PHYWE

| Cobra SMARTsense Code | 12953-00 |

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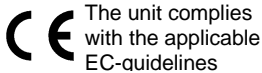
**Operating
instructions**

CE The unit complies
with the applicable
EC-guidelines

Fig. 1: 12953-00 Cobra SMARTsense Code

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1 SAFETY PRECAUTIONS

⚠ **Caution!**

- Carefully read these operating instructions completely before operating this instrument. This is necessary to avoid damage to it, as well as for user-safety.
- Only use the instrument for the purpose for which it was designed.
- Only use the instrument in dry rooms in which there is no risk of explosion.
- Protect the instrument from dust, moisture and vapours. Use a slightly moist lint-free cloth to clean the instrument. Do not use aggressive cleaning agents or solvents.
- Take care that no liquid penetrates in through the housing openings, as such penetration would result in damage to Sensor.
- Do not open the unit.

2 PURPOSE AND CHARACTERISTICS

The sensor is used to visualise (switching) statuses via LED, display, loudspeaker or relay. This enables the sensor to activate certain outputs depending on other measurement inputs (e.g. SMARTsense sensors) after defining switching thresholds.

3 FUNCTIONAL AND OPERATING ELEMENTS
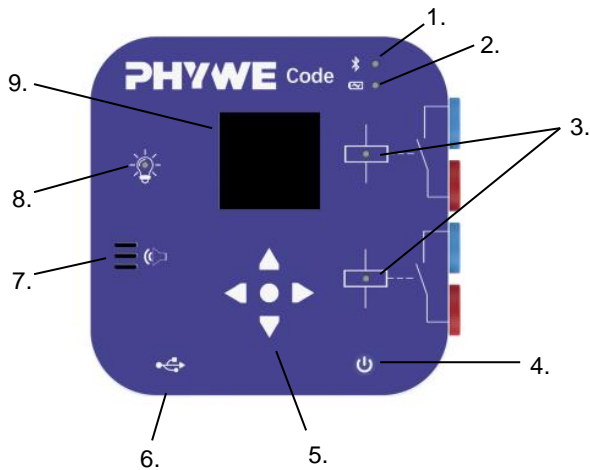
1. Bluetooth LED

Flashes red	Not connected
Flashes green every 2s	Connected to termal device
Flashes green every 4s	Measurement recording in progress

2. Charging LED

Flashes red every 2s	Low battery
Illuminated red	Charging process active
Illuminated green	Charging process completed

3. Two relays for switching loads
   A green LED indicates the switching status.

4. Switch on button
   To switch the device on and off, press the switch for longer than 3 seconds.

5. Keypad

6. USB-C connection
   For charging the internal battery and for data exchange.

7. Mini loudspeaker
   For sound output in the frequency range 10 Hz to 10 kHz

8. RGB LED display

9. Colour display 1.5" with 128x128 pixels

4 NOTES ON OPERATION

This device fulfils all of the technical requirements that are compiled in current EC guidelines. The characteristics of this product qualify it for the CE mark.
 The individual connecting leads are each not to be longer than 2 m.

The instrument can be so influenced by electrostatic charges and other electromagnetic phenomena (HF, bursts, indirect lightning discharges) that it no longer works within the given specifications. Carry out the following measures to reduce or eliminate the effect of such disturbance: Ensure potential equalization at the PC (especially with Laptops). Use screening. Do not operate high frequency emitters (e.g. radio equipment or mobile radiotelephones) in the immediate vicinity. When a total failure of the instrument occurs, unplug it and plug it back in again for a reset.

5 HANDLING

This section describes the start-up of the sensor and the recording of measurement data. Please read this section thoroughly in order to avoid failures or operating errors.

5.1 Charging process

Use a USB-C cable to connect the sensor to a computer or USB charger (not included).

During the charging process, the battery charge LED lights up red. When the charging process is complete, the battery charge LED lights up green. The charging time for a completely discharged battery is 3 hours maximum.

⚠ Disconnect the charger at the latest four hours after the completion of the charging process. Otherwise, the service life of the battery may be negatively affected.

