WLAN Interface SOL
for Solexa II control

Technical specifications and installation instructions

Item number 10154

1.   Description

The **SOL interface** WLAN connects the Solexa II building control system with the Solexa II mobile app. With the app installed on the mobile device, meteorological data can be called up and devices and drives operated manually. Readings from the indoor sensor installed in the system can also be viewed over the WLAN.

The SOL interface receives the data from the app via the on-site Wi-Fi and the mobile internet (VPN). These are then forwarded from the interface to the Solexa II by radio. Data from the Solexa II weather station is transferred to the app in the same way.

The app can be installed on up to 6 mobile devices that can access the interface SOL simultaneously. Commands that are typed in (e.g. blinds up/down) are executed in succession in the order of their arrival.

1.1. Deliverables

•   Interface in the housing for CEE 7/4 socket.

1.2. Technical specifications

Interface dimensions	approx. 67 x 110 x 91 (W x H x D, mm)
Weight of interface	approx. 260 g
Housing material	Plastic, black
Protection category	IP20
Ambient temperature	Operation -20…+50 °C, storage -55…+70°C
Ambient humidity	max. 95% RH, avoid condensation
Power supply	230 V AC (earthed CEE 7/4 plug)
Wireless frequency	868.2 MHz and 2.4 GHz

The product is compliant with the provisions of EC guidelines.

2.   Instructions for first commissioning

2.1. Installation notes

Installation, testing, operational start-up and troubleshooting should only be performed by an electrician.

The device is only to be used for its intended purpose. Any improper modification or failure to follow the operating instructions voids any and all warranty and guarantee claims.

After unpacking the device, check it immediately for possible mechanical damage. If it has been damaged in transport, inform the supplier immediately.

The device may only be used as a fixed-site installation; that means only when assembled and after conclusion of all installation and operational start-up tasks and only in the surroundings designated for it.

Elsner Elektronik is not liable for any changes in norms and standards which may occur after publication of these operating instructions.

2.2. Prerequisites

In order to be able to use the **SOL interface** following requirements must be fulfilled:

• 	A mobile device must be available (smart phone or tablet) with the Android operating system 4.0.3 or higher or Apple iOS 8.0 or higher.
• 	A Solexa II system with weather station (from version 1.1) must be installed.
• 	A router and an active wireless network (WLAN) must be available. Take appropriate actions to protect your WLAN against unauthorised access, e.g. encryption etc.!

2.3. Notes on wireless equipment

When planning facilities with devices that communicate via radio, adequate radio reception must be guaranteed. The range of wireless control will be limited by legal regulation and structural circumstances. Avoid sources of interference and obstacles between receiver and transmitter, that could disturb the wireless communication. Those would be for example:

• 	Walls and ceilings (especially concrete and solar protection glazing).
• 	Metal surfaces next to the wireless participants (e. g. aluminium construction of a conservatory).
• 	Other wireless devices and powerful local transmitters (e.g. wireless headphones), which transmit on the same frequency (868,2 MHz). Please maintain a minimum distance of 30 cm between wireless transmitters for that reason.

2.4. Notes on mounting and commissioning

Device must not be exposed to water (rain). This could result in the electronic being damaged. A relative air humidity of 95% must not be exceeded. Avoid bedewing.

3.   Setting up interfaces, WLAN, app

The **SOL interface** is connected to the on-site WLAN and, in addition, establishes a wireless connection to the Elsner Solexa II wireless system.

3.1. Installing the app

For Android devices:

Open the Google Play Store and install the Solexa II mobile app.

For iPhone / iPad:

Open the App Store and install the Solexa II mobile app.

3.2.   Putting the SOL interface into operation

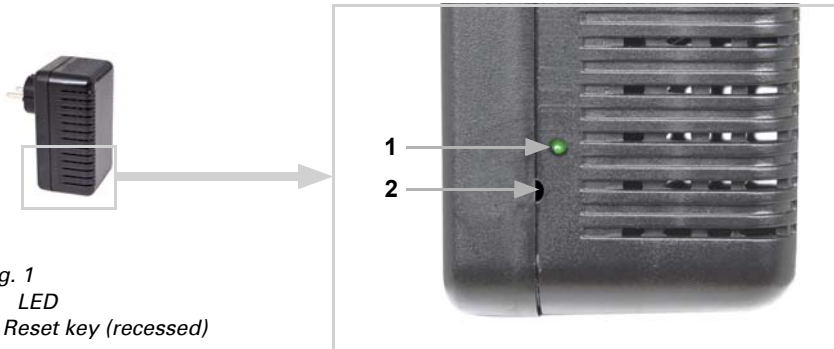The interface is plugged into a mains socket (CEE 7/4). The mains voltage must be 230 V AC / 50 Hz.


