

DIEHL
Metering

IZAR OH BT 3

User guide



**Diese
Anleitung ist
dem Endkunden
auszuhändigen.
This guide must be given
to the end consumer.
Ce guide doit être donné
au client final.
Esta guía se debe dar
al cliente final.**

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1 GENERAL INFORMATION

The guide is intended for trained specialized personnel. For this reason, no basic working steps are included.

2 PACKAGE CONTENT

Before using the IZAR OH BT 3 please check the package content:

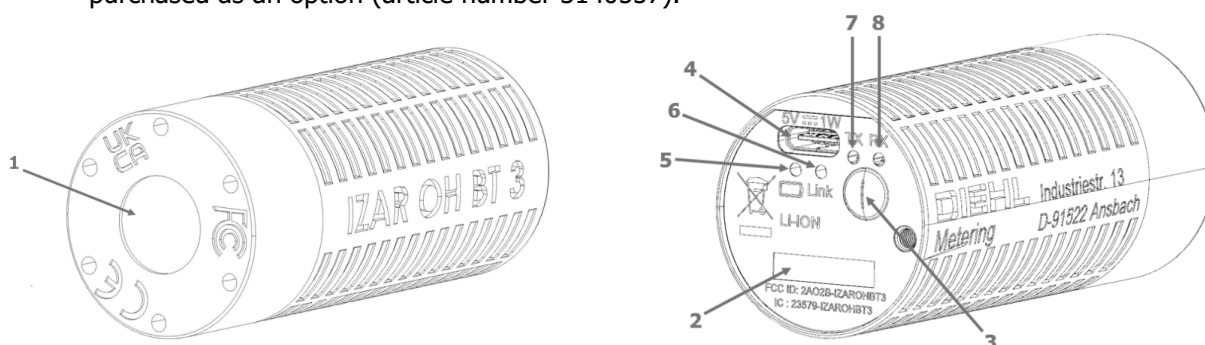
- ✓ IZAR OH BT 3
- ✓ USB-A to USB-C charging cable
- ✓ Installation Guide
- ✓ Hand strap

3 DESCRIPTION

The IZAR OH BT 3 is a practicable tool for configuring and reading Diehl Metering meters and system components via an optical interface (IrDa or ZVEI). The integrated magnet and the shape of the optical head allow easy attachment and hands-free use for Diehl Metering products. The opto head then transmits the data to IZAR@MOBILE 2 (v2.12.8 or above necessary) over Bluetooth® Low Energy (BLE).

With an operating time of up to 16 hours and the supplied wrist strap, the IZAR OH BT 3 is designed for mobile operation. The battery and transmission status is displayed via LEDs. The IZAR OH BT 3 can be recharged within 6 hours via USB-C.

The opto head complies with protection class IP54. A protective cover for the IZAR OH BT 3 can be purchased as an option (article number 3140557).



Number	Description
1	Optical interface
2	MAC adress
3	Power button
4	USB-C power input
5	LED Charge
6	LED Link
7	LED TX
8	LED RX

4 TECHNICAL DATA

General	
Optical modes	ZVEI, IrDa
BLE specification IZAR OH BT 3	5.4 (backwards compatible with BLE 4.2 or above)
Transmission frequency	2.4 GHz (2402 to 2580 MHz)
Bluetooth® range	Up to 10 m
Data transmission rate	Up to 1 Mbit/s
Transmission Power	Max. -0.3 dBm
User interface	Status LEDs and power button
Power supply	Lithium-Ion rechargeable battery 3.7 V / 900 mAh; input USB 5 V / 200 mA
Weight	75 g
Dimensions	73 mm x 32.5 mm (L x Ø)
Environment	
Operating temperature	-10 ... 55 °C in operation 0 ... 38 °C in charging
Operation level	Max. 2,000 m above sea level
Storage temperature	-20 ... 60 °C
Relative humidity	10% ... 70% relative humidity, non-condensing
	Operating humidity must be ensured to be non-condensing
Ingress protection	IP54

5 INSTRUCTIONS

IZAR OH BT 3 should be put into operation by qualified experts only.



For the operation of the IZAR OH BT 3, a computer/tablet/smartphone with a BLE interface (4.2 or above) and IZAR@MOBILE 2 (v2.12.8 or above) is mandatory. An update of IZAR@MOBILE 2 might be necessary. Please refer to the handheld manual when activating the Bluetooth®.

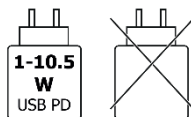
6 CHARGING

Only the following chargers should be used:

- Sunny SYS1561-1105-W2E 5C USB-C



Using unsuitable battery charger can damage the built-in lithium-ion battery. When too much force is applied, the thread may be ripped off the housing.



The IZAR OH BT 3 is fully charged when the Charge LED changes from green to red. Charging errors are indicated by a blinking red Charge LED.



The capacity of the built-in lithium-ion battery decreases in time, which results in shorter operation time. This is the result of normal battery ageing.

A longer storage at high temperatures (> 30°C) accelerates significantly the aging process and should be avoided.

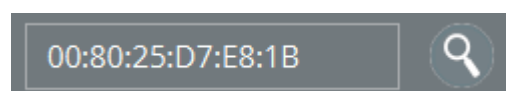
Built-in battery cannot be replaced by user.

