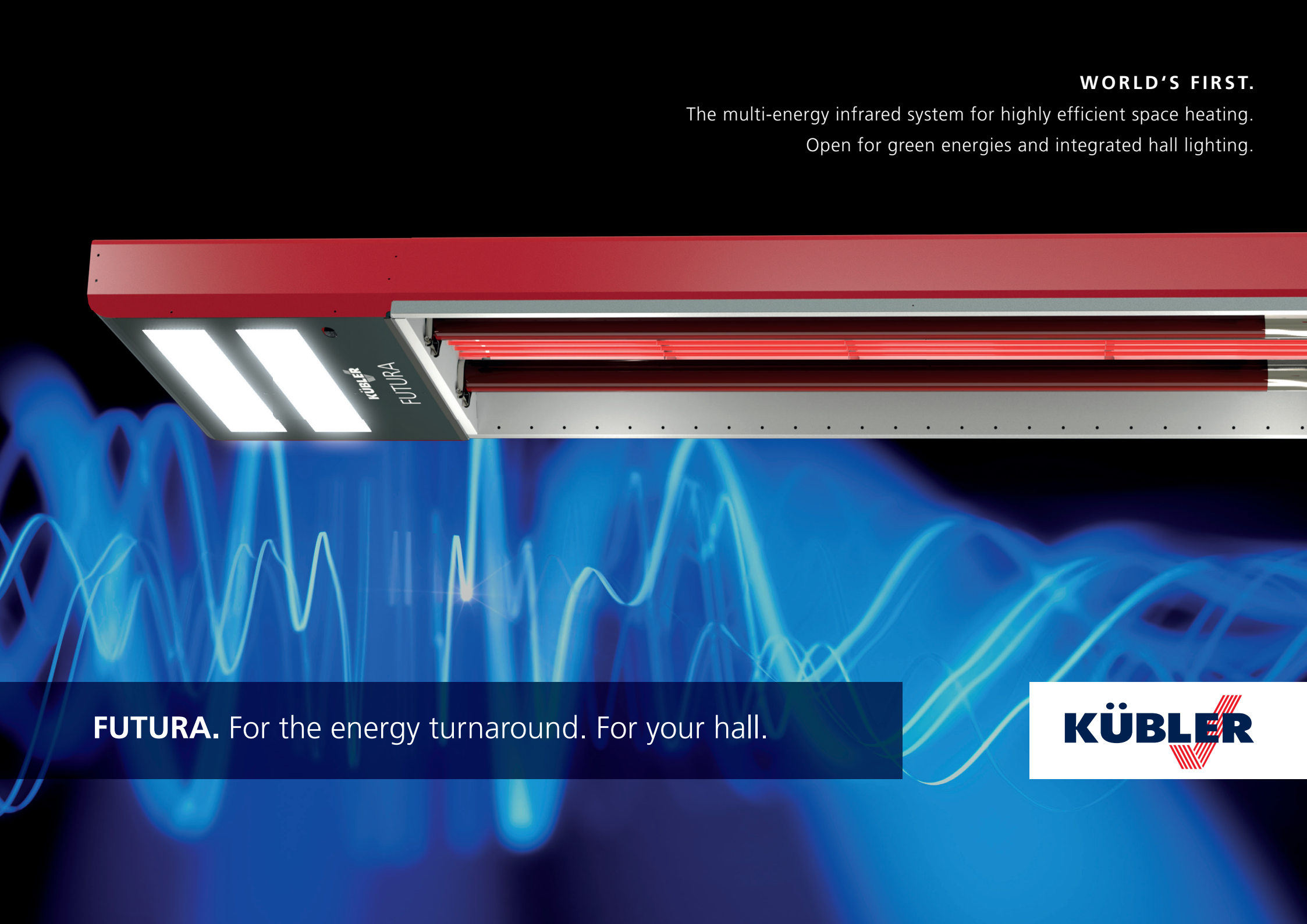
WORLD'S FIRST.

The multi-energy infrared system for highly efficient space heating.
Open for green energies and integrated hall lighting.



FUTURA. For the energy turnaround. For your hall.

KÜBLER

With green electricity. With green H_2. With gas. With (future) security.

