INFICON

Translation of the original operating instructions

SMART-Spray

Helium Spray Device

Catalog No.
551-050, 551-551

Iins32en-01-(2407)

From software version
1.11.0

INFICON

INFICON GmbH

Bonner Strasse 498

50968 Cologne, Germany

Table of Contents

1 About this Manual

This document applies to SMART-Spray with the specified software version see title page.

Product names may occur in the document, which are added for identification purposes only and belong to the respective owner of the rights.

1.1 Warnings

⚠ DANGER

Imminent hazard resulting in death or serious injuries

⚠ WARNING

Hazardous situation resulting in potential death or serious injuries

⚠ CAUTION

Hazardous situation resulting in minor injuries

NOTICE

Hazardous situation resulting in damage to property or the environment

1.2 Target Groups

This instruction manual is aimed at the operator of the device, at technically qualified specialists, and trained personnel.

2 Safety

2.1 Intended use

The device is a mobile helium spraying device. This allows you to apply helium to a test specimen from the outside and in the event of a leak, this is displayed.

- Only operate the device as intended, as described in the operating instructions, in order to avoid hazards due to incorrect use.
- Comply with application limits, see "Technical Data".

Incorrect usage

Avoid the following unintended uses:

- Use outside the technical specifications, see "Technical Specifications"
- Use of non-original INFICON batteries/rechargeable batteries
- Pushing body parts with the tip of the device
- Use with non-INFICON leak detectors
- Inhalation of test gas
- Use of the device in case of recognizable defects
- Use in radioactive areas
- Pressure cans that are not intended for use with the SMART-Spray. Pressure cans that have been filled with too high a pressure (> 6 bar relativ) or have a direct gas supply instead of a pressure can.
- Using the device without using the lanyard or with a defective lanyard.
- Use of gases other than helium (oxidizing, flammable, toxic, explosive) or helium concentrations other than those specified.
- Spraying gas in the direction of the face, ear or eye.
- Storage and use of the device in hot environments (surfaces, sunlight....)
- Use of accessories or spare parts, which are not included in this instruction manual
- Filling of unauthorized containers (cans, balloons, gloves, ...)
- Fascia panels with integrated lighting
- Flushing (e.g. for cleaning) with liquids or gases via the gas connection
- Permanent switching (e.g. with clamping device, cable tie) of the actuation
- Using the device in potentially explosive atmospheres
- Placing the device in a location where strong electromagnetic fields from third-party equipment may affect the measuring results.
- Connection of dangerous electrical voltages to the device interfaces

- Use via Bluetooth with unauthorised devices or non-original INFICON Bluetooth devices.

- Use of the device in the vicinity of dangerous electrical voltages

- Note: To avoid possible radio interference, do not operate the device in living areas.

- Using the device in places with strong electromagnetic fields from third-party devices could affect the Bluetooth connection

- Use via Bluetooth with unauthorised devices or non-original INFICON Bluetooth devices.

2.2 Duties of the Operator

- Read, observe, and follow the information in this manual and in the work instructions provided by the owner. This concerns in particular the safety and warning instructions.

- Always observe the complete operating instructions for all work.

- If you have any questions about operation or maintenance that are not answered in this operating instructions, contact INFICON service.

2.3 Owner Requirements

The following notes are for companies or any person who is responsible for the safety and effective use of the product by the user, employees or third parties.

Safety-conscious operation

- Operate the device only if it is in perfect technical condition and has no damage.

- Only operate the device properly in accordance with this instruction manual, in a safety and risk conscious manner.

- Adhere to the following regulations and observe their compliance:

  – Intended use

  – Universally valid safety and accident prevention regulations

  – International, national and local standards and guidelines

  – Additional device-related provisions and regulations

- Only use original parts or parts approved by the manufacturer.

- Keep this instruction manual available on site.

Personnel qualifications

- Only instructed personnel should be permitted to work with and on the device. The instructed personnel must have received training on the device.

- Make sure that authorized personnel have read and understood the instruction manual and all other applicable documents.

2.4 Dangers

The measuring instrument was built according to the state-of-the-art and the recognized safety regulations. Nevertheless, improper use may result in risk to life and limb on the part of the user or third parties, or damage to the unit or other property may occur.

3 Scope of Delivery, Transport, Storage

Item number 551-050	Quantity
SMART-Spray	1
Digital operating instructions, to download as PDF from www.inficon.com	1
Charging cable	1
Battery	1
Hand strap	1
IFCBT-Dongle	1
HeliCan Helium container 50 ml	2
Adapter set IFCBT-Dongle, consisting of mounting holder and adapter for IFCBT-Dongle	1

or optionally

Item number 551-051	Quantity
SMART-Spray	1
Digital operating instructions, to download as PDF from www.inficon.com	1
Charging cable	1
Battery	1
Hand strap	1

► Check the scope of delivery of the product for completeness after receipt.

Transport

> **NOTICE**
>
> **Damage caused by transport**
>
> Transport in unsuitable packaging material can damage the device.
>
> ► Keep the original packaging.
>
> ► Only transport the device in its original packaging.
>
> ► Remove the screwed-in HeliCan before transport.

Storage

Always store the device in compliance with the technical data, see Technical Data [▷ 14].

Only store and transport the appliance without the HeliCan screwed in.

4 Description

4.1 Function

In vacuum leak detection, gas is pumped out of a test specimen and fed to the leak detector.

With the SMART-Spray, a preset amount of helium can be sprayed onto the outside of the test block. If helium is then detected in the leak tester, this means that the test specimen is leaking. The amount of helium from the SMART-Spray is sufficient to detect a leak without unnecessarily contaminating the test object with helium. As a result, the helium background is degraded more quickly and the next test point can be tested more quickly.

