WÖHLER

**Operating manual
Smart Inspection Camera** EN

Wöhler SI 400

Contents

1 General information

1.1 Information on the operating instructions

These operating instructions enable you to operate the Wöhler SI 400 smart inspection camera safely. Please keep these operating instructions in a safe place for future reference.

The Wöhler SI 400 may only be used by qualified personnel for the intended purpose.

We accept no liability for damage caused by failure to observe these operating instructions.

1.2 Notes in the operating instructions

> **! ATTENTION!**
> Indicates hazards which could result in damage to the appliance or objects.

> ☞ *NOTE!*
> *Highlights tips and other useful information.*

1.3   **Intended use**

The Wöhler SI 400 smart inspection camera is suitable for HD inspection of flues and pipes from a diameter of 60 mm and for inspecting chimneys

> **⚠ ATTENTION!**
>
> In exhaust systems Ø 60 mm, we strongly recommend using the stabilising ball (item no. 3634). Otherwise, the Wöhler SI 400 may tilt when it is pulled back into the pipe.

1.4   **Basic equipment**

Device	Scope of delivery
Wöhler SI 400	Wöhler SI 400 camera (upper and lower part)
	32 GB SD memory card
	Protective bag
	USB stick for recording the SD card
	Dome protection with cutout
	Stabilizing sphere

1.5   **Waste disposal**

Electronic devices must not be disposed with household waste, but must be disposed of in accordance with the applicable environmental regulations.

Damaged batteries are considered hazardous waste and must be taken to the designated collection points for disposal.

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1.6	Address	**Wöhler Technik GmbH**

2 Warnings

> ⚠️ **ATTENTION!**
> Only use the videoscope within the specified temperature range.

> ⚠️ **ATTENTION!**
> Before each camera run, make sure that the camera base, the black deflection piece and the connection to the rod are properly screwed together.

> ⚠️ **ATTENTION!**
> Keep the videoscope clean and dry. In particular, ensure that the camera glass is not scratched.

> ⚠️ **ATTENTION!**
> Never open the device housing. Device parts or the battery may only be replaced at the factory.

> ⚠️ **ATTENTION!**
> Only use a 5 V charger to charge the battery.

> ⚠️ **ATTENTION!**
> The camera should preferably be used facing forwards. When inspecting from the rear, carefully push the camera through the exhaust pipe or tube.

3   Specification

Description of the	Specification
Image display	On a mobile device
Image transmission	Via the device's internal WLAN in the app
WLAN connection	Up to 6 m The camera records even if the WLAN connection is lost.
Storage option	32 GB Mini SD card or on a mobile device via Smart Inspection App
Video recording time	Max. 10 minutes
Power supply	Lithium-ion battery 2200 mAh, 3.7 V
Battery runtime	180 minutes
Battery charging time	3 hrs.
Lighting	8 LEDs
file format	Picture: jpg
	Video: avi
Protection class	IP 67
Working temperature	0 - 45 °C
Dimensions	Ø 40 mm
Weight (upper and lower part)	116 g
Push rod connection	M 5 M10 with adapter

4 Functionality

The Wöhler SI 400 sets up its own Wi-Fi network, via which it transmits images and videos in HD quality to the Wöhler Smart Inspection app. The user can download the app to a mobile device free of charge.

Any Wöhler rod with an M5 thread (or M10 thread via adapter) can be screwed onto the housing of the Wöhler SI 400.

The user should preferably push the camera forwards with the rod through the exhaust pipe or tube. If the camera is used with the direction of view to the rear, the camera should be applied with care and not with high or jerky forces. The Wöhler SI 400 Smart Inspection Camera thus simultaneously checks for a free cross-section and performs the video inspection. All Wöhler accessories for the Ø 40 mm camera head can be used.

M5 thread

WLAN connection

Fig. 13: Functionality of the Wöhler SI 400

5   Device parts and function

Wöhler SI 400
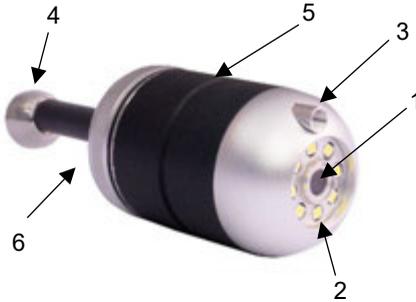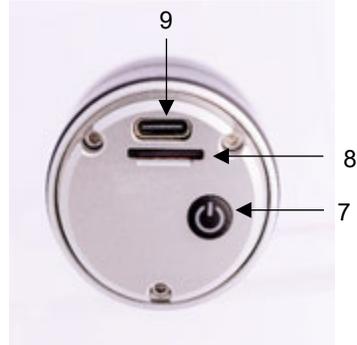

Fig. 14: Wöhler SI 400

Wöhler SI 400, camera base

Fig. 15: Wöhler SI 400 camera base

Part	Functions
1	Camera
2	LED lighting
3	M5 female thread for connecting a push rod when the camera is facing backwards / downwards.
4	M5 external thread for connecting a push rod when the camera is pointing forwards / upwards.
5	Notch for attaching the dome guard
6	Camera base with deflection piece

Part	Functions
7	Switch on: press briefly. Switch off: Press for 4 s LED display
8	Mini SD card slot
9	USB-C connection

6 LED display

LED	Functions
Blue luminous	Camera switched on, connected to mobile device
Flashing blue	Camera switched on, not connected to mobile device
Glowing red	Battery is charging
Flashing green (slow)	Video recording

7 Insert memory card

Photos and videos can only be recorded when a memory card is inserted.

