WORLD FIRST.

The multi-energy infrared system for your hall. Benefit from electricity, hydrogen, gas and light.



"No matter what energy sources are available in the future, in what quantities and at what price, with our highly effective KÜBLER technology, you will always get your hall warm. And turn the heating transition into an economically measurable success."

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Thomas Kübler

Managing Partner KÜBLER GmbH Energiesparende Hallenheizungen





Benefit from electricity, hydrogen, gas and light.

FUTURA is the future that begins today. A world first that helps you shape the energy transition. Safe. Reliable. With groundbreaking functions. In addition to the ability to switch highly efficiently between current and future energy sources, the new infrared heating system also combines heat supply with the lighting of your hall buildings. Intelligent, functional and economical.

Electrons or molecules? FUTURA can do both.

What energies will we use to heat halls tomorrow? And the day after tomorrow? And 2045? It doesn't matter. Because regardless of whether green hydrogen or electricity will determine the future, FUTURA can do both. And more: the innovative infrared heating system also uses biogas, natural gas or liquefied natural gas (LNG) and allows you to switch back and forth between the energy sources. In mono mode or in a mix. Depending on whichever energy is currently available or particularly costeffective. This ensures security of supply and stabilizes the networks. The energy transition? It can come.

The economy needs economic solutions? Voilà!

Infrared is highly efficient in halls. The ideal way to heat large rooms with heights of 4 to 40 meters. And by far the most comfortable. It has proven itself thousands of times. Because it is unbeatably flexible. Because it minimizes energy consumption and lowers consumption costs. Also because of its low investment costs infrared is one of the most economical ways to bring heat into large spaces. Now FUTURA offers another option to save money: Use the energy that is the cheapest at the moment.



The electric heater that can do gas? The gas heater that can do electric? FUTURA is the heater that can do everything.

Electrical energy

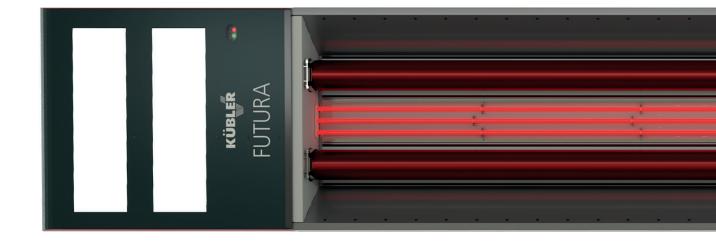
FUTURA uses green electricity from photovoltaics or from the grid for the reliable and effective heat supply of your hall buildings. Applicable: 0 to 100 percent*.

Hydrogen

The innovative IR heater is $\rm H_2$ -ready and therefore ready for the green gas of the future. Applicable: 0 to 20 percent in accordance with current standard and open for up to 100% as regulations will permit.

Gas

With this low-carbon energy source FUTURA ensures the security of supply and grid stability on our path to the carbon-free era. Applicable: 0 to 100 percent*.









^{*} Based on annual energy consumption

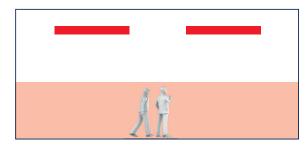
At your service: infrared, comfort heat. Economical, sustainable flexibility in your hall.

Infrared: superior in halls on principle

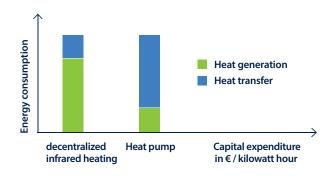
Infrared heat comes from above but works below. Fast, effective and targeted like the sun: where its rays hit floors, objects and even bodies, they become warm. This physical principle of heat transfer is far superior in halls. For a variety of reasons. Decentralized infrared heating technology from KÜBLER is extremely energy-efficient with savings of 50 to 70 % compared to conventional systems.