The SMART-Spray can also be used as a remote control for various functions on the UL device.

The measurement of the leak detector can be transmitted simultaneously to the SMART-Spray via Bluetooth. This function is currently available in INFICON UL series leak detectors.

4.2 Device structure of the SMART-Spray

Fig. 1: SMART-Spray Side view

1	HeliCan Helium container	5	Handle
2	USB-C port with cap	6	Battery case
3	Spray tip	7	Hand strap
4	Push button		

The following information can be read on the display:

- Measured leak rate on the leak detector

- Battery charge

- Number of remaining sprays

- Qmax (maximum measured leakage rate)

- Set spray shot size

- Fill level of the HeliCan.

- Leak detector status (runup / standby / purge)

- Signal strength of the Bluetooth signal

LEDs on the top of the device provide an optical display:

- for the active spray blast with helium

- for the leakage rate

- Error message

- In charging mode, also the charge status of the batteries

The following buttons are located on the control panel for operation:

- Nach oben scrollen $\wedge$

- Scroll downwards

- ON-Power off/Back button

- Confirmation button / Zero_Set

Fig. 2: SMART-Spray Top View

1	Spray tip	5	HeliCan
2	USB-C port	6	Leak rate display LED
3	Display	7	Status indicator (LED)
4	Control panel		

4.2.1 Display /Control Unit

Fig. 3: Display

1	Available sprays	7	Highest measured leakage rate since activation
2	Set spray shot size	8	Zero / Set
3	Fill level HeliCan	9	∧
4	Bluetooth signal strength	10	∨
5	Battery level	11	Switch on / off / back
6	Leak rate		

4.3 Technical Data

4.3.1 Mechanical data

	551-051
Dimensions (W x H x D)	10 x 40 x 20 cm
Weight with HeliCan 50ml	approx. 540 gr
Weight with HeliCan 405ml	approx. 580 gr

4.3.2 Ambient conditions

	551-051
Permissible ambient temperature (during operation)	10 °C to 40 °C
Permissible storage temperature	-10 °C to 60 °C
Minimum humidity (in operation)	> 30%
Max. relative humidity up to 31°C	80 %
Max. relative humidity from 31°C to 40°C	Decreasing on linear basis from 80% to 50%
Max. relative humidity above 40°C	50 %
Relative humidity during storage and transport	Minimum 10% Maximum 90%
Pollution degree	2
Max. altitude above sea level	2000 m
Degree of cleanliness of the operating environment (clean room or clean room class)	ISO CLASS 6

4.3.3 Electrical data

	551-051
Name	SMART-Spray
Current	600mA
Voltage	3.63 V DC ±10 %
Electronic interfaces	USB-C, Bluetooth
Radio Technology	Bluetooth
Frequency Range	2400 - 2483.5 MHz
RF Output Power (dBm)	8 dBm (< 20 dBm)
USB-C charging voltage	5 V DC ±10 %

	551-060
Name	IFCBT-Dongle
Current	60mA
Voltage	5- 24 V DC ±10%
Electronic interfaces	RS232, Bluetooth
Radio Technology	Bluetooth
Frequency Range	2400 - 2483.5 MHz
RF Output Power (dBm)	8 dBm (< 20 dBm)

4.4 Factory Settings

If you reset the SMART-Spray to the factory setting, the connection to the leak detector is interrupted and is used settings and the daily spray burst counter values are reset.

Dispense Time	1.6 seconds
Flow rate	S
Sound Type	LOW
Vibration Type	on
Canister Type	50 ml

5 Installation

⚠ **DANGER**
Risk of death from electric shock
If a spray tip with defective insulation comes into contact with live parts, there is a danger to life.
► Only use spray tips with undamaged insulation.
► Do not touch any live parts with the device.
► Do not use the device near dangerous electrical voltages.

⚠ **WARNING**
Risk of injury from explosion due to blocked or dirty ventilation slots
► Keep the ventilation slots clear.
► Clean the ventilation slots regularly,

⚠ **CAUTION**
Risk of injury due to heat
The device can be damaged or deformed by heat.
► Do not use the appliance near hot surfaces.

⚠ **CAUTION**
Risk of injury due to improper installation of accessories
► Check that the spray tip is firmly seated.
► Check that the HeliCan is firmly seated.
► Check that the battery compartment is properly closed.

⚠ **CAUTION**
Risk of injury or damage to the SMART-Spray due to falling
► Always use the hand strap when carrying the device.
► Only place the device on the battery compartment on a level, stable and vibration-free surface.
► Make sure that the device cannot be knocked over.

5.1 Install the SMART-Spray and charge the battery

5.1.1 Install the spray tip

> ⚠ **WARNING**
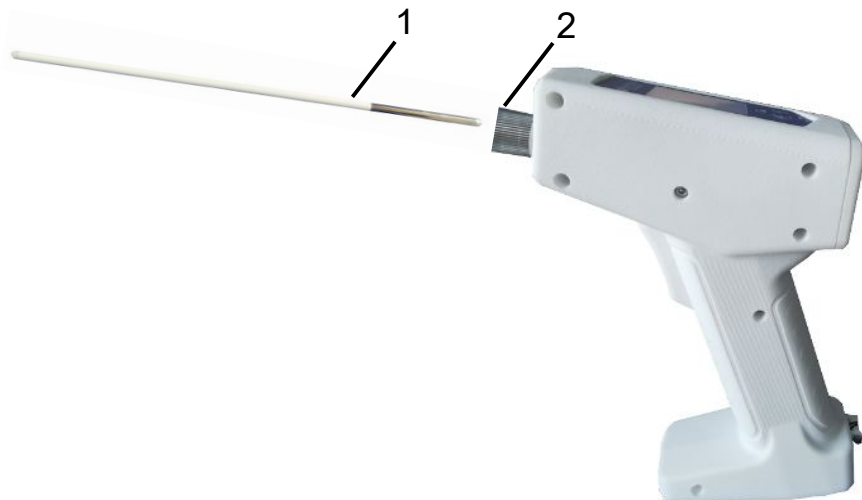>
> **Injury due to improper handling**
>
> Injury caused by the spray tip
>
> ► Never point the spray tip at parts of the body, such as the eyes.
>
> ► Never spray helium on other people.
>
> ► Lower the spray tip during transportation.