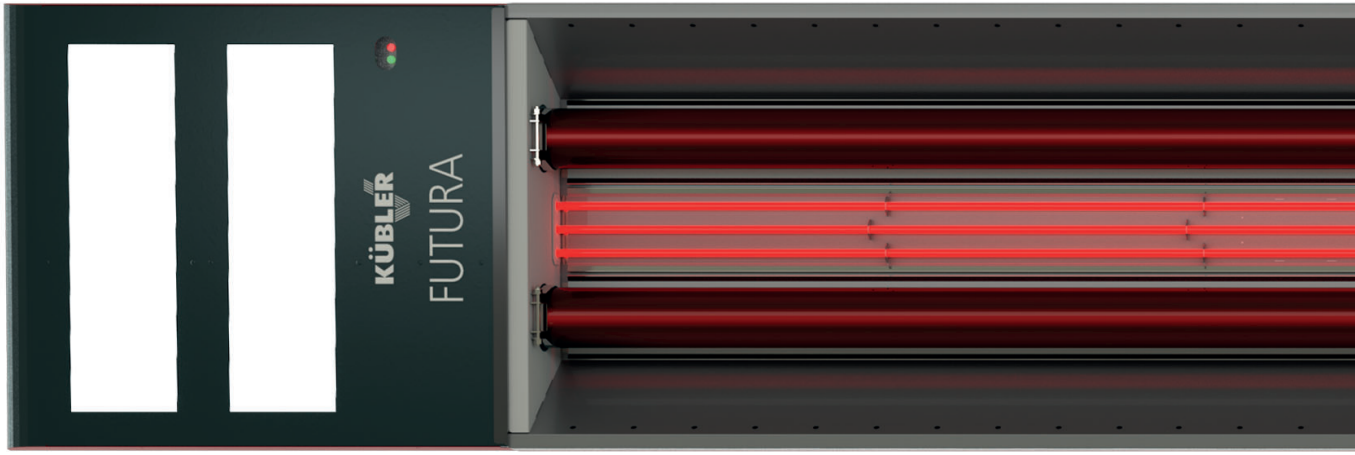
FUTURA is the future that begins today. A world first that helps you shape the energy transition. Safe. Reliable. With groundbreaking functions. In addition to the ability to switch highly efficiently between current and future energy sources, the new infrared heating system also combines heat supply 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 petroleum gas and allows you to switch back and forth between the energy sources. And back between the energy sources. In mono mode or in a mix. Depending on, whichever energy is currently available or particularly particularly cost-effective. This ensures security of supply and stabilizes the networks. The energy transition? It can come.

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

FUTURA

The electric heater that can 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 of your hall buildings. Applicable: 0 to 100 percent*.

Hydrogen
The innovative IR heater is H_2-ready and therefore ready for the green gas of the future. Applicable: 0 to 20 percent acc. current standard and open for 100 percent* by 2045.

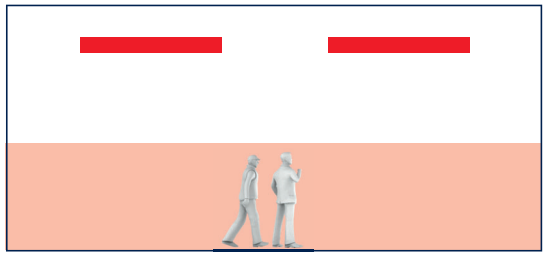
Gas
With this low-carbon energy carrier, FUTURA ensures FUTURA ensures the security of supply and grid stability on our path to the carbon-free era. Applicable: 0 to 100 percent*.

