

# User guide

## Geasy

### Bridgiot (Pty) Ltd

(The Company)

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# Product description

Geasy (device) is a smart geyser controller that enables the management of an electric water heater (EWH), commonly known as a geyser, through an online platform. The Geasy is retrofitted to an EWH and has the following functionality:

- Switching the EWH ON and OFF by switching the supply to the element.
- Measuring up to 4 temperatures, typically
  - Water outlet temperature (estimated the internal temperature).
  - Water outlet temperature further from the EWH.
  - Water inlet temperature.
  - Ambient temperature.
- Measuring the volume of consumed hot water (if functionality installed).
- Measuring the volume of consumed cold water (if functionality installed).
- Measure the power consumption.
- Detect the presence of water in the drip tray (if functionality installed).
- Shut the water supply to the EWH (if functionality installed).
- Internet connectivity through cellular connection.

Geasy has internet connectivity whereby it sends information and receives instructions from an online platform.

How a Geasy uses the various functionalities depends on the specific service provider and service. Since the functionality is software based and continuously being improved, it can change. General instructions and the typical service that Bridgiot provides is available in the following sections. For the latest information, contact your service provider.

## Safety

Do not interfere with the device. If you have to open the enclosure of the device, for whatever reason, only do so after switching off the power supply at the isolation switch. Only switch on the isolation switch after the enclosure has been closed.

## User responsibilities

1. The user may not use the device's sim card for any other purposes, if the sim card was provided with the device. The sim card must therefore remain within the device.
2. The user must immediately notify Bridgiot, or their service provider, if the sim card is lost/stolen.

# Warranty

The Geasy device itself has an one year replacement warranty, subject to quality of installation.

# Basic specifications

Specifications of Elster Kent water meter:

Flow rate min:	2 litre per minute	Flow rate max:	45 litre per minute
Pressure max:	1.75MPa		

Maximum load and power supply: Please consider the installation manual.

# General

## Inserting sim card

Only insert a sim card if not provided by your service provider.

1. Switch off the power supply to the device at the isolation switch.
2. Open the enclosure of the device. (The screws only require a quarter turn)
3. Locate the sim card holder.
4. Slide the grey slider open and lift the flap.
5. Slide the standard size sim card into the flap, with the connectors facing downwards.
6. Close the flap and slide the slider back until it clicks, securing the sim card.
7. Close the enclosure, securing the screws.
8. Switch the power supply on again.

## Device status

There are two LED lights indicating the status of the device. The number of times each flickers per cycle indicates a state. These definitions are subject to change.

The green LED indicates the connectivity status of the device.

1. Fully connected
2. Partially connected
3. Disconnected

The red LED can indicates the state of the EWH.

1. EWH supply is switched off (ie, not heating)
2. EWH supply is on, but not drawing power (ie, not heating)
3. EWH supply is on and drawing power (ie, heating)

## Temperature control

Geasy can perform temperature control of the EWH based on the estimated internal temperature. Geasy does not replace your standard thermostat, and can therefore not heat the water higher than the thermostat is set at. This ensures safe operation of the EWH and prevents overheating.

## Connectivity

If your device loses connectivity to the online platform, for whatever reason, it will go into a default state. The default state is determined by the service provider. The quality of the connectivity is dependent on the cellular service provider (CSP) used for the device. If your device is experiencing consistent connectivity issues, it might be needed to change CSP.

## Resetting the device

To reset your device, switch off the supply to the device by switching the EWH circuit breaker off at the distribution board.

## Override device

The only way of completely overriding the device is for an installer to electrically bypass the device. This may not be allowed, depending on your service agreement with your service provider.

## Typical service

The specific service provided depends on your service provider. The typical service is described below.

## User interface

The user can manage their device via an online website or app. An user will typically have on profile on the service providers website, and the specific device will be linked to that profile. From the user interface the following functionality will typically be provided:

- Switching the EWH ON and OFF.
- Scheduling when the EWH should be ON and OFF.
- View the volume of water used at different times.
- View the power consumption.
- View the efficiency of the EWH

## Burst detection and mitigation

Depending on what components are installed, the device can provide burst detection and mitigation. The drip detection sensor in the drip tray can detect the presence of water. Upon detection of water the device shuts the water supply to the EWH and switches the EWH off. The online platform then notifies the user of a potential leak or burst.

To open the water supply and turn the EWH on again, the device typically has to be reset. If there is still water present in the drip tray, the device will trigger a burst event again. It is therefore needed that the user ensure that there is no burst or leak, and removes the water from the drip tray before resetting the device.

## Appendix A

Versions of Geasy covered in this guide:

1. Geasy Mk3
2. Geasy Mk3-BV
- 3.