KLARO

The **KLARO WebMonitor**®
The intelligent remote control

We provide clear water

Direct access
to plant data

Operational security
for wastewater treat-
ment systems

GPRS,
LAN, WLAN, dLAN

KLARO WebMonitor®

... the intelligent remote control system for:

- Maintenance companies
- Caretakers
- Operators of KLARO sewage treatment plants

- Municipalities (e.g. local authority associations)
- Authorities (e.g. environmental agencies, water conservation agencies)

- Water boards
- Commercial enterprises, hotels, campsites, holiday homes
- etc.

The KLARO WebMonitor saves time and work

The KLARO WebMonitor® takes over the legally stipulated daily controls and automatically saves the plant data once a month. This means that the operator is relieved of its monitoring duties. The KLARO WebMonitor® performs this task on the operator's behalf by calling the plant on a daily basis to check its operational status.

In the event of errors in the plant the KLARO WebMonitor® sends an error notification to the address stored in the system by SMS (EU, NO, ICE) or Email. The partner can then act upon this immediately in the plant. Errors can be acknowledged and settings can be changed.

Travelling time and costs no longer apply and the operator receives direct and fast assistance. All events are automatically saved in the KLARO WebMonitor® and made available to download.

The right connection for all

The plant is monitored remotely via mobile radio or internet connection. The LAN- adapter required for the internet connection is connected between the control system and the router. For mobile radio connection via GPRS, a modem with a M2M card is used.

Remote control for more security!

The KLARO WebMonitor® is an internet portal that gives maintenance companies and operators the option to monitor small wastewater treatment plants online, regardless of where they are.
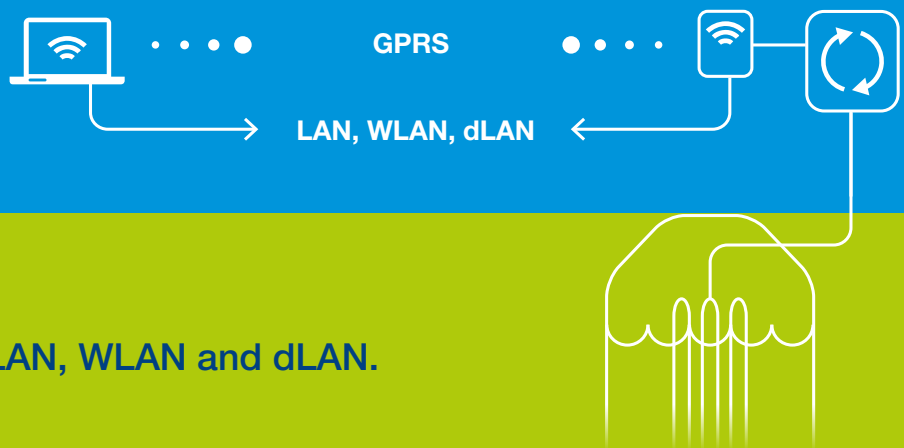
GPRS

LAN, WLAN, dLAN

Many support GPRS,
but KLARO also supports LAN, WLAN and dLAN.

Advantages for the operator

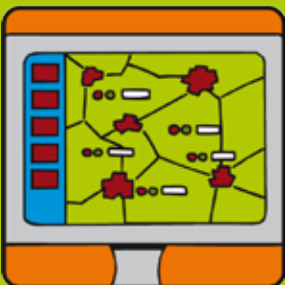Relief from daily and monthly monitoring

Automatic log book management

Monitoring when absent

Monitoring of remote plants

Advantages for our partners

Overview of all plants in own portfolio (table and chart)

Direct access to the plant data (GPRS, LAN)

