



LED does not break a sweat

Digital displays instead of hourglass and hygrometer

A digital sauna? At KLAFS GmbH, the world market leader in the sauna, wellness and spa sector, this is exactly what is possible. Instead of the usual hourglass, clock, hygro and thermometer, the manufacturer from Schwäbisch Hall has installed special LED displays in several saunas for a hotel's own sauna world upon customer request. These were developed by microSYST Systemelectronic GmbH. Thanks to its own development and production, the specialist provided both the material basis and the expertise for the technical implementation. Numerous requirements could thus be met precisely.



Advantages at a glance

- Best readability even with high humidity
- Alternating display of information
- Maintenance-free electronics thanks to fanless technology

When the LED bar graph „trickles“ instead of sand

For the sauna project, the microSYST developers used line-oriented LED displays of the milline type. Slim and slender, the display area of approx. 490 x 122 millimetres with 64 x 16 pixels resolution replaces the classic hourglass. A programmed, automatically running bargraph scale visualises the time spent in the sauna in a continuous loop. Classically illuminated in white, the display provides a modern and clean look without interfering with relaxation. At the same time, the bright LEDs ensure the best readability even with high humidity or infusion steam. If desired, a combination of different colours is possible thanks to the integrated seven-colour spectrum.

Clock, hygrometer and thermometer in constant alternation

The alternating display of time, temperature and humidity is done using another display. On an area of approximately 245 x 122 millimetres, either temperature and humidity are displayed on two lines or the digital time is shown on one line. The character heights of 50 and 75 millimetres respectively ensure good readability. The alternating display of the temperature/humidity and time can be easily changed in the configuration at any time, so that the displayed content switches every 0 to ten seconds. For easy setting, microSYST provides its own manufacturer software; the control is carried out with the help of a serial interface or analogue input as well as the protocol data provided by the sauna manufacturer KLAFS.

Digital functionality instead of analogue simplicity

Some sauna experts may ask: Why digital instead of analogue at all? Of course, analogue hygrometers and clocks are still the classics in the entire spa sector. Nevertheless, the affinity for digital displays is increasing here, too. A modern touch and, above all, the functional advantages cannot be denied. For example, other content can be integrated at any time in addition to the previously stored time, humidity and temperature - such as the waiting time until the next infusion in real time or other information. Due to their size and resolution, the displays used by KLAFS are very easy to read, even over long distances. „When steam is present and visibility is therefore difficult, as it usually is in saunas and spas, LED technology in particular offers very good readability thanks to the high contrasts and flexibly controllable luminosity,“ adds microSYST Managing Director Harald Kilian.

Fan-free technology that does not break a sweat

One of the central challenges for KLAFS in the search for suitable digital visualisation was certainly long-term resistance to heat and humidity. Thanks to fan-free, maintenance-free technology and experience even with displays for extreme temperature ranges and challenging environments, microSYST is exactly the right partner for this project. Due to the aluminium housing, the displays do not „sweat“, heat up only minimally and thus also ensure the necessary safety of the sauna visitors in case of unintentional contact.