Unscrew the camera base.

- To remove the memory card, press lightly on the card until it pops out and then pull it out.
- When inserting the memory card, make sure it is orientated correctly (the label points towards the on/off button).

! ATTENTION!

The memory card must never be pulled out or inserted with force.

8 Charge batteries

The battery status is displayed in the header of the app.

When the battery is low, the battery status indicator in the app lights up red.

- Unscrew the camera base.
- To charge the battery, connect the Wöhler SI 400 to the mains via a USB-C cable.

The red LED indicator lights up during the charging process. It goes out as soon as the Wöhler SI 400 is charged.

9 Switching the camera on/off

- Unscrew the camera base.
- To switch on, press and hold the on/off button for approx. 1 second.
- To switch off, press and hold the on/off button for approx. 3 seconds.

☞ *NOTE!*
If the camera is already connected to the Wöhler Smart Inspection app, a red on/off icon appears at the top right of the display, which can also be used to switch the camera off.

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10 Video inspection

The video inspection is carried out via the Wöhler Smart Inspection app.

> ☞ *NOTE!*
> *The app is in English. The language cannot be changed.*

In the app, you can take, view and delete photos and videos from the Wöhler SI 400.

You can also send the image files directly from the app via messenger service or email to the customer or the office. To work with the app, proceed as follows:

Mobile device

- Download the "Smart Inspection App" from the Play Store (Android) or the App Store (iOS) onto your mobile device.

- Open the WLAN settings of your mobile end device and connect your end device to the Wöhler SI 400.

> ☞ *NOTE!*
> *As long as your mobile device is connected to the Wöhler SI 400, your mobile device has no access to the Internet.*

Fig. 16: Home page Wöhler Smart Inspection App

- Open the Wöhler Smart Inspection app.

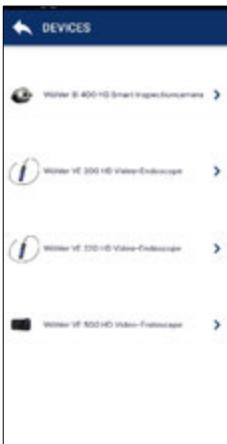Tap on "Connect Device" to connect the app with the Wöhler SI 400.

Fig. 17: Compatible Wöhler devices

All Wöhler endoscopes with which the app is compatible appear in the app.

- Choose Wöhler SI 400 HD Smart Inspection-camera.

Fig. 18: Live image in the app

As soon as the WLAN connection has been established, the live image of the Wöhler SI 400 appears in the app on the mobile device.

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Rotate image

- Tap on the rotate image icon at the top right of the app to rotate the display by 90° on the screen of the mobile device.

Setting the backlight

- Tap on the brightness icon at the top centre of the app to adjust the brightness of the LEDs in 3 levels or to switch them off (very bright, bright, dimmed, off).

Take a photo

Fig. 19: Photo mode

- Select "Photo" in the footer.
- Tap the blue dot to take the photo.

 A confirmation appears briefly on the screen.

Record video

Fig. 20: Video mode

- Select "Video" in the footer.
- Tap on the red dot to start video recording.
- The recording length is displayed with a timer in the footer.

☞ *NOTE!*

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The maximum recording length is 9:59 minutes. The video must then be restarted.

- Tap the red square to end the video recording.

☞ *NOTE!*
If the WiFi connection is lost during the inspection and the video image is no longer displayed in the app, the camera will still record the inspection on the SD card. You can therefore view the complete inspection afterwards, see chapter 12.
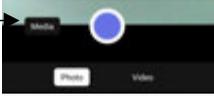
11 Media gallery

Fig. 21: Call up media gallery

Fig. 22: SD card view

- Tap on "Media" in the image to access the media gallery.

Here you can view, delete or send pictures and videos.

