DIN 200 bar / DIN 300 bar
- Connections of your choice
- Adjustable throttle valve
- High-quality PVC case for transporte

Technical Data - Puracon Light

Technical Data	
Dimensions L x B x H [mm]:	60 x 90 x 40 mm
Connector:	G 1/4“ female thread
Weight :	450 g
Operating time (battery operation)	ca. 100 h
Battery type / capacity / charging time	Li-Ion / 1000 mAh / 1h
Protection crating:	IP20
Operating pressure range	50 - 350 bar
Flow rate	80 - 1300 l/min
Temperature range [°C]:	+5 bis +40
Medium:	Compressed air

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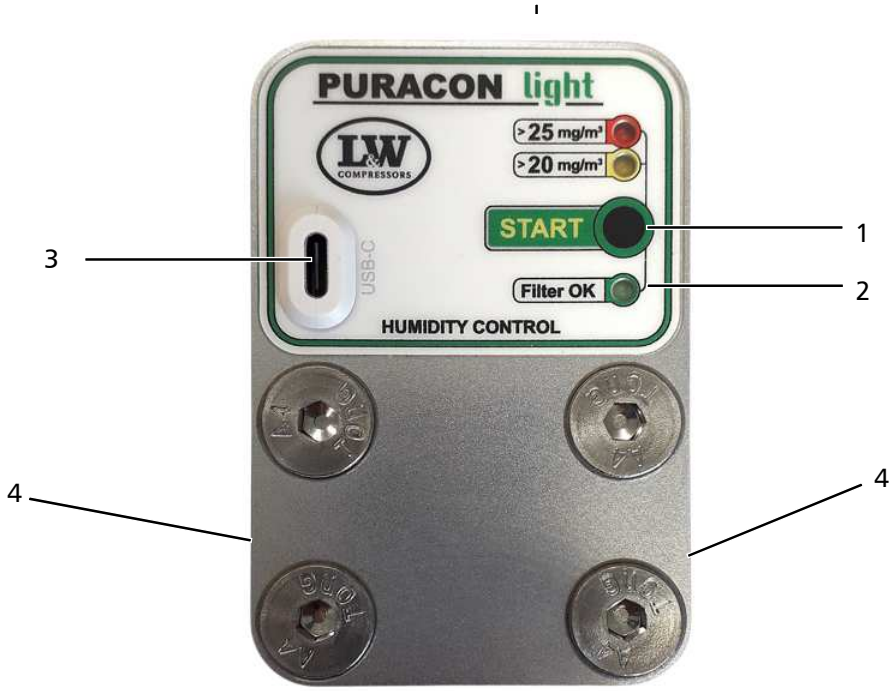
Unit Assembly - Puracon Light



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Nr.	Designation
1	Start-Button
2	LED Indicator
3	USB-C Port
4	High-pressure connection: Inlet/outlet 1/4"

SAFETY PRECAUTIONS

Intended Use

Only use the unit in perfect condition for its intended purpose, safety and intended use and observe the operating instructions! In particular disorders that may affect safety have to be eliminated immediately!

Use the unit exclusively for the determined medium (see "Technical Data"). Any other use that is not specified is not authorized. The manufacturer/supplier shall not be liable for any damages resulting from such use. Such risk lies entirely with the user. Authorization for use is also under the condition that the instruction manual is complied with and inspection and maintenance requirements are enforced.

No change and modification to the unit can be made without the written agreement of the manufacturer. The manufacturer is not liable for damage to persons or property resulting from unauthorised modifications.

Operators

Target groups in these instructions;

Operators

Operators are persons who are authorized and briefed for the use of the compressor.

Qualified personnel

Qualified personnel are persons who are entitled to repair, service, modify and maintain the system.

Warning
Read the operating instructions before putting the monitoring unit into service!

Warning
Do not make any changes to the electrical equipment or the structure of the monitoring unit!

Strictly follow the instruction for use

Any use of the device requires full understanding and strict observation of this instruction. The device is only to be used for purposes specified here. Also pay attention to the specific instructions for the use of compressors, filling stations and to the corresponding statutory requirements and standards.

Maintenance

When the basic measurement shows a high deviation after a filter change, the device must be returned to the manufacturer for inspection (examination of actual condition), calibration (comparison with true values) and adjustment (adjustment to true values).

Maintenance work can be carried out by the user (actions to maintain the specified condition) - see chapter "Maintenance".

Note
Check the following possible defects before returning the device:

- Filter housing sealing defective
- Expiration date of the filter cartridge has been exceeded
- No original L&W filter cartridge / user filling of the filter cartridge

Liability for proper function or damage

The liability for the proper function of this device is irrevocably transferred to the owner or operator to the extent that the device has been serviced or repaired by personnel not employed or authorized by Lenhardt & Wagner or when the device was used in a manner not conforming to its intended use.

Lenhardt & Wagner and its distribution partners cannot be held responsible for damage caused by non-compliance with the recommendations given above. The warranty and liability provision of the terms of sale and delivery of Lenhardt & Wagner and its distribution partners are likewise not modified by the recommendation given above.

Safety regulations

Inspections according to legal and local obligatory regulations regarding accident prevention are carried out by the manufacturer or by authorised expert personnel. No guarantees whatsoever are valid for damage caused or favoured by the non-consideration of these directions for use.

OPERATION

Important operation instructions

- Any contamination of the sensor can cause it to fail. Before commissioning, it is essential that the lines be free of metal and rust particles, oils, or other liquids. Contaminated sensors are excluded from the warranty.