> **NOTICE**
>
> **Escaping helium due to improper attachment of the spray tip**
>
> ► Mount the spray tip properly on the device.

| 1 | Spray tip |
| 2 | Captive knurled nut |

✓ Spray tip available

✓ SMART-Spray availible

   1 Loosen the captive knurled nut

   2 Position the spray tip correctly and insert the spray tip with light pressure as far as it will go.

   3 Tighten the captive knurled nut hand-tight and check that the spray tip is properly secured by pulling gently.

⇨   You have fitted the spray tip.

⇨   You have fitted the spray tip.

5.1.2 Screw in HeliCan

⚠ **DANGER**

Health hazard due to escaping gas

► Only use helium, no other gases.

► Visually inspect SMART-Spray and HeliCan for damage.

⚠ **WARNING**

Danger due to incorrectly dimensioned cartridge

Explosion of the HeliCan or damage to the device due to incorrect or improperly filled helium containers

► Only use Only use HeliCan helium containers from INFICON.

► Only use HeliCan that are filled with helium.

► Only use HeliCan that are filled to a maximum pressure of 6 bar.

► Screw in the HeliCan helium container hand-tight.
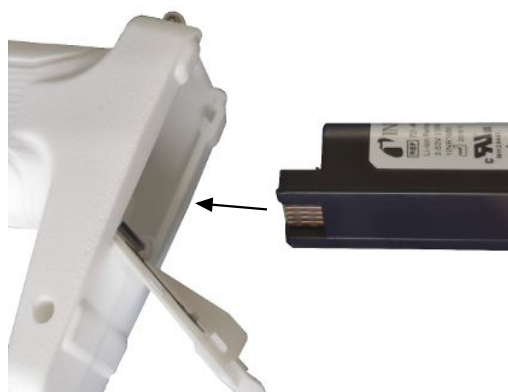
5.1.3 Insert battery

⚠ **WARNING**

Risk of injury due to a damaged battery or a battery that does not come from INFICON

No or faulty function of the SMART-Spray

► Only use rechargeable batteries that come from INFICON and are undamaged.

5.1.4 Charging the battery

⚠ CAUTION

Injury or damage

Injury due to electric shock or damage to the SMART-Spray due to incorrect or damaged accessories.

► Only use chargers, charging cables and batteries that come from INFICON and are undamaged.

NOTICE

Malfunction due to incorrect USB cable

► Observe the specified cable length; cable lengths must not be exceeded.

► Cable length maximum 3 meters

Charging the battery via USB-C

1 Remove the protective cap on the USB-C port.

2 Plug the supplied charging cable into the USB-C port, see "Device structure of the SMART-Spray [▷ 11]".

3 When you have fully charged the battery, unplug the charging cable from the USB-C port.

4 Replace the protective cap.

  ⇨ Battery is charged

Charging the battery in the charger

The charger is not included in the scope of delivery (can be ordered optionally, article number 551-080).

Only use INFICON chargers.

Place the battery in the charger and connect the charger to a charging socket via the USB interface.

5.2 Fastening attachments to the leak detector

To use the full efficiency of SMART-Spray, connect SMART-Spray to the leak detector as described.

You will then see the measured leak rate on the display of the leak detector and the display of the SMART-Spray at the same time.

5.2.1 Mount the IFCBT-dongle on the leak detector

5.2.1.1 Attach-mounting bracket, adapter for IFCBT-dongle and IFCBT-dongle to UL3000 / UL6000

UL3000 / UL6000

Mounting bracket SET
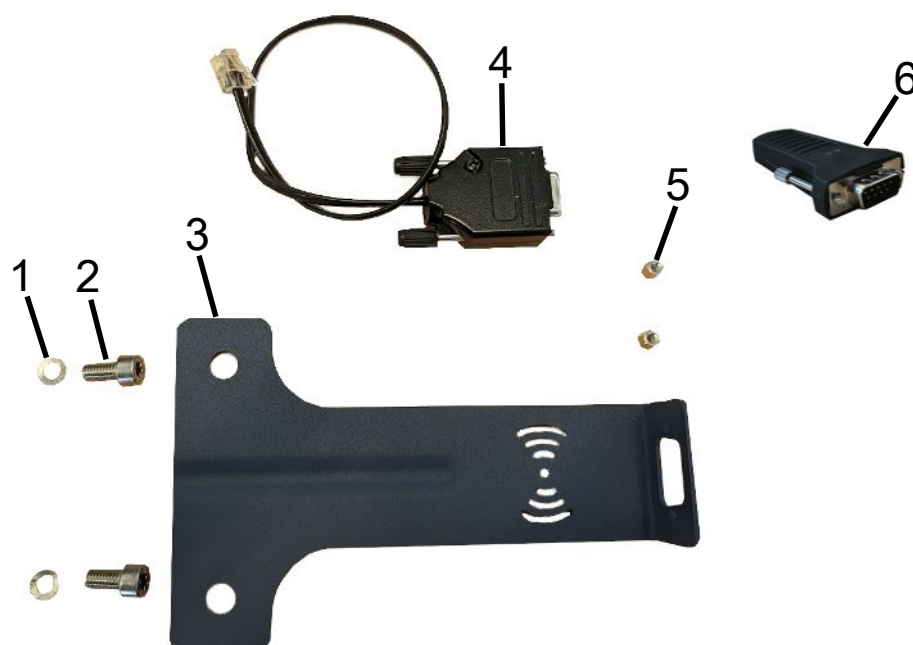
1	Serrated lock washer
2	Mounting screws
3	Mounting bracket UL3000 / UL 6000
4	IFCBT-Dongle adapter (maximum cable length 3 m)
5	Fastening nut
6	IFCBT-Dongle