5.2 Start-up

Switch on the sensor by pressing the power button for more than 3s. Now the Bluetooth LED flashes red. Start the software and select the sensor.

If the sensor is to be used via the USB interface, it does not need to be switched on. The sensor is connected directly to the end device using the supplied USB cable.

There is a 9-digit code on the back of the sensor (Fig.2). The last 4 digits of the code are displayed as the sensor name in the software (Fig.3). This enables the precise assignment of the sensors within the software.
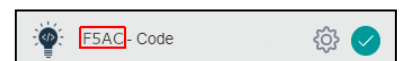

Fig. 2

Fig. 3

Selection of the sensor via the Bluetooth interface
Make sure that the Bluetooth interface is activated on the terminal device (PC/Tablet/Smartphone) and that the software is allowed to access the interface.

After the sensor has been selected in the software, the LED flashes green to indicate that the connection has been established correctly. After the sensor has been coupled with the software, the sensor is no longer visible to other users in the software, and therefore can no longer be selected.

If the sensor is switched on and not connected, it switches off automatically after 5 minutes.

Selection of the sensor via the USB interface
For this purpose the sensor must be plugged into the USB port of the end device. It is not necessary to switch on the sensor. The sensor is automatically recognized and displayed. It can be selected and connected directly.

6   TECHNICAL DATA

Operating temperature range: 5 - 40°C
Rel. humidity < 80%

Display	5" LCD
Resolution	128 x 128 pixels
Colours	65.000
Switching output	Max. 30V / 2A
Loudspeaker	
Frequency range	10 Hz ... 10kHz
Display	5" LCD
Resolution	128 x 128 pixels
Colours	65.000
Max. data transfer rate	100 Hz
Max. wireless range (open field)	30 m
Battery capacity	2000 mAh
Dimensions (width x height x depth)	100 x 100 x 30 mm
Weight	200 g

7   SCOPE OF DELIVERY

The extent of delivery is as follows
* Cobra SMARTsense Code   12953-00
* USB connecting cable type C   07935-00
* Operating instructions

8   ACCESSORIES

* Cobra SMARTlink   12999-99
* USB-Bluetooth-Adapter   07936-00
* Software measureLAB   14580-61
* Free measureApp available from supplier portals

iOS	Android	Windows

9   CONFORMITY

PHYWE Systeme GmbH & Co.KG hereby declares that the radio system type 12953-00 complies with the 2014/53/EU directive. The complete text of the EC Declaration of Conformity is available at the following Internet address:

www.phywe.com/en/ec-declaration

10 DISPOSAL

The packaging consists mainly of environmentally friendly materials that should be disposed of at local recycling centres.

Do not dispose of this product with normal household waste. If this unit needs to be disposed of, please return it to the address that is stated below for proper disposal

PHYWE Systeme GmbH & Co. KG
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11 NOTES ON BATTERY AND RECHARGEABLE BATTERY DISPOSAL

As we sell batteries and rechargeable batteries or devices containing batteries and rechargeable batteries, we are obliged under the Battery Act (BattG) to inform you of the following: Batteries and rechargeable batteries may not be disposed of with household waste, but you are legally obliged to return used batteries and rechargeable batteries. Used batteries may contain harmful substances that can damage the environment or your health if they are not stored or disposed of properly. However, batteries also contain important raw materials such as iron, zinc, manganese or nickel and are recycled. You can either send the batteries back to us after use or return them free of charge in the immediate vicinity (e.g. in shops or at municipal collection centres). Batteries or rechargeable batteries that contain harmful substances are labelled with the symbol of a crossed-out dustbin. The chemical name of the hazardous substance is located near the symbol.

Cd = rechargeable battery or battery contains cadmium

Pb = rechargeable battery or battery contains lead

Hg = rechargeable battery or battery contains mercury

Li = rechargeable battery or battery contains lithium

Ni = rechargeable battery or battery contains nickel

Zi = rechargeable battery or battery contains zinc

Mh = rechargeable battery or battery contains metal hydride