** Based on annual energy consumption*

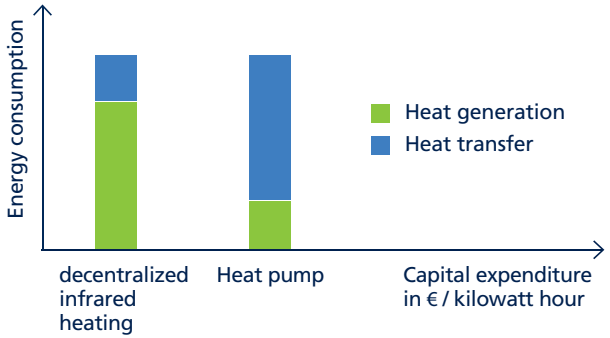
SUCCESS | 2022
VORSPRUNG DURCH INNOVATION

With award
Vorsprung durch Innovation - FUTURA wins the highly endowed special prize „Innovative Technologies for Climate Protection“ in the SUCCESS 2022 technology competition. Under this motto, Investitions- und Strukturbank Rheinland-Pfalz (ISB), in cooperation with the Ministry of Economics, honors outstanding technical innovations in the state.

With infrared. With comfort heat. With economy. With sustainable flexibility in your hall.



Infrared heaters transfer heat highly efficiently and without loss to the work zones, where they directly heat people and surfaces, thus acting from all directions. from all directions. Like the sun. Very effective, extremely comfortable and unsurpassed comfort.



On a par in terms of overall efficiency: Decentralized high-efficiency IR heating systems score points not only with much more favorable investment costs, but also with their excellent heat heat transfer - heat pumps with their effective heat generation.

Efficiency-first. Good for the energy transition. Good for your costs.
FUTURA is heat from above. Like the sun, it heats everything that is illuminated. People, machines, hall floors. So the heat comes from above, below and from all sides at the same time. In other words, bidirectional. Like the sun's rays. And because it is direct and does not end up as a warm air cushion under the hall ceiling, and because it is decentralized with no conduction losses, this heat transfer is unbeatably energy-efficient thanks to physics. With impressive savings of 50 to 70 percent.

Heat on demand. Where and when there is a demand.
Not working in production area 1? Special shift from 5 p.m.? Storage area 3 degrees below working temperature? With FUTURA, you heat flexibly in terms of time and location - because the pioneering infrared heating system only covers the heat demand that actually exists. After all, the most efficient heating system is the one that is not running. Smart control features such as the interface to the PV system, which can automatically switch to free electricity from the roof, zone heating, night setback or the shut-off function when the gates are open also reduce energy consumption considerably. In production and logistics halls. In event and sports halls. In workshops and salesrooms. In energy-efficient refurbishment as well as in new buildings.

Flexible for the future
FUTURA is flexibility. And therefore also the future of your hall building. Why? Because the versatile infrared heating allows you to do with your hall what you consider useful. At any time. Adapt the hall layout again and again to the changing requirements of production operations or production technology? Change the building's utilization profile? Expand or replace your machinery? Change the use of the hall? Rent it out? Sale? No matter. The future holds all possibilities open for you.

With energy efficiency

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

With economy

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

With operational reliability

- Trendsetting Multi-energy system
- Safe investment for current and future
- energy sources
- Balancing of volatile available energies
- Area-wide service network
- World novelty from the innovation leader - Made in Germany

With 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

With 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

With light. With an infrastructure. With one installation. With the cost advantage of the innovative 2-in-1 solution.

FUTURA brings light to the energy turnaround. Because the innovative multi-energy system is IR hall heating and and LED hall lighting in one. 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: with light and with infrared heat. 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 for heating systems. The illumination must be exactly right - for every hall, for every zone of use. As far as hall lighting with FUTURA is concerned? Mission accomplished. The energy-saving LEDs provide high-quality light, for fatigue-free working conditions, and for glare-free, flcker-free, highly efficient. Of course CE-compliant and Made in Germany.