NOTICE

Damage to the adapter cable

Damage to the adapter cable due to kinking or crushing

► During installation, ensure that the cables are laid correctly without kinking or crushing them.

Procedure

✓ UL3000 / UL6000 device, mounting bracket set and IFCBT-Dongle are available.

1 Position the IFCBT-Dongle adapter on the mounting bracket and tighten the fastening nuts. For alternative mounting with the angle adapter on the UL6000, see "Mounting the IFCBT dongle on the UL6000 with the angle adapter".For alternative mounting with the angle adapter on the UL6000, see "Mount the IFCBT-dongle on the UL6000 using the angle adapter [▶ 25]".

2 Position the mounting bracket with serrated lock washers and fastening nut on the UL device and tighten the fastening screws.

3 Plug the IFCBT-Dongle onto the IFCBT-Dongle adapter and tighten the IFCBT-Dongle fastening screws.

4 Insert the plug of the IFCBT-Dongle adapter into the "Remote Control" interface on the UL device.
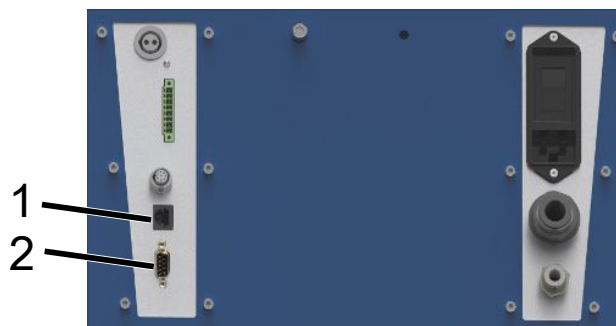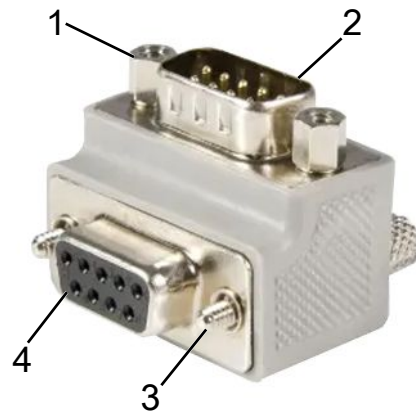
1	Remote Control
2	RS232

Mounting bracket with adapter IFCBT-Dongle and IFCBT-Dongleis attached and connected to the UL3000 / UL6000 device.

5.2.1.2 Mount the IFCBT-dongle on the UL6000 using the angle adapter

To make it easier to install the IFCBT-Dongle, use the angle adapter.

Only use the angle adapter on the UL6000.

| 1	Mounting nut for IFCBT-Dongle
2	Interface IFCBT-Dongle
3	Fastening screw for UL6000
4	Interface RS232 UL6000

✓ UL6000 device, angle adapter and IFCBT-Dongle are available.

   1 Position the angle adapter on the UL6000 at the RS232 interface and tighten the fastening screws.

   2 Position the IFCBT-Dongle on the angle adapter and tighten the fastening screws of the IFCBT-Dongle to the fastening nuts of the angle adapter.

   ⇨ Angle adapter and IFCBT-Dongle are attached to the UL6000.

5.2.1.3 Mounting the IFCBT-dongle on the UL1000 / UL5000
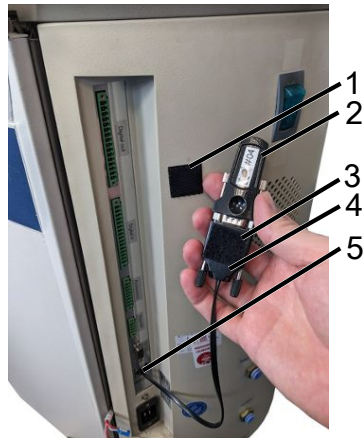
1	Adhesive pad
2	IFCBT-Dongle
3	Adhesive pad
4	BT adapter
5	Interface

✓ Adhesive pads, IFCBT-Dongle and BT adapter are available

1. Screw the IFCBT-Dongle onto the BT adapter.

2. Stick one side of the adhesive pad to the BT adapter and the other side to the UL 1000 / UL 5000.

3. Glue the BT adapter to the UL1000 / UL5000.

⇨ BT adapter with IFCBT-Dongle attached to the UL1000 / UL5000 and connected.

5.2.1.4 IFCBT dongle in operation

1	Service buttons	4	Mounting screws
2	Green LED	5	SUB-D interface
3	Orange LED	6	Mounting screw

When a Bluetooth connection is established, the green and orange LEDs light up continuously.

If there is no connection, the LED flashes green.

The service buttons may only be used by INFICON employees or trained personnel.