Our infrared systems are very economical, especially when it comes to investment. With costs 3 to 5 times lower than for a heat pump, for example, the overall package of purchase and operating costs is significantly cheaper. This applies to new builds - in renovation projects, the use of heat pumps is often not even possible. KÜBLER covers the entire value chain. This means that the energy transition with FUTURA is almost always profitable for you. Infrared technology is a safe investment, flexible for any type of hall use (or change of use), it can be controlled digitally and switched on or off as required for each heating zone. What's

more, infrared generates a uniform, pleasant heat without draughts or warm air pockets under the hall ceiling. In short: infrared is hard to beat in hall buildings.



Infrared heaters transfer heat highly efficiently and without loss to the work zones, where they heat people and surfaces directly and thus have an effect from all directions. Just like the sun. Very effective, extremely comfortable and unsurpassed coziness.



On a par in terms of overall efficiency: the heat pump is used for efficient heat generation. What is not considered is the heat transfer to the building. Decentralized high-efficiency IR heating systems are generators and transmitters in one device. With outstanding efficiency values for heat transfer.

"KÜBLER technology is probably one of the few ways to be as efficient as a heat pump. Only much more economical and with unsurpassed usability.

Because this technology was not made for living rooms, but for halls."



Energy efficiency

- ✓ Innovative high-efficiency technology
- Open for green and fossil energies
- Direct heat without heat exchanger losses
- Temporally and locally flexible coverage of the real heat demand
- Energy management integrated according to DIN EN ISO 50001

Cost efficiency

- 2-in-1 heating and lighting system
- ✓ Low-cost investment, fast ROI and low TCO
- Always heat with the most economical energy source
- ✓ Fast installation even during ongoing operation
- ✓ No separate boiler room
- Strengthens resilience against fluctuating energy prices

Operational reliability

- ✓ Trendsetting multi-energy system
- ✓ Safe investment for current and future energy sources
- ✓ Balancing of volatile available energies
- ✓ Nationwide service network
- World novelty by the innovation leader -Made in Germany

Flexibility

- Functionally optimized for comfortable and economical operation in halls
- ✓ Fast heat-up times, individual zone heating
- Easy to dismantle and move at any time
- Free (re)use of hall and floor space
- Modular expansion and service concept

Heat comfort

- Bidirectional heat transfer with infrared
- Comfortable heat principle similar to the sun – even at low room air temperature
- ✓ No draught or dust whirling up
- Uniform heat distribution even in poorly insulated halls
- ✓ Demand-oriented controllable heat output



Awarded. For the heat transition in industrial and commercial buildings.



SUCCESS 2022 – Special price "Innovative technology for climate protection"

"The system makes an immediate and relevant contribution to the energy transition, as it can be operated efficiently with methane or liquid gas, as well as with various mixtures of green gases, until renewable energy can be supplied in sufficient quantities."



Innovation Award of the State of Rhineland-Palatinate 2023

"KÜBLER GmbH from Ludwigshafen received the award in the trade category for its fully digitalized FUTURA Multi-Energy infrared heating and lighting system. The system enables a CO₂-neutral heat supply for industrial and other hall buildings and can switch back and forth between different energy sources in a highly efficient manner."



German Innovation Award 2023 – Winner

"With this development, KÜBLER is breaking new, innovative ground and offering a solution that, thanks to its added value, benefits both the users - hall operators in trade and industry - and the environment. Because FUTURA offers the economy a highly functional and affordable transformation path into the CO₂-free era."



FOCUS OPEN 2023 - Special Mention

"With the FOCUS OPEN, the Design Center Baden-Württemberg recognizes the quality of product developments in an international comparison. A large number of criteria were used for the assessment. The focus was on design quality and functionality as well as the level of innovation, ergonomics, interface design/connectivity, usability and sustainability. The topics of aesthetics, branding, development lead, user journey and finally digital intelligence were also scrutinized in detail."

Plus light. One infrastructure, one installation. Enjoy the cost advantage of the innovative 2-in-1 solution.

