Next Generation

Sauna Control System

DIATRON
your. future. step.

DIATRON

Discreetly mountable in sub-distribution

App operatable

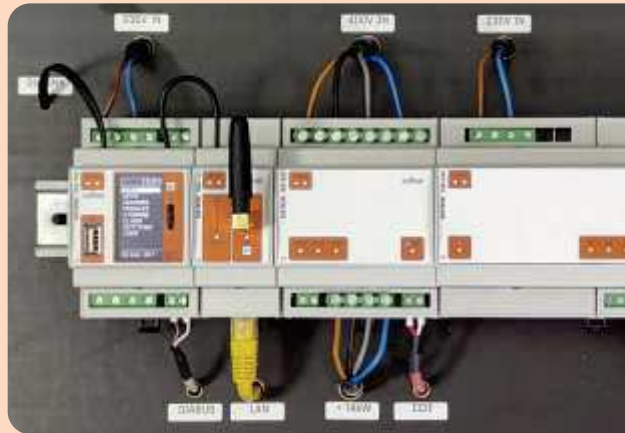Fully digital system

10 zones available

Finnisch Sauna

Wet Sauna

Dynamic ventilation

compact design

freely customizable

Digital interconnection

Aufguss-automatics

5 Years warranty

expandable

RGB light

central operator

multiple cabins on one control

integrated diagnosis

Highlights

Modules freely combinable

multiple control panels

Soft light control

Infrared

Steam bath

For private and business use

Remote control panels

Modular design

Safe in operation

state-of-the-art

Modern technology

Robust sensors

Statistical evaluations

Easy to use

Firmwareupdate by USB

Energy optimized

Made in Germany

Revolutionary better

The perfect sauna with perfect control technology

Experience greatest convenience, incomparable safety and all the modern features of DIATRON

Smart & elegant

No more clunky boxes on the wall: Technology can be this beautiful!

The **DIATRON TFT-terminal** is extremely inconspicuous and modernly simple: with its dimensions of 12 cm x 12 cm (approx. 4.7" x 4.7"), it is barely larger than a light switch, making it ideal for aesthetic, stylish installation situations. It can also be flush-mounted as an option.

Operation is done by a color display with intuitive, easy to understand screens and a user-friedly touchscreen. There are no complicated menus or button combinations.

Lots of extras make it even better: the display is automatically dimmed at night and several terminals can be connected to one system at the same time. Even in other rooms or in the building up to 200 meters (approx. 200 yards) distance!

Safety done right!

The innovative **DIATRON safety module** monitors the surface of the sauna heater without contact: incorrectly placed objects of <u>different sizes</u> are detected at any point and the heater is then automatically deactivated.

Fire hazards are thus reliably detected and effectively prevented!

New!

- ✔ Exceeds the requirements of standard **DIN EN 60335-2-53**

- ✔ Suitable for private and commercial use

- ✔ Easy wall mounting

- ✔ Slim and discreet design

- ✔ Globally unique, legally protected technology

- ✔ No mechanical parts

- ✔ Operates without camera

- ✔ The ideal addition for every sauna and its safe operation

The system works optically by invisibly scanning the underlaying surface and is also insensitive to interference. The reaction time for detecting foreign objects is only a few seconds.

A traffic light display (red/green) on the front of the system shows the status directly. Optionally, shutdowns or external alarms can be triggered.

Ideal for private and commercial saunas: controlling from a remote location is possible without risk. The area to be monitored can be easily adjusted by the mounting height and covers all heater sizes from all manufacturers. Adjacent benches are blanked out and therefore do not interfere with correct operation.
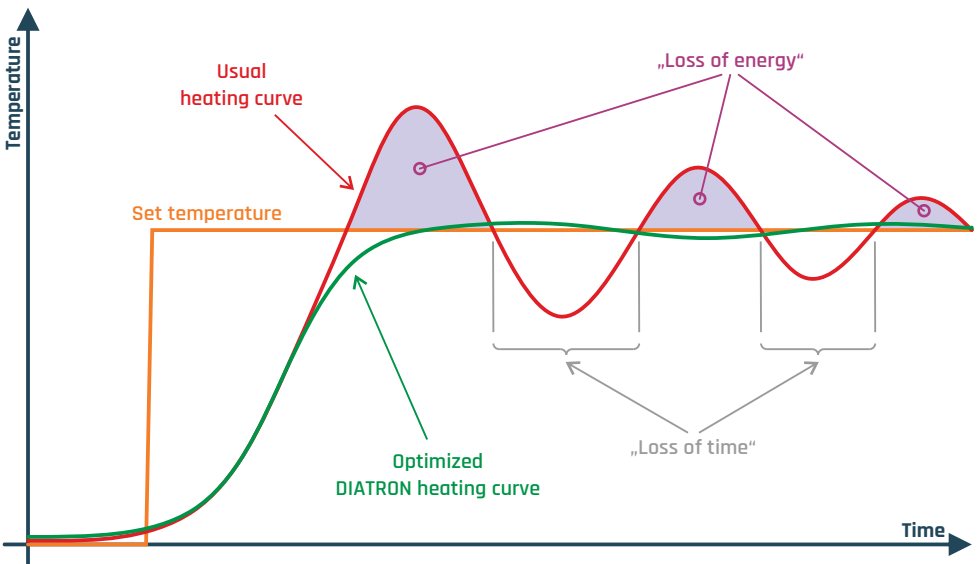
Energy management