Further information can be found in the IFCBT-Dongle operating instructions.

6 Setting the SMART-spray and leak tester

> ⚠ **WARNING**
>
> **Health hazard due to escaping helium**
>
> Risk of suffocation and/or fainting due to escaping helium
>
> ► Only use the appliance in well-ventilated rooms.
>
> ► Only use helium, no other gases.
>
> > ⇨ To the optionally available INFICON filling station:
>
> ► Filling of HeliCan by means of filling station only with HeliCan firmly screwed in.
>
> ► Check all components for damage.
>
> ► Stop the filling process at HeliCan immediately if there is a leak.
>
> ► Stop the filling process after 15 seconds at the latest.
>
> ► Always remove HeliCan completely from the SMART-Spray if you want to detach HeliCan.

Material damage due to electromagnetic magnetic fields

Valves can open and HeliCan empties.

► Never use the device in locations with strong magnetic fields

> **NOTICE**
>
> **Material damage due to ESD discharge**
>
> Damage caused by working in areas with a high risk of ESD discharge
>
> ► Observe the ESD protective measures.

6.1 Switching on

► Press the on/off switch. THE SMART-Spray starts.

The start screen appears.

6.2 Menu

Press the button ⌄ to access the menu, see "Display /Control Unit".

The following menu items are available:

Menu	Name	Description
1	Refresh Qmax	Change Qmax (*)
2	Scan for leak detector	Scanning for leak detectors
3	Start/Stop LD	Start/stop leak detector (*)
4	Show Leak Graph	Display leak diagram or leak rate
5	Set HeliCan Type	Select HeliCan (50 ml / 405 ml)
6	Set Vibration On	Switch on the vibration alarm
7	Set Sound Type	Setting the volume of the SMART-Spray.
8	Set Alarm Level	Set Alarm Level
9	Set Dispense Time	Setting the spraying time
10	Set Fill Pressure	Set Fill Pressure
11	Turn Illumination on	Front LED light on/off
12	Set Flow Rate	Select the flow rate setting (s, m ,l ,xl)
13	Spray Shots info	Available sprays
14	Certificates	Certificates
15	Factory Reset	Reset to factory settings
16	About device	About the device

(*) only if the leak detector is connected to the SMART-Spray via Bluetooth.

6.3 Connect with leak detector

**Preparations on the leak tester**

Set the connection to SMART-Spray on the display of the leak detector under the following menu item, if this is not already preset.

1 ⚙ > Setup > Accessories > Device selection

2 Save ⤓.

Connect the SMART-Spray to an available UL series device via Bluetooth. To do this, the Bluetooth dongle must be connected to the interface on the UL device using the appropriate adapter, see "Mount the IFCBT-dongle on the leak detector [▷ 22]".

Connect device to UL series

Select the UL device shown in the SMART-Spray display. SMART-Spray then automatically connects to the UL device.
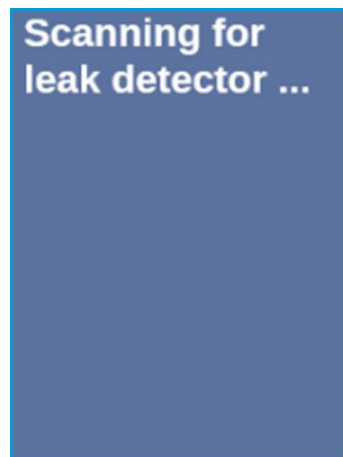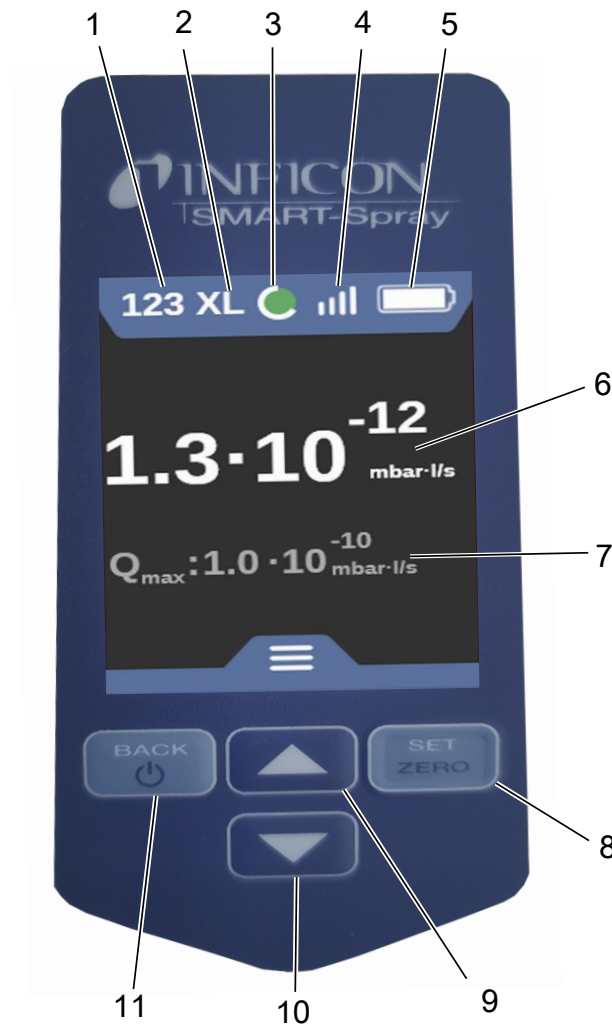

SMART-Spray is connected

ℹ **The software version of your UL series device must be 1.42 or higher.**

If you are unable to establish communication with the UL3000/6000 using the SMART-Spray, please check the version of the basic device software. It must be at least V1.42 or higher.