Legal regulation and filling authorization

- The water content of the gas supplied by the compressor for filling gas cylinder should not exceed 25 mg/m³. The owner of the compressor and the person in charge of filling are responsible for ensuring that this limit is not exceeded. Gas may only be filled by person listed as authorized persons in the compressor check book.
- WARNING! Correct humidity values are only possible during gas flow and with a working pressure from 200 to 300 bar. For other pressure ranges or for better accuracy see "Adjustment pressure range"

Function

The sensor monitors the air flow within a pressure range of 150 to 350 bar. Humidity is measured in mg/m³.

Power is supplied by an integrated rechargeable battery.

Turning on the device or restarting it

The sensor is turned on by briefly pressing the Start button.
After approx. 3 seconds, the green LED lights up; the sensor will then remain on for approx. 30 minutes if the battery voltage is between 3.4 V and 4.1 V.

If the voltage is less than 3.7 V, the green LED flashes. Operation is still guaranteed for several hours.

- Immediately after startup, the sensor measures the moisture content of the flowing medium in real time.
- If the alarm LED lights up red, the maximum moisture limit has been exceeded.

Turning off the device

The Puracon automatically turns off after 30 minutes; power consumption drops to zero.

Caution
Do not fill bottles if the red alarm LED is lit.

Note
Correct humidity values are only possible during gas flow and with a working pressure from 200 to 300 bar.

Indicators / Alerts:

Yellow LED: Humidity exceeds 20 mg/m³

Red LED additionally: Humidity exceeds 25 mg/m³

Below 20 mg/m³: Neither the yellow nor the red LED is active

If the green LED is lit or flashing, the device is turned on.

If the battery voltage drops below 3.7 V, the green LED flashes with short pauses.

The device will continue to function until the end of the set runtime (approx. 30 minutes). Several hours of operation are still possible.

Battery and Charging

The battery is charged via the USB-C port. The charger can be connected at any time.

Green LED flashes with long pauses → Charging

Fully charged → Flashing with double pulses

The charging current is interrupted to protect the battery; the device remains on.

If the charger is connected, the device remains on continuously.

If the charger is removed, the device turns off after approximately 30 minutes (counting from the first time it was turned on).

It can be reactivated by pressing the power button.

A single battery charge provides more than 100 hours of runtime.

Operating Behavior

If the sensor has been exposed to high humidity for an extended period, it takes longer for the measured value to return to a level that reflects the actual dry air conditions.

If the sensor has been exposed to high humidity for an extended period of time, it takes about 30–60 seconds for the reading to return to a value that reflects the actual dry air conditions.

Measurement cylinder humidity

Dry the sensor before humidity measurement. Start the device by briefly pressing the Start button.

Predrying with compressor air

Connect sensor to the compressor. Switch compressor on. Open the filling hose valve just a little and discharge air on ambient pressure.

Predrying with cylinder air.

Caution: Min. cylinder pressure 200 bar.

Connect the sensor to the cylinder. Open the valve on the filling hose just slightly and let air escape to ambient pressure.

Measurement with throttle valve

- Connect throttle valve. Push the UP-button for a faster measurement.
- Open cylinder for about 10 - 30 seconds and discharge the air via the throttle valve.
- Close the cylinder again for about 10 - 30 seconds.
- Open the cylinder, wait for 10 seconds, read value, close cylinder.
- This procedure can be repeated 1-3 times when the value is not below 35 mg/m³.

MAINTENANCE AND SERVICE

Maintenance Work

Maintenance and repair work must only be performed when the system is shut down and depressurized. The screw connections must be checked for leaks at regular intervals. This should preferably be done using leak spray.

We also strongly recommend that all calibration and adjustment work be performed by trained technical personnel. This is necessary because not all functional descriptions can be detailed and accurately described in this manual.

Use only original parts for maintenance.

The sensor must be replaced or sent to the manufacturer every 12 months.

Replacement / Maintenance of the Sensor Board

The sensor must be unscrewed, and the O-rings must be replaced.

- After replacing the sensor, check that the gasket is positioned correctly. The gasket must sit precisely in the groove provided, as gas flow is determined by the pressure difference between the internal pressure of the housing and the ambient pressure. A clean seal is absolutely essential for the proper functioning of the breathing air monitor.
- Tighten the screws to 25 Nm. The sensor replacement is now complete.

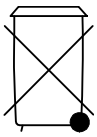
Return to the manufacturer

Please send the device to the manufacturer every 12 months. During the inspection / repair / calibration, a free software update and cleaning will also be performed.

Disposal

The product must be disposed in accordance with national waste disposal regulations and by an appropriate waste disposal company.

Electric and electronic components



EU-wide regulations for the disposal of electric and electronic appliances which have been defined in the EU Directive 2002/96/EC and in national laws are effective from August 2005 and apply to this device.

Common household appliances can be disposed by using special collecting and recycling facilities. However, as this device has not been registered for household usage, it must not be disposed of through these means.

The device can be returned to L&W. Please do not hesitate to contact us if you have any further questions on this issue.

Disposal instructions for batteries and rechargeable batteries

Disposal information for batteries and rechargeable batteries

Consumers are obliged to return these used batteries or rechargeable batteries (statutory obligation) to the manufacturer. The disposal in household waste is forbidden.

Customers can properly dispose old batteries and rechargeable batteries free of charge at dedicated collection points.

Batteries delivered by L&W can also be returned after use.