FUTURA brings light to the energy transition. Because the innovative multi-energy system is both, IR hall heating and LED hall lighting. This has enormous advantages - especially in new hall construction. After all, this smart world innovation saves a lot of effort and costs under the hall roof. And it bridges the gap to the new era of industrial heat and light supply.

One device. Two functions. All the advantages.

The combination of heating and lighting in one device - nothing is closer under the hall ceiling. After all, both use the same space. And follow the same physical laws for "illumination" - only with different wavelengths for light and infrared heat, respectively. The advantages are obvious and, above all, incredibly economical. Because the 2-in-1 world innovation means simple instead of double effort. In planning, in cabling, space requirements and, of course, service.

High quality. Economical. LED.

Hall buildings place high demands on LED luminaires - just as they do on heating systems. The illumination must be exactly right - for every hall, for every zone of use. That set the target for FUTURA. Result: Mission accomplished. The energy-saving LEDs provide high-quality light, for fatigue-free working conditions, and for glare-free, flicker-free, highly efficient lighting. Of course CE-compliant and Made in Germany.



The future has many faces. You can see three of them here.

Two lights, one light or none? You decide. The 2-in-1 world innovation FUTURA offers you ideal illumination functions for new halls - with one or two luminaires per end module depending on the ceiling height. Designed for a basic illumination of 500 lux, the highly efficient LEDs ensure favorable light distribution in the work zones. However, you can also benefit from FUTURA's forward-looking energy openness to green or fossil energy sources even if the building is already illuminated. E.g. for energy refurbishment projects in an existing building you can use the FUTURA variant without luminaires for your supply-secure path to a CO₂-free future.

FUTURA without light

Ideal for heating modernization in the energy transition with energy-open and highly efficient infrared technology.

FUTURA with 1 light per end module

High, fatigue-free lighting quality for new hall construction or energy-efficient refurbishment projects with ceiling heights up to 6 meters.

FUTURA with 2 lights per end module

Energy-saving LED lighting made in Germany for new halls or energy-efficient refurbishment projects with ceiling heights of more than 6 meters.

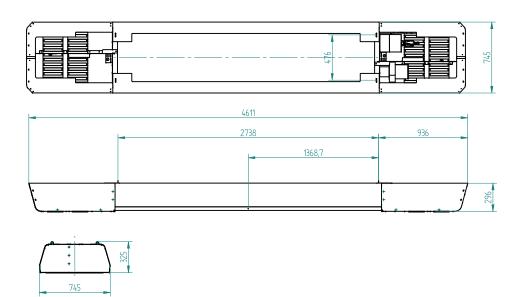






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LED lighting module	FUTURA	
Power supply (primary)	230 V / 50 Hz	
Voltage and operating current (secondary)	51 V DC / 3,6 A	
Electrical power consumption	ca. 180 W	
Color temperature (light color)	6.500 K (coolwhite)	
Color rendering index	> 80	
Luminous flux	ca. 28.000 lm	
Average illuminance (depending on the suspension height, 1 or 2 modules are used per end cap).	500 lx	



nfrared heater	FUTURA 20 kW
Total nominal heat load	20 kW
Power electrical	10 kW
Nominal heat load gas	10 kW
Nominal heat output gas	9,2 kW
Nominal natural gas flow rate at 10.0 kilowatt-hour/square m	neter [Hi] 1 m³/h
Length	4.611 mm
Width	743 mm
Height	326 mm
Gas connection to the device	1/2"
Gas connection pressure min./max. natural gas	20 / 50 mbar
Total weight	ca. 140 kg
Number of suspension points	4
Maximum point load of a suspension point	40 kg
Recommended minimum height ceiling mounting	5,0 m
Minimum length of the device suspension	0,27 m
A: Minimum distance to combustible materials (above reflector edge)	0,1 m
B: Minimum distance to combustible materials (below reflector edge)	1,0 m
Minimum distance from combustible materials	2,6 m

Note: We have exaggerated the colors of the FUTURA heating elements in this brochure for clarity. They do not correspond to the real coloring.



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