If you require a software update, please contact INFICON customer service

---

Display

| 1	Available sprays	7	Highest measured leakage rate since activation
2	Set spray size	8	Zero / Set
3	Fill level HeliCan	9	∧
4	Bluetooth signal strength	10	∨
5	Battery level	11	Switch on / off / back
6	Leak rate		

The signal from the pressure sensor P1 in the SMART-Spray is not shown on the display of the SMART-Spray but only on the display of the leak detector. To set the starting pressure of a newly screwed-in HeliCan or to change the preset starting pressure, the pressure value must be read on the leak detector display and set on the SMART-Spray before spraying begins.

The display of the <variable linkid="2328202252" name="1128">SMART_Spray</variable> provides information about the fill level of the connected <variable linkid="2328202252" name="1141">HeliCan_</variable> or the number of remaining

sprays, or the remaining spraying time, taking into account the manually set start pressure and the internal counter, without accessing the measuring signal of the pressure sensor P1.

6.4 Select flow rate

1   Use the arrow key ∨ to go to the Select Flow Rate see, "Display /Control Unit [▷ 13]".

2   Select the helium flow rate for the 405 ml HeliCan.

S = approx 5 - 10 sccm

M = approx 55 - 65 sccm

L = approx 230 -260 sccm

XL = approx 1000 - 1300 sccm

3   Select the helium flow rate for the 50 ml HeliCan.

S = approx 5 - 10 sccm

M = approx 55 - 65 sccm

L = approx 1000 1300 sccm

4   Confirm the selected helium flow rate with the Zero / Set button.
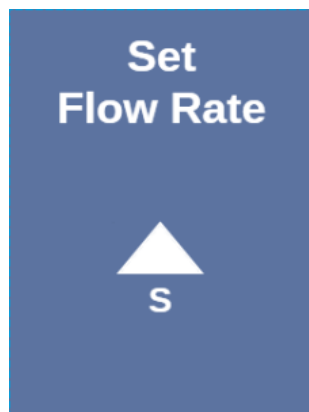
5   To change the flow rate during operation, press the button ∧.

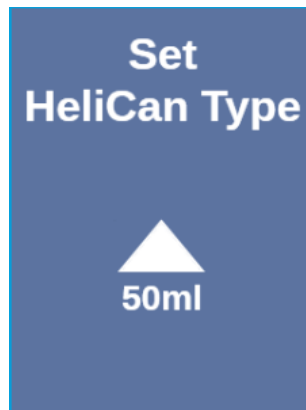**6**   Exit the menu with the Back button.

To achieve the greatest possible savings in helium, always select the lowest possible flow rate.

If you are spraying helium over a small area and with pinpoint accuracy, we recommend selecting the S or M setting.

If you are spraying helium over a large area, we recommend selecting the L or XL setting.

6.5 Select HeliCan volume

1   Use the arrow key button ∨ to go to the Select Canister Type menu, see, "Display /Control Unit [▷ 13]".

2   Select the HeliCan:
     - HeliCan 50 ml
     - HeliCan 405 ml

3   Confirm the selected HeliCan with the Zero / Set button.

4   Exit the menu with the Back button.

6.6 Switching the LED work light on and off

⚠ **CAUTION**

Glare from LED work light

Short-term impairment of the eye

► Do not look directly into the LED work light or dazzle third parties with it.

1   Select "Turn Illumination on" in the menu.

2   Select "on" for LED work light.

3   Select "off" for LED work light.

4   Exit the menu with the Back button.

6.7 Switching the vibration alarm on and off

⚠ **CAUTION**

Risk of injury due to use of the vibration alarm

Danger of being startled when the vibration alarm starts

Always carry the SMART-Spray in the hand strap.

1   Use the arrow button ∨ to go to the "Set Vibration On" menu item.

2   Select "On" for the vibration alarm.

3   Select "Off" for the vibration alarm.

4   Exit the menu with the Back button.

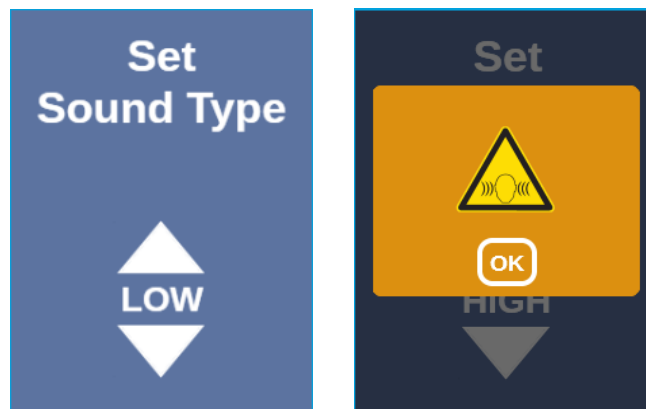## 6.8 Setting the volume of the SMART-Spray

⚠ **CAUTION**

Damage to hearing due to loud audio

The alarm level of the device can exceed 85 dB (A).

► Set the volume up to a maximum of "5".

► Use suitable hearing protection at set volumes above "5".