7 OPERATING

7.1 POWER BUTTON FUNCTIONALITY

Turning the IZAR OH BT 3 on: Press and hold the power button for 1-2 seconds to switch the IZAR OH BT 3 on.

Connect the IZAR OH BT 3: After startup, Bluetooth® pairing is enabled for approximately 10 minutes. The Bluetooth® LED will blink blue, indicating that the IZAR OH BT 3 is ready for connection. To connect, select the opto head in IZAR@MOBILE 2 under **Settings > Communication > Optohead address**.

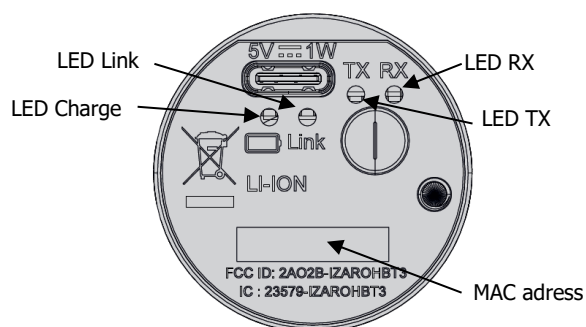


If a previously connected mobile device tries to reconnect after the device start up, this connection will be restored without enabling pairing. In this case, pairing can be enabled via pressing the power button 1-2 seconds.

Turning the device off: press and hold the power button min. 2 seconds to initiate the shut down procedure.

Connection time-out: To save battery, the device switches off automatically after 10 minutes without activity. Also, if no mobile device is connected, the IZAR OH BT 3 will automatically shut down after 10 minutes.

7.2 LED FUNCTIONALITY



LED	Color	Operation
Bluetooth® (Link)	blue	- Blue Blinking: BT pairing possible - Blue On: BT is connected (Unpaired) - Blue Flashing Rapidly: BT is connected (Paired)
Signal Reception (RX)	green red	- Green on, red off: Device is ready - Green flashing, red blinking: Receiving signal
Data Transmission (TX)	green red	- Green on, red off: Device is ready - Green flashing, red blinking: Transmitting signal
Device status – charger connected	green red	- Green off, red on: Battery charging - Green on, red off: Battery charging complete - Red flashing, green off: Charging error
Device status – charger disconnected (Charge)	green red	- Green flashing slowly, Red off: Battery > 8 h - Red and Green flashing together (Orange blinking): Battery 1-8 h - Red flashing slowly, Green off: Battery < 1 h

7.3 CONFIGURING AND READING OUT METERS AND SYSTEM COMPONENTS

After connecting the IZAR OH BT 3 (see section 7.1), attach the IZAR OH BT 3 to the optical interface of the meter or system component. Use IZAR@MOBILE 2 (version 2.12.8 or above) to read out and configure the device. For more information, refer to the IZAR@MOBILE 2 guide.



Please note that the maximum range between the IZAR OH BT 3 and the handheld device is 10 meters. If you encounter connection issues, try reducing the distance between the handheld device and the IZAR OH BT 3.

8 MAINTENANCE

IZAR OH BT 3 does not require any special maintenance.

Do not use solvents or abrasive cleaning agents, as these may damage the plastic housing.

When needed, use a cloth or moist sponge for cleaning.

9 REGULATIONS

9.1 CONFORMITY



Simplified EU and UK Declaration of Conformity and UK PSTI Statement of Compliance

Hereby, Diehl Metering declares that the radio equipment type described in this manual is in compliance with Directive 2014/53/EU and the UK Radio Equipment Regulations 2017.



In addition to this, Diehl Metering declares that the radio equipment type described in this manual is in compliance with the UK PSTI Regulations.

The full text of the EU Declaration of Conformity and UK Declaration of Conformity and of the PSTI Statement of Compliance is available at the following internet address:

<https://www.diehl.com/metering/en/support-center/download-center/>

9.2 COUNTRY-SPECIFIC ADDITIONAL REGULATIONS

9.2.1 USA



Warning

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. this device may not cause harmful interference, and
2. this device must accept any interference received, including interference that may cause undesired operation.



Warnings concerning exposure to electromagnetic fields

This equipment complies with FCC's radiation exposure limits set forth for an uncontrolled environment under the following conditions:

1. This equipment should be installed and operated such that a minimum separation distance of 20cm is always maintained between the radiator (antenna) and user's/nearby person's body.
2. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

9.2.2 CANADA

This equipment complies with RSS102’s radiation exposure limits set forth for an uncontrolled environment under the following conditions:

- 1. This equipment should be installed and operated such that a minimum separation distance of 20cm is always maintained between the radiator (antenna) and user’s/nearby person’s body.
- 2. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada’s licence-exempt RSS(s). Operation is subject to the following two conditions:

- 1. This device may not cause interference.
- 2. This device must accept any interference, including interference that may cause undesired operation of the device.

9.3 RECYCLING



The transposed European Directives on waste batteries and waste electrical and electronic equipment supervise the actions necessary to limit the negative impact of the product end of life.

This product is subject to special collection and disposal. It should be deposited at an appropriate facility to enable recovery and recycling. For further details about recycling this product, please contact your Diehl Metering agency.

Bluetooth® is a registered trademark for Bluetooth SIG, Inc

10 OTHER RELEVANT INFORMATION



Direct Current

LI-ION

Lithium-Ion rechargeable battery

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment

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