The "Album" and "SD" tabs can be found in the media gallery

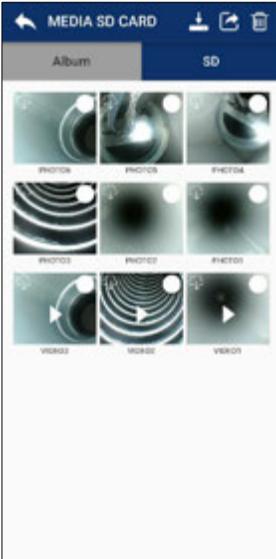- Recorded photos and videos are initially saved on the SD card.
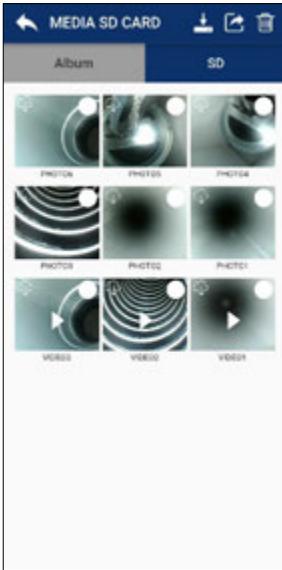
- Tap on an image or video to view it.
- Select one or more images or videos and tap the trash can icon to delete them.

Fig. 23: SD card view

- Tap the "Share" icon to send selected image or video files by email or messenger service.

☞ *NOTE!*
This does not work as long as your mobile device is connected to the Wöhler SI 400. As soon as your mobile device is connected to the Internet again, the files will be sent.

- Tap on the "Cloud" icon to download selected image or video files to your mobile device.

In the ID card view, a cloud icon appears in the tile of a downloaded file.

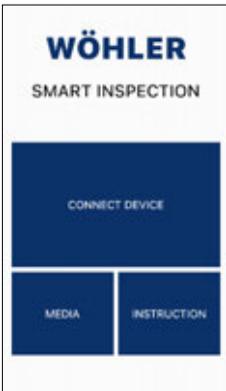Downloaded files appear in the album of the media gallery and in the gallery of your mobile device.

Fig. 24: Main view of the Wöhler Smart Inspection app

☞ *NOTE!*
You also have the option of accessing the media gallery via the main view, even if the app is not connected to the Wöhler SI 400. All photos and videos that you have ever taken with a Wöhler VE endoscope or the Wöhler SI 400 are displayed here.

12 Transferring image and video files to the PC

Micro SD memory card:

• Switch off the Wöhler SI 400.

• Remove the micro SD memory card, insert it into the card USB stick (included in the scope of delivery) and read the data on the PC.

or

Mobile device

• Connect your mobile device to the PC via USB cable and download the image and video files from the gallery to the PC.

13 Maintenance

• If necessary, wipe the housing with a soft, clean cloth.

• Charge the battery every 3 months if you do not use the device for a longer period of time.

14 Warranty and service

14.1 Guarantee

Every Wöhler SI 400 Smart Inspection Camera is tested in all functions and only leaves our factory after an extensive quality control.

If used correctly, the warranty period for the Wöhler SI 400 is twelve months from the date of purchase. The battery is excluded.

The warranty does not apply if repairs and modifications have been carried out on the appliance by a third party who is not authorised to do so.

14.2 Service

SERVICE is very important to us. That's why we are also there for you after the warranty period.

- You send the camera to us, we repair it within a few days and send it to you with our parcel service.

- You will receive immediate help from our technicians on the phone.

15 Declaration of Conformity

CE-Declaration of Conformity

The manufacturer:

WÖHLER Technik GmbH
Wöhler-Platz 1, D-33181 Bad Wünnenberg

declares that the product:

Product name: Wöhler SI 400 Smart Inspection Camera

complies with the essential protection requirements laid down in Directive 2014/53/EU of the European Parliament and of the Council on the harmonisation of the laws of the Member States relating to the making available on the market of radio equipment.

The following standards were used to assess the product with regard to the above directive:

Radio	ETSI EN 300 328 V2.2.2 (2019-07)
EMC	ETSI EN 301 489-1 V2.2.3 (2019-11)
	Draft ETSI EN 301 489-17 V3.2.6 (2023-06)
Safety	EN IEC 62368-1:2020+A11:2020
Health	EN 62479:2010
	EN 50663:2017

Bad Wünnenberg, 15.10.2024

Dr. Michael Poeplau, Geschäftsführer/Managing Director

UKCA-Declaration of Conformity:

The manufacturer:

WÖHLER Technik GmbH

Wöhler-Platz 1, D-33181 Bad Wünnenberg

declares that the product: Wöhler SI 400 Smart Inspection Camera

has been tested for UK regulations and in accordance with the following Standards:

Radio Equipment Regulations 2017 (SI 2017/1206)

Radio	ETSI EN 300 328 V2.2.2 (2019-07)
EMC	ETSI EN 301 489-1 V2.2.3 (2019-11) Draft ETSI EN 301 489-17 V3.2.6 (2023-06)
Safety	BS EN IEC 62368-1:2020+A11:2020
Health	BS EN 62479: 2010, BS EN 50663:2017

FCC Caution:

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

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.

Note: 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 FCC radiation exposure requirement set forth for an uncontrolled environment.