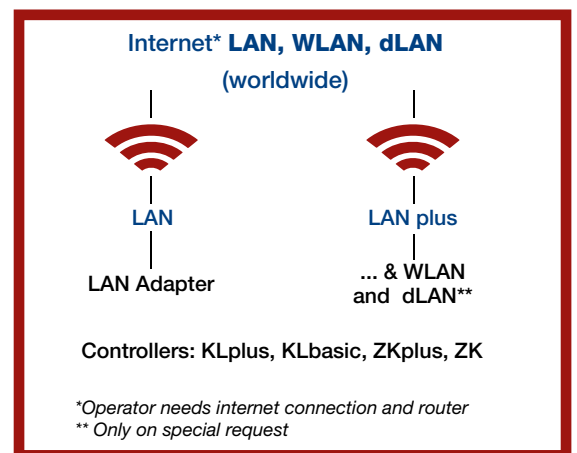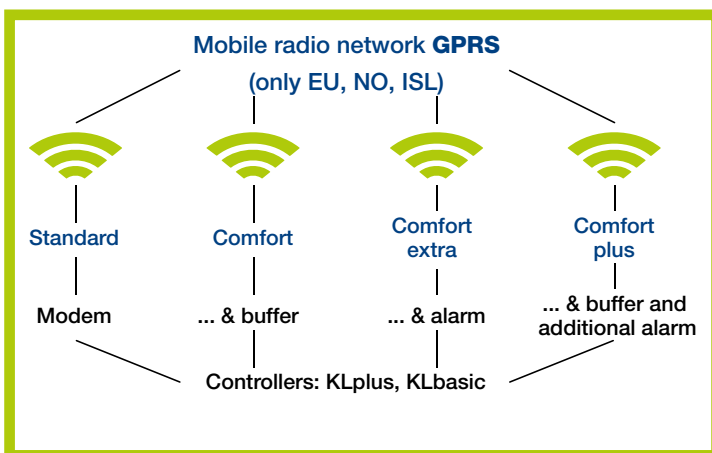Email or SMS (EU, NO, ICE) notification in the event of an error

Continuous automatic monitoring of the plants

The functional principal of the KLARO WebMonitor®!

The KLARO WebMonitor® offers a variety of possibilities for monitoring wastewater treatment plants.

GPRS, LAN.
KLARO WebMonitor® user

Mobile radio network **GPRS**

(only EU, NO, ISL)

Standard	Comfort	Comfort extra	Comfort plus
Modem	... & buffer	... & alarm	... & buffer and additional alarm

Controllers: KLplus, KLbasic

Internet* **LAN, WLAN, dLAN**

(worldwide)

LAN	LAN plus
LAN Adapter	... & WLAN and dLAN**

Controllers: KLplus, KLbasic, ZKplus, ZK

*Operator needs internet connection and router
** Only on special request

The different versions of the KLARO WebMonitors®!

Standard, Comfort, Comfort extra, Comfort Plus or LAN.

The KLARO WebMonitor® communicates with the wastewater treatment plant via mobile radio or direct internet access.

For the communication between the wastewater treatment plant and the KLARO WebMonitor® via mobile radio network, the operator requires an M2M card, which is integrated into the modem. In Germany, this card is already included. Outside Germany, we can look together for the right provider for applications.

The user of the internet connection can choose between LAN, WLAN and dLAN. A private internet connection is required for this. The necessary LAN-adapter is connected between the user's router and the control system.

The individual KLARO WebMonitor®-Versions

With the „**Standard**" package the plant is monitored using a modem. If an error occurs, notification of this is sent to the address stored in the KLARO WebMonitor® immediately via SMS (EU, NO, ICE) or email.

The „**Comfort**" package also includes a „battery pack". In the event of loss of power, there is enough power to transmit an error message.

The „**Comfort extra**" package is equipped with an additional alarm. This means that external devices can be monitored, e.g. the filling level of precipitant canisters in plants with phosphate precipitation.

The „**Comfort plus**" package is equipped with an additional alarm and also includes a battery pack.

The „**LAN**" package offers the easiest option for remote monitoring. The necessary LAN-adapter is self-configuring. As with the mobile radio solution, in the event of an error an email or SMS (EU, NO, ICE) is sent by the KLARO WebMonitor® to the stored address. Either an additional access point or dLAN-adapter is required for the WLAN and dLAN versions.

Hardware overview!

The KLARO WebMonitor product range.

Achieve a great deal with minimal technology.

