# **KRONOTERM**

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## Cloud.KRONOTERM for water heating pumps

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Management and control of heat pump using cloud service technology





Powerful weekly schedules

Visual representation of heat pump operation





Remote maintenance and support



## **Features**



Simple&Secure real-time unit control anytime, anywhere.



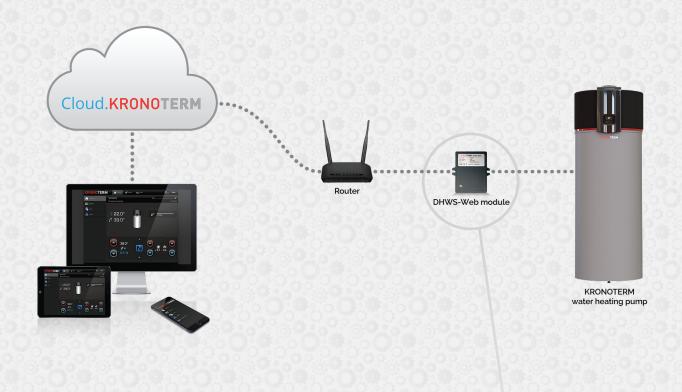
Quick buttons for additional modes of operation

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Powerful and user friendly weekly schedule configuration.



Visual representation of heat pump operation.



## **Technical specification**

### DHWS-Web module

#### Power supply

5VDC; 150mA

#### Micro-controller

PIC32MX; MIPS32 M4K Core; 40 MHz 128 kBytes of RAM; 512 kBytes of FLASH memory

#### Ethernet

10/100 Mbit connection DHCP client for dynamic IP (static IP possible) Local module management web interface Cloud server time and date synchronization

#### MODBUS

Proprietary 3-wire connection with DHWS-BB-IO controller

#### Extras

Button for simple 3-step user registration to the cloud MicroSD storage for long term data logging (4 Gb) Hardware RTC for accurate timings STATUS signal LED CLOUD signal LED

#### Dimensions

WHD: 59 x 76 x 17.5 mm Mounting: 2x ø4 screws



DHWS-Web module connects water heating pump device and the Cloud.KRONOTERM service server.



SSL (Secure Socket Layer) connection between the KRONOTERM Web module and Cloud.KRONOTERM.



SSL connection between client and Cloud.KRO-NOTERM (HTTPS)



Service does not use any sensitive private information

### Heat pump controller for sanitary water DHWS-BB



## Extended functionality with additional DHWS-Web module:



Weekly Schedule: A schedule for every day in a week can be set. Up to three scheduled periods can be configured during each week day. Scheduled period is defined by a start time, stop time and an active operation mode. After the scheduled period ends the heat pump returns to the previously selected operation mode.



**Heating costs:** Heating costs menu provides access to a theoretical heating cost calculation with 3% error tolerance for different time periods. Daily, weekly and monthly reports are available with the ability to compare costs for the last 4 weeks of operation.



**World Time&date synchronization:** Heat pump time and date are synchronised with the cloud.KRONOTERM server.



Extra (3rd) daily schedule period



Weekly schedules setup



Weekly heating cost overview



Montly heating cost estimation