1   Use the arrow button ∨ to go to the Set Sound Type menu item.

2   Select the volume and confirm the selected volume with the Zero / Set.

3   Exit the menu with the Back button.

6.9 Set Alarm Level

1 Use the arrow key button ∨ to go to the Set Alarm Level menu, see "Display / Control Unit [▶ 13]".

2 Select the Alarm level and confirm the selected volume with the Zero / Set.

3 Exit the menu with the Back button.

6.10 Set Fill Pressure

1 Use the arrow key button ∨ to go to the Set Fill Pressure menu, see "Display / Control Unit [▶ 13]".

2 Select filling pressure and confirm the selected Fill pressure with the Zero / Set.
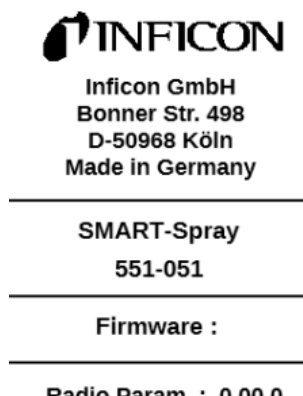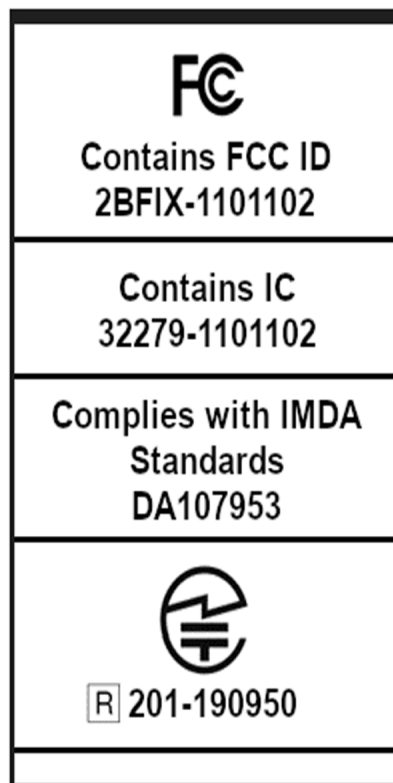
3 Exit the menu with the Back button.

The filling pressure can also be read on the UL device, see "Operating instructions for UL devices".

6.11 Miscellaneous

6.11.1 Call up electronic label

1 Use the button ∨ to go to the Certificates menu, see "Display /Control Unit [▶ 13]".

2   Confirm with the Zero / Set button.

3   Use the ⋀ and ⋁ keys to scroll.

4   Exit the menu with the Back button.

6.11.2 About the device

Here you will find information on the serial number and configuration.

1   Use the button ⋁ to go to the About Device menu, see "Display /Control Unit [▷ 13]".

2   Confirm with the Zero / Set button.

3   Exit the menu with the Back button.

6.11.3 LED status display

1	Status display
2	Leakage indicator / battery level when charging via USB

6.12 Switch off

Press the on/off switch. The SMART-Spray switches itself off.

7 SMART-spray in measuring mode

Also refer to the operating instructions of the respective sniffer leak detector.

7.1 Starting and stopping the UL-device

(i) **SMART-Spray must be connected to a UL series device via IFCBT-Dongle.**

    1   To start the UL series device, select "Start" in the menu.

    2   To start the UL series device, select "Stop" in the menu.

7.2 Carry out leak detection

SMART-Spray is switched on and connected to the UL series device and all parameters are set, see "Installation [▶ 16]".

(i) **The threshold value is set on the UL series device.**

    ► Spray helium by pressing the pushbutton on the SMART-Spray at the point to be tested on the test specimen. The set spray burst is triggered. The status light on the SMART-Spray lights up green when the spray is carried out correctly.

        ⇨ Leakage can be read on the display of the SMART-Spray and on the display of the UL series device.

        ⇨ The leakage is also indicated by an LED on the SMART-Spray.

    • Green LEDs = test specimen is OK.

    • Yellow LEDs = test body shows leak within tolerance.

    • Red LEDs = test body shows leak outside tolerance.

7.3 Use the Zero function

Why should I use ZERO?

The ZERO function should be used to measure small leaks more clearly.

With every leak test, there is a "background signal" that interferes with the search for or measurement of leaks.

    • To hide the background signal, activate the ZERO function.

    • You can also use ZERO to hide a currently displayed leakage, which interferes with searches for other or even smaller leaks.

	A currently displayed leak is ZERO hidden through ZERO.
(i)	By using the function ZERO not only is the background signal hidden, but also the representation of a current leak.
	► If you want to avoid this, only activate the ZERO function if a leak is not being measured at the same time.

Switch ZERO on	Briefly press the Zero / Set button on the control panel and ZERO is performed.
Switch ZERO off.	Press the Zero / Set button on the control panel for longer than 2 seconds and ZERO is deactivated.

8 Cleaning, maintenance and filling with helium

⚠ **WARNING**

Injury due to improper handling of liquids

Damage or explosion of the appliance due to cleaning with liquids

► Only clean the appliance with a dry or slightly damp cloth.

⚠ **WARNING**

Injury due to explosion or damage

Injury due to explosion of the HeliCan

► Before cleaning or maintenance, remove the HeliCan.

8.1 Replace spray tip

⚠ **WARNING**

Injury due to improper handling

Injury caused by the spray tip

► Never point the spray tip at parts of the body, such as the eyes or other parts of the body.

► Never spray helium on other people.

► Lower the spray tip during transportation.

ⓘ **Material damage due to escaping helium caused by improper attachment of the spray tip**

► Attach the spray tip properly.

Replace spray tip

1 Loosen the captive knurled nut

2 Pull out the spray tip.

3 Position the spray tip correctly and insert the spray tip with light pressure as far as it will go.

4 Tighten the captive knurled nut hand-tight and check that the spray tip is properly secured by pulling gently.

⇨ You have fitted the spray tip.