KLARO Modem KM12

- Quadband GSM /GPRS
- Incl. power supply, antenna, data cable
- 8 - 30 V DC
- 65 mm x 74 mm x 33 mm

KLARO Battery Pack KP12

- enables transmission of power failure messages
- 8.2 V, 2.000mAh
- 11 - 30 V DC
- 60 mm x 125 mm x 25 mm

KLARO Alarm KA12

- additional error message input (e.g. for empty notifications of the precipitant container)
- 11.8 V DC / 20 mA DC
- 2 inputs
- 48 mm x 75 mm x 17 mm

KLARO Adhesive Antenna

- Frequency range (824-894, 880-960, 1.710-1.880, 1.850-1.990, 1.920-2.170)
- Cable length 2.50 m
- Emitter height 115 mm

KLARO Magnet Antenna

- Frequency range (824-960, 710-1.990, 2.150-2.250)
- Cable length 3.0 m
- Emitter height 115 mm

KLARO LAN-Adapter KL12

- 5 V DC
- 2 digital and 1 analogue input
- 2 digital outputs (e.g. for empty notifications of the precipitant container)
- incl. power supply and data cable
- 64mm x 114mm x 33mm

KLARO WebMonitor® management system!

The management system is designed based on the needs of the customer and the security of the plant.

Optimised access rights for the user.

The KLARO WebMonitor® is suitable for many different users - maintenance companies, operators, authorities, companies, hotels, and many more. The different users obtain different access rights depending on the classification.
In general, each person who would like to use the KLARO WebMonitor® needs a license that can be purchased from KLARO. More information on this can be obtained upon request..

KLARO WebMonitor® user groups:

Operators

Tourism
partners***

Service and
maintenance companies

Commercial
partners**
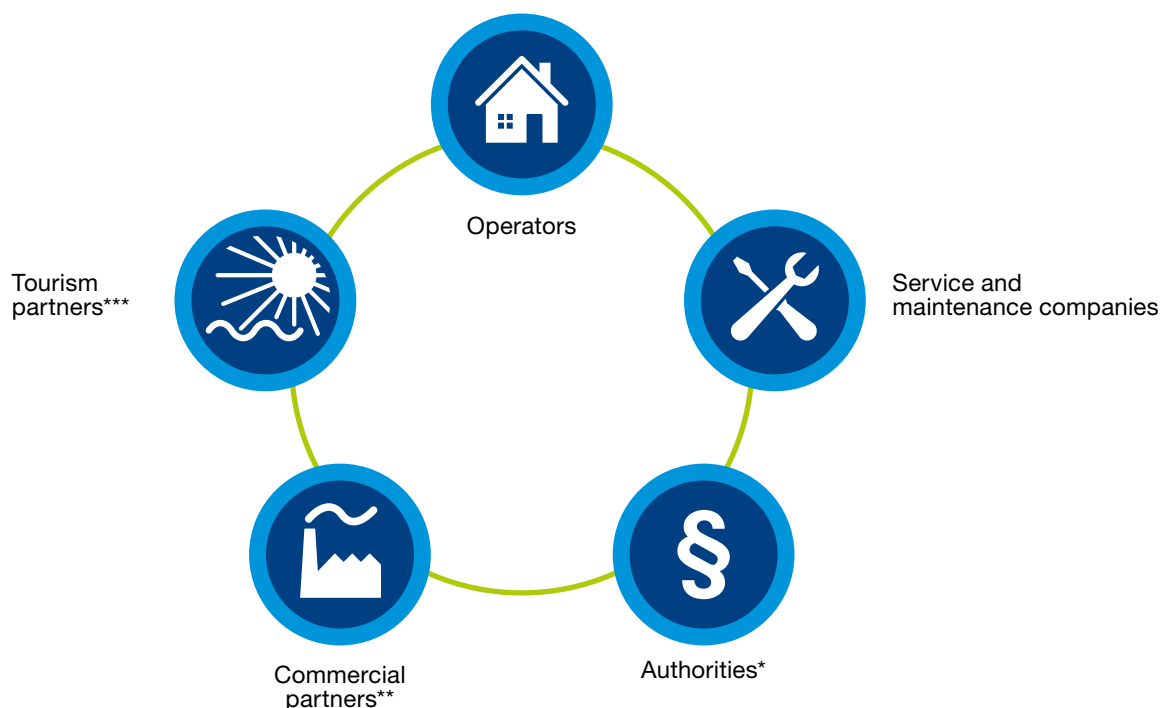
Authorities*

* local authorities, water conservation agencies
** businesses, companies, planning offices
*** hotels, holiday apartments, campsites

From log-in to firmware update.
The KLARO WebMonitor® in pictures!