Optimizing energy consumption is an important aspect of operating a sauna today. **DIATRON** provides support here with new approaches that meet every need.

The heater is controlled using innovative control technology that optimizes the heat capacity and heat dynamics according to physical principles. This reduces heat-up and run-on times and saves energy.

Smart sensors can also be connected, for example to reduce air exchange depending on the air quality.

Presence and activity sensors are available for commercial saunas, with which the sauna can easily be switched to eco mode without being noticed during operation. This allows energy consumption to be quietly optimized in the background without negatively affecting the guest experience.

Temperature

Usual
heating curve

„Loss of energy"

Set temperature

Optimized
DIATRON heating curve

„Loss of time"

Time

Networkable

Today's systems must be networkable: This is the only way to guarantee modern operating concepts and the usual uncomplicated comfort. So why not make the sauna operable from a cell phone or PC?

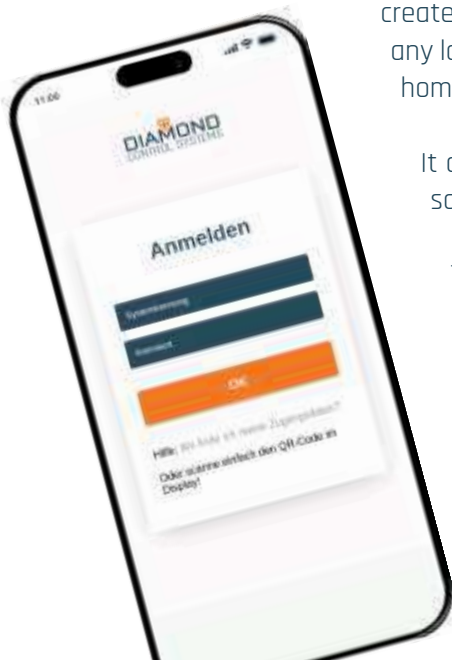**DIATRON offers all necessary technologies natively without adapters:**

- ✔ Wired LAN (Ethernet) and WiFi
- ✔ App access from smartphone/tablet/smartwatch
- ✔ Cloud-based services
- ✔ Control center software (on PC) for commercial saunas, even with many cabins
- ✔ Remote diagnostics and fault analysis for service and installers
- ✔ Open protocols for professional building management systems
- ✔ Optional voice control via all known services

Combined with the **DIATRON** safety module, this creates safe and convenient remote operation from any location. Quickly switch on the sauna on the way home or from the couch? No problem!

It couldn't be easier to operate and monitor your sauna (or saunas) from your PC or smartphone!

The cloud services communicate securely and encrypted, of course.

Each individual application is activated directly on the system, providing security and control over data protection.

Lighting in a new dimension

Beautiful light integrated: No separate stand-alone solutions necessary!

Gentle scenes and relaxing atmospheres create pure relaxation and complement the sauna experience in an unforgettable way.

DIATRON offers all the advantages of integrated control of lighting for the sauna cabin, the anteroom and for indirect lighting.

No adapters or third-party systems are required. Operation is conveniently carried out at the terminal or directly in the sauna, and all settings can also be made remotely via the app or the control station.

Multiple zones are of course also supported.

- ✔ White light with dimming and color temperature (cool to warm white)
- ✔ RGB and RGBW colored light (in all grades)
- ✔ Scenes as a selection or coupled to events

Control center (for Experts)

Monitor and control multiple cabins centrally

The integrated **DIATRON control station** allows control and monitoring from a central location. All diagnostic data is also available centrally in real time. All what you need is a PC or tablet.

This practical solution supports reception, back office and facility management: this means that good, fast service can be guaranteed even in very large facilities with minimum staffing levels.

For hotel resorts, the control center opens up a completely new way of processing guest inquiries quickly and securely in seconds. Even distributed facilities (e.g. in suites or chalets) can be monitored within seconds.

Interfaces (for Experts)

Integration into the higher-level building management system (BMS) is the clear success factor for the future of a modern planned system. This is the only way that different systems can interact and exploit all their advantages.