8.2 Exchange HeliCan

> ⚠ **CAUTION**
>
> **Health hazard due to escaping helium**
>
> Risk of suffocation and/or fainting
>
> ► Only use the appliance in well-ventilated rooms.
>
> ► Screw in the HeliCan hand-tight.
>
> ► Only use helium, no other gases.
>
> ► Check all components for damage.

 1   Loosen the HeliCan and remove it.

 2   Position the new helium container correctly and tighten it hand-tight.

 ⇨   HeliCan is fitted.

8.3 Filling the HeliCan via the filling station

> ⚠ **DANGER**
>
> **Danger from escaping helium or excessive pressure during filling.**
>
> Only fill the HeliCan with the INFICON filling station.

For handling the INFICON filling station, please refer to the INFICON filling station operating instructions.

9 Zertifikate

9.1 CE Declaration of Conformity

INFICON

CE

EU Declaration of Conformity

We – INFICON GmbH - herewith declare that the products defined below meet the basic requirements regarding safety and health and relevant provisions of the relevant EU Directives by design, type and the versions which are brought into circulation by us. This declaration of conformity is issued under the sole responsibility of INFICON GmbH.

In case of any products changes made, this declaration will be void.

Designation of the product:

Helium Spray Device

Models: **SMART-Spray**

Catalogue number: 551-051

The products meet the requirements of the following Directives:

- *Directive 2014/53/EU (RED)*

- *Directive 2011/65/EU (RoHS)*

Applied harmonized standards:

- *EN 300 328 V2.2.2*
- *EN 301 489-1 V2.2.3*
- *EN 301 489-17 V3.2.4*
- *EN 55032:2015*
- *EN 61326-1:2013*
- *EN ISO 61326-1:2021*
- *EN 55011:2021*
- *EN 62479:2010*
- *EN ISO 61010-1: 2020-03*
- *EN IEC 63000:2018*

The notified body TUV Rheinland LGA Products GmbH, NB No.: 0197
performed an EU-type examination and issued the EU-type examination certificate: RT 60175556 0001

Cologne, May 7th, 2024

p.p.
Dr. H. Bruhns, Vice President LDT

Cologne, May 7th, 2024

pro
W. Schneider, Research and Development

INFICON GmbH
Bonner Strasse 498
D-50968 Cologne
Tel.: +49 (0)221 56788-0
Fax: +49 (0)221 56788-90
www.inficon.com
E-mail: leakdetection@inficon.com

INFICON

CE

EU Declaration of Conformity

We – INFICON GmbH - herewith declare that the products defined below meet the basic requirements regarding safety and health and relevant provisions of the relevant EU Directives by design, type and the versions which are brought into circulation by us. This declaration of conformity is issued under the sole responsibility of INFICON GmbH.

In case of any products changes made, this declaration will be void.

Designation of the product:

Bluetooth-Dongle

Models: **IFCBT-Dongle**

Catalogue number: 551-060

The products meet the requirements of the following Directives:

- *Directive 2014/53/EU (RED)*

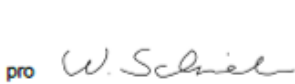- *Directive 2011/65/EU (RoHS)*

Applied harmonized standards:

- *EN 300 328 V2.2.2*
- *EN 301 489-1 V2.2.3*
- *EN 301 489-17 V3.2.4*
- *EN 55032:2015*
- *EN 61326-1:2013*
- *EN ISO 61326-1:2021*
- *EN 55011:2021*
- *EN 62479:2010*
- *EN ISO 61010-1: 2020-03*
- *EN IEC 63000:2018*

The notified body TUV Rheinland LGA Products GmbH, NB No.: 0197
performed an EU-type examination and issued the EU-type examination certificate: RT 60175557 0001

Cologne, May 7th, 2024

p.p. Dr. H. Bruhns, Vice President LDT

Cologne, May 7th, 2024

pro W. Schneider, Research and Development

INFICON GmbH
Bonner Strasse 498
D-50968 Cologne
Tel.: +49 (0)221 56788-0
Fax: +49 (0)221 56788-90
www.inficon.com
E-mail: leakdetection@inficon.com

9.2 Radio certificates for SMART-Spray

Important notice FCC:

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

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.

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.

FC

Contains FCC ID: 2BFIX-1101102

Important notice ISED:

This device complies with Industry Canada licence-exempt RSS standard(s).

Operation is subject to the following two conditions:
(1) this device may not cause interference, and
(2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement."

This equipment complies with Industry Canada radiation exposure limits set forth for an uncontrolled environment.

Cet équipement est conforme à l'exposition aux rayonnements Industry Canada limites établies pour un environnement non contrôlé.

Contains IC: 32279-1101102

ARIB Declaration of conformity
Japanese Radio Law Compliance.
This device is granted pursuant to the Japanese Radio Law.
This device should not be modified (otherwise the granted designation number will become invalid)

R 201-190950

Important notice Singapore:

Complies with
IMDA Standards
DA107953

10 Accessories

The following parts can be ordered as accessories

SMART-Spray	551-051
IFCBT-Dongle	551-060
IFCBT-Dongle adapter set for UL series	551-061
Flexible spray tip	551-064
Empty HeliCan 50 ml	551-065
Empty HeliCan 405 ml	551-066
HeliCan 50 ml 6 bar	551-067
HeliCan 405 ml 6 bar	551-068
HeliCan 405 ml 2.9 bar	551-068A
Empty case	551-069
Refilling station for HeliCan	551-070
Filling adapter for spray tip	551-071
Flow-Check	551-072
Protective cover SMART-Spray	551-073
Battery charger	551-080
Battery	551-085
Battery with charger	551-081
I•BOOST	551-600
Spray tip	200013575

INFICON Inspired by visions. Proven by success.