Access and overview.

Getting started!

Registration / Log-in

Registration for the portal takes place under www.klaro-webmonitor. de. After verification of the data and assignment of a user profile, the KLARO WebMonitor® is usually operational within 24 hours (excluding weekends and public holidays).

It is then possible to log in at any time using the access data that the user has created themself.
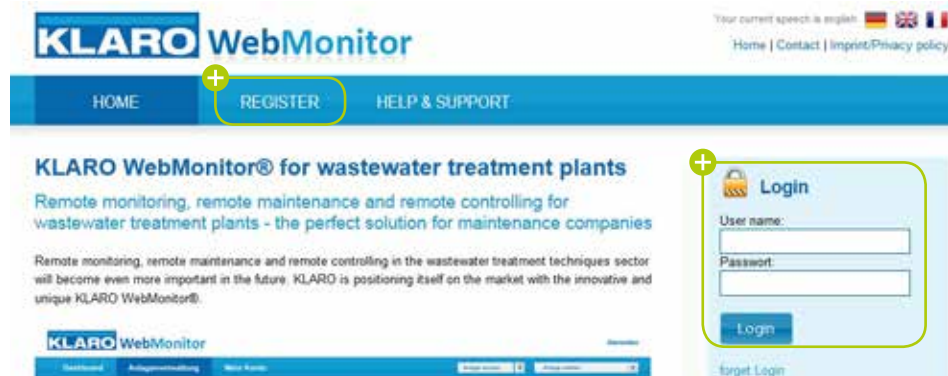
Map overview

The plants in an individual portfolio are displayed on a map on the homepage. The size of the map automatically adjusts depending on the number and position of plants. The individual plants can be selected by clicking them or entering them into the fields „Search plant" and „Select plant".

Furthermore, the error messages are displayed on the homepage in more precise detail (date, time, plant, message).
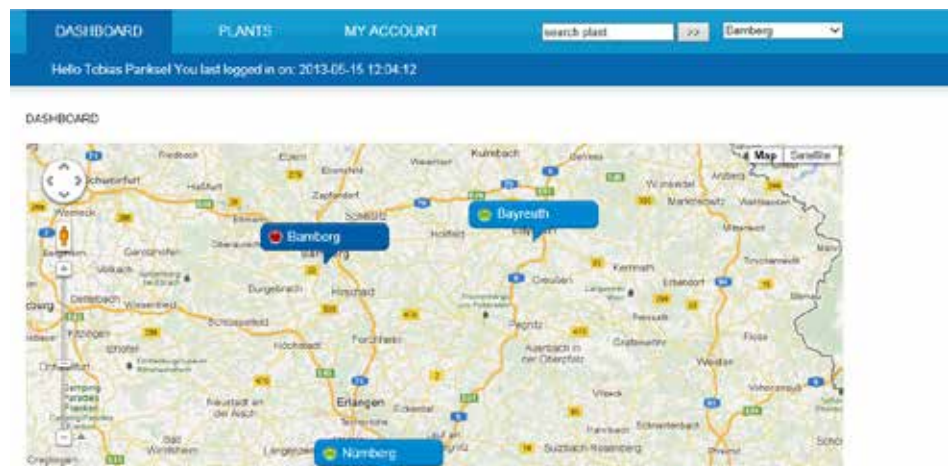
An overview of plants!

Plant overview

All plants registered in a portfolio are listed in the plant overview. New plants can be added and existing plants can be deleted. Likewise you can perform status requests and synchronisations here. The location and name of the plant, type of connection (incl. telephone number/email) and operator data is listed under heading „Edit data".

Master and operational data

Information about the type and location of the plant, as well as contact details of the operator are listed under „Master data".

The total hours operational by listed by calendar week under the menu option „Operational data". This can also be commented on. The data can be saved as an Excel or PDF file on individual PCs.