DIATRON already provides various interfaces for this today.

Modbus   KNX   ⌂   ⧉MQTT   LOXONE

Selection of application examples:

- ✔ Set hotel sauna automatically/dynamically to eco mode during kitchen times to keep the house connection below the grid limit

- ✔ Activate central cleaning light in all cabins via existing KNX push-button

- ✔ In the event of a building alarm, deactivate all heating sources and ventilation and set all lighting to maximum

- ✔ Display the current cabin temperature on a large display

Zones & Statistics

DIATRON offers the best solution for commercial installations in wellness areas, hotels and spas:

Only one system supports the simultaneous control of up to ten separate areas/cabins (so-called "zones") with just a single control unit.

All zones work independently, but can still be operated centrally.

Thanks to the modular design, the Finnish cabin, for example, is covered as zone 1 and the steam bath next to it as zone 2 by just one controller. The changing room lighting could be defined as zone 3.

Perfect oversight with statistics: Good data, good reporting

The integration of intelligent sensors makes it possible to discreetly record usage statistics of operating times in the background. Utilization and peak times are thus just as visible to the management as idle times.

For the first time, the operator is able to create realtime evaluations over different time periods. Based on this data, automatic standby times can be defined, which contribute to energy reduction and generate a direct benefit.

Diagnosis makes it easy!

In the event of a malfunction, the technical department needs to know quickly what the problem is. For this reason, all intelligent **DIATRON** modules are equipped with an integrated diagnostic function independently monitors the modules for correct functioning.

Just as a modern vehicle today reports a faulty headlight to the driver as plain text in the cockpit, **DIATRON** can also indicate faults in the sauna technology directly on the display (or remotely on a cell phone or control station).

Example: If the heater does not consume the expected power (e.g. because a heating element is defective), this deviation appears on the display and in the control center. The failure of a fuse/phase in the supply line is also displayed directly.

Other diagnostic functions include the overall system, power consumption, running times, connection statuses, temperatures, short circuits, etc...

This means that troubleshooting can begin immediately without time-consuming analysis. This additional work in the electronics quickly pays for itself.

DIATRON Warranty

DIATRON modules are developed, tested and manufactured exclusively in-house. They meet the high requirements of professional and durable industrial products at all times.

In addition to the actual hardware modules, this standard is also applied to the software, the long availability of spare parts and the service.

This commitment results in an extended manufacturer's warranty of 5 years from commissioning, which applies to most products.

DIATRON live

Your partner for planning and sauna construction
will be happy to show you all the advantages in
safety and operation
of a control system
from DIATRON!

Practicing sustainability

Good technology convinces through
discrete sophistication.

A control system from DIATRON
is sustainable, durable and
contributes to saving
resources.

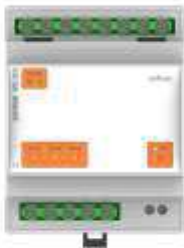# Product overview

CPU: The central control module with plain text display for configuration

TFT-Terminal: The intuitive way of operating via color touchscreen

Power switching modules: Suitable for all sizes of electric ovens

Switching modules with input: For evaporators with low-water output

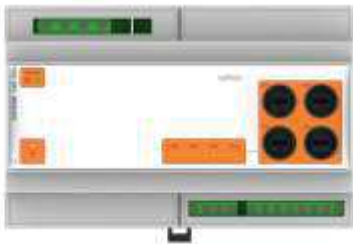**Network module:** Connection to Ethernet and WiFi for cloud and app

Dimmer modules: Variable control of light, transformers and fans

Sensors for temperature and humidity, also with safety limiter

Oven safety: Detects objects and switches off the oven in case of risk

LED-Dimmer: Incl. power supply unit, super soft for RGB and white light

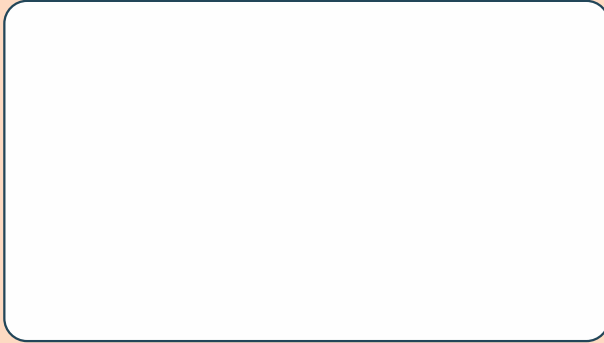**Input module:** For door contacts and manual Aufguss triggers

and many more ...

Sensors for monitoring air quality and CO2 concentration

Figures are not to scale

DIAMOND
CONTROL SYSTEMS

Your DIATRON partner:

your.
future.
step.

www.diamond-cs.com