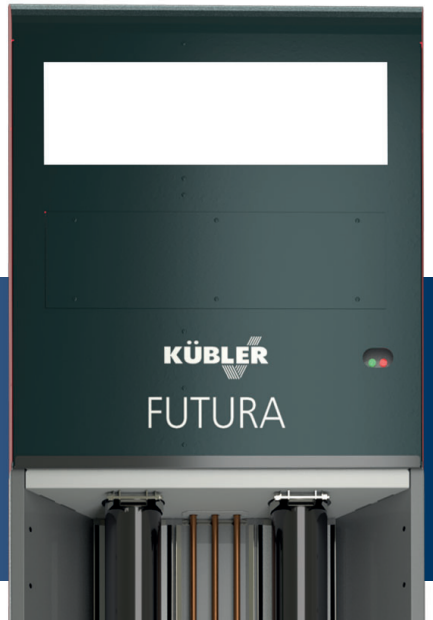
FUTURA

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

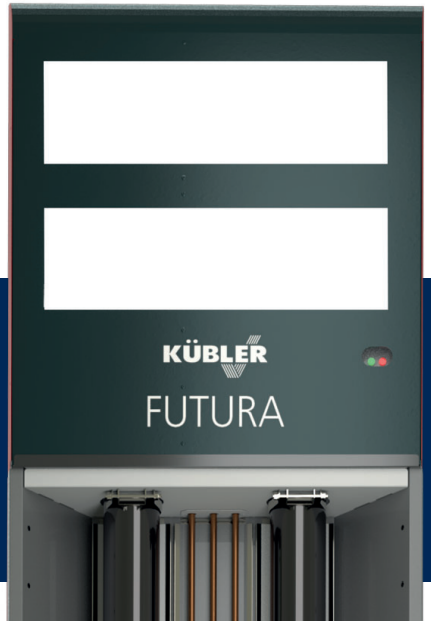
Two lights, one light or none? You decide. The 2-in-1 world innovation FUTURA offers you ideal illumination functions for new halls - with one or two luminaires per end module depending on the ceiling height. Designed for a basic illumination of 500 lux, the highly efficient LEDs ensure favorable light 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. As in the existing building, during energy refurbishment. Then use the FUTURA variant without luminaires for your supply-secure path to a CO_2-free future.

FUTURA without luminaire
Ideal for heating modernization in the energy transition with energy-open and highly efficient infrared technology.

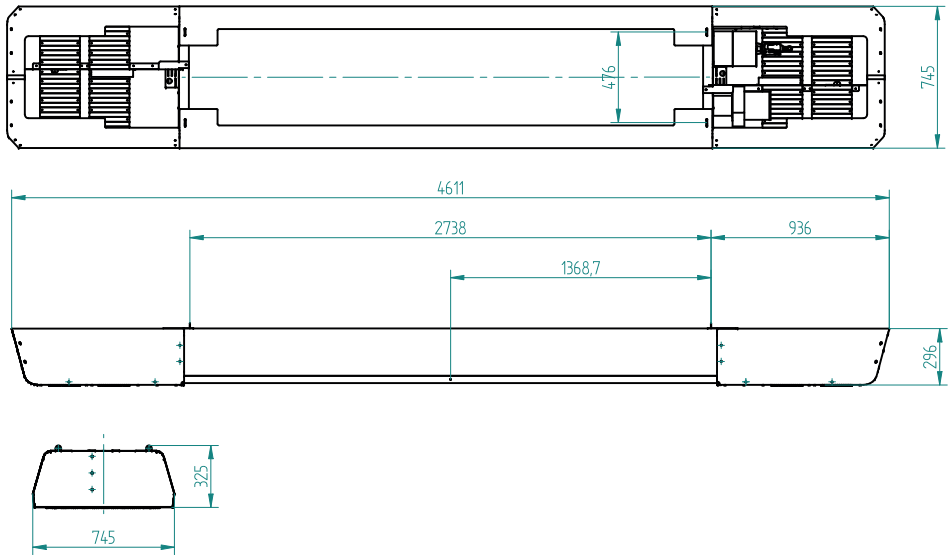
FUTURA with 1 luminaire per end module
High, fatigue-free lighting quality for new hall construction or energy-efficient refurbishment projects with ceiling heights up to 6 meters.



FUTURA with 2 luminaires 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.



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 (kaltweiß)
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



Infrared 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 meter [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
C: 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.

KÜBLER
Energiesparende Hallenheizungen

KÜBLER GmbH
Am Bubenpfad 1a
D-67065 Ludwigshafen
Tel. +49 / 621 / 57000-0
Fax +49 / 621 / 57000-57
www.kuebler-hallenheizungen.de

KÜBLER Anlagenbau GmbH
Sachsenallee 14
D-01723 Kesselsdorf / Dresden
Tel. +49 / 35204 / 220-0
Fax +49 / 35204 / 220-22
kontakt@kuebler-hallenheizungen.de

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