From log-in to firmware update.
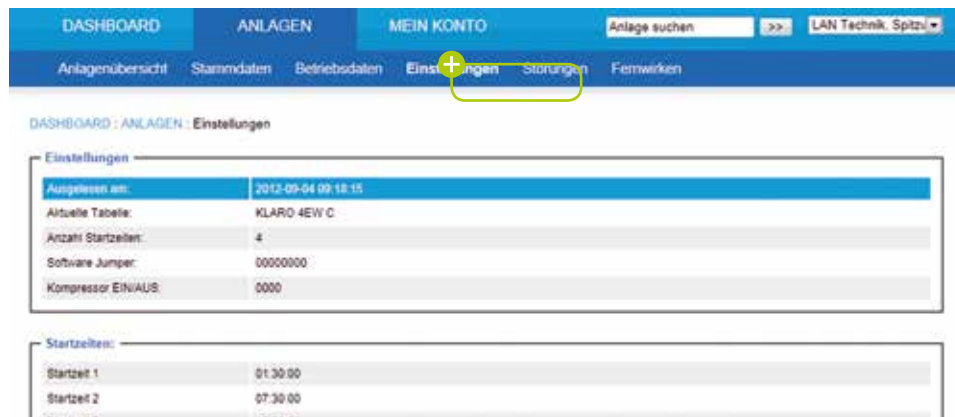# The KLARO WebMonitor® in pictures!

Error management and remote control.

Error management!

Settings

This menu option gives an overview of all relevant settings in the control system. This includes:
- basic settings (PE, filtration level)
- cycle times
- underload detection
- telephone numbers
- etc.

Errors

The error messages accrue in this area and are logged precisely. The error messages can be saved as Excel files or PDF files on individual PCs. If a new error is reported, an eye appears in the last column, which disappears again once the error message has been read. This means that no error goes undetected.
Furthermore, there is the option to comment on error messages.
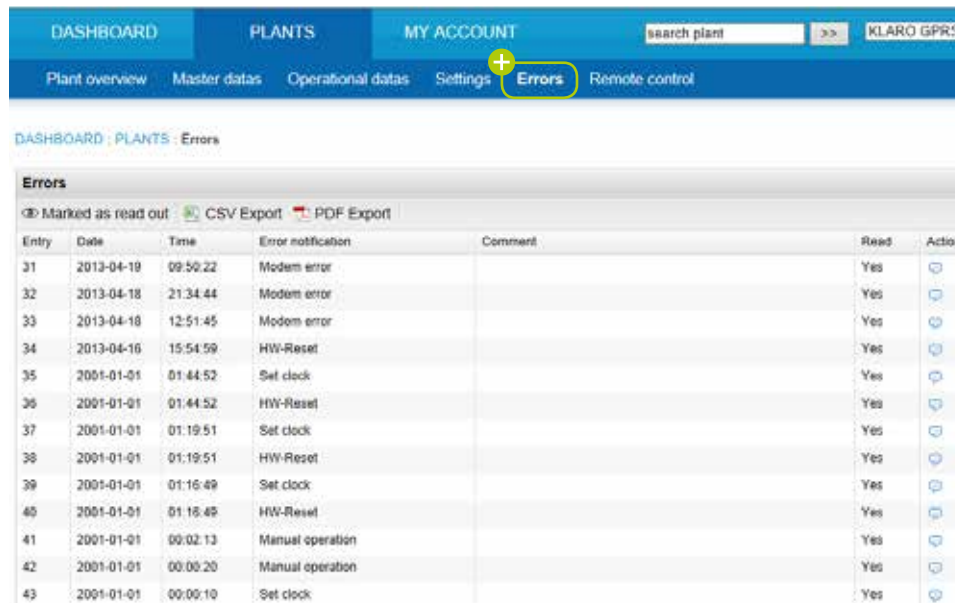
Hands-on access!

Remote control

The plants can be actively accessed via the menu option „Remote control". The front view of the control is broadcast live with the current LCD display. The buttons are operated with the mouse. You have full access to all menu functions (even at service level). So error messages can be acknowledged and settings can be changed.

LAN-Client / Firmware-Update

Regular updates and software expansions ensure that the KLARO plants are always at state-of-the-art. The transmission and exchange operations of the control system are no longer necessary. In the future, updates can be performed online.
Naturally, our customers will be informed when a new update is available.

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www.klaro.eu   **www.klaro-webmonitor.eu**