Fig. 1
1   LED
2 Reset key (recessed)

Read off the current equipment status from the LED status display type on the side:

LED off	Initialising Initialising can take up to 1 minute.
LED on	WLAN configuration mode In order to be able to use the SOL WLAN interface, you must, first of all, configure the settings of the on-site WLAN (-> section configuring WLAN) *Fig. 2 Screenshot of WLAN settings*

LED flashes regularly at short intervals	Connected with the router The SOL WLAN interface is connected with your router. Log on with your mobile device into the same WLAN network and start the app.
LED goes out briefly every 2 seconds	No WLAN connection to the router. A connection to your router could not be established. If necessary, position the WLAN interface closer to the router. If the access data to your router has been changed, reset the SOL to the default factory settings (SOL section on resetting to factory settings) and continue with configuring the WLAN section. *Fig. 3 Screenshot showing No WLAN interface*
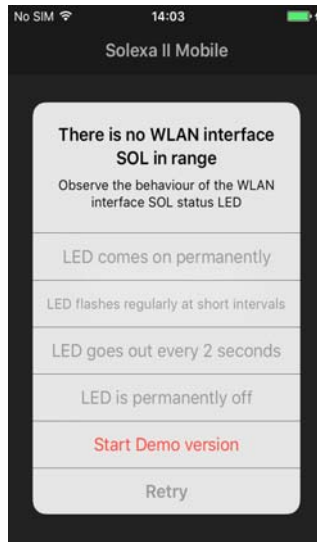
3.3. Configuring the WLAN

Prerequisite: The **SOL interface** status LED must be lit permanently.

Call up the available WLAN networks on your mobile device. Select the "SOL WLAN interface" network. The mobile device is then connected with the SOL WLAN interface.

Start the app. Input fields will appear, into which you enter the on-site WLAN settings "network name (SSID)", "encryption" and "code".

Now press "Save" top right in the menu screen. After about 10 seconds, the LED on the **SOL interface** starts to blink regularly at short intervals. The interface is now connected with your WLAN router.

First of all, call up the available WLAN networks again and connect with the on-site WLAN network. Restart the app.

3.4. Connecting to the Solexa II weather station

After successful WLAN configuration and restarting of the Solexa II mobile app, the notice that a Solexa II must be taught is displayed. Briefly disconnect the Solexa II weather station from the power supply (switch the fuse on the weather station off and back on again).

A beep indicates that the weather station has been taught successfully.

The interface is now connected with the weather station and can transmit data to the Solexa II mobile app. The app is now ready for use.

Alternatively, the weather station can be taught by pressing the PRG button on the inside of the housing. However, this may only be done by a qualified electrician since the PRG button is on the inside of the weather station.

WARNING!
Electrical voltage!
The weather station programming button is on the inside of the housing and thus in the proximity of unprotected, live components.
• The device may only be taught in this manner by a qualified electrician (according to VDE 0100).

3.5. Resetting the SOL to the factory settings

The factory settings can be recreated using the reset button. For this, initialisation must be completed, recognisable by the LED status (LED is on or blinks).

Press down the recessed reset button on the side of the device, next to the LED, with a pointed object for 5 seconds.

4. Operating the app

The app has two screens: Overview and Operating Screen.

4.1. Overview

Fig. 4 Overview screen

All the occupied memory locations of the Solexa II are shown in a list. Tap to select the appropriate position and switch to the operating screen. In addition, you can change the name for the display in the app.

Changing names in iOS
- Click on "Edit" top left.
- Tap on the left, next to the item on the red circle with the minus sign.
- Alternatively: Swipe the item to the left with your finger.
- The "Edit" menu opens on the right next to the item. Tap on "Edit" and assign the new name. Either confirm with "OK" or close the input screen using "Cancel".

Changing names in Android:
- Press on the desired item until a text-box with a keyboard appears.
- Confirm with "OK" or touch the display outside the keyboard to cancel.

4.2. App operating and display screen

Change to the next/previous item by swiping to the left or right with your finger in the upper half of the screen.

Switch to the overview screen with "< Overview" in the upper left of the menu bar.
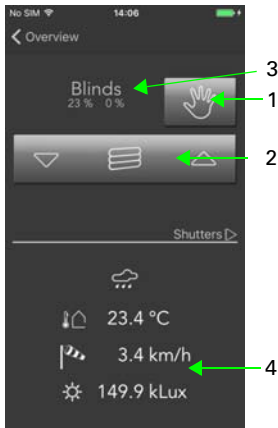
Fig. 5

Drive example

Fig. 6

Heating example

Fig. 7

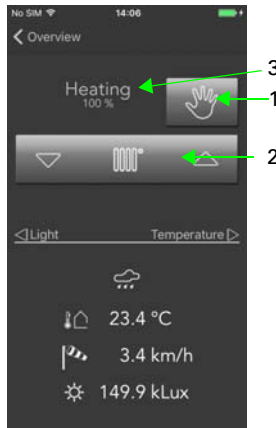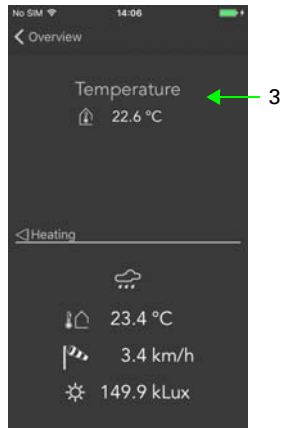*Sensor example*

4.2.1. Drive and device operation, displaying indoor sensor values

The functions of the selected drive or device or the indoor sensor data are displayed in the top half of the display.

1 Manual/Automatic button:

- Tap the button to switch between manual/hand operation and automatic operation

2 Rocker switch:

- Tap the rocker switch to trigger short movement commands or switching commands
- If a drive is to move continuously upwards/downwards, hold the rocker switch down for at least one second,

3 Text display:

- Name
- For shading and windows: current movement position
- For heating and lighting: current status (if applicable, level of dimming)
- For sensors: current values

4 Weather data:

- Rain (Yes/No)
- Brightness
- Wind speed
- Outside temperature