

SUPERTHAL®

IR Radiator

Electric Short Wave Infrared Radiator with Higher Power Yield

Kanthal infrared heater is a new generation of IR radiators, producing short wave infrared radiation with an element temperature of 1400–1450°C (2550–2640°F). The element is made of MoSi₂ wire known from many high temperature heating processes in different industries like electronics, ceramics, glass, R&D.

The new IR radiators are ready-to-install small compact panels, in standard unit sizes, with high power densities of 300 kW/m² (28 kW/ft²). The peak energy wavelength is 1.2 μm with a secondary peak energy from the fiber reflector of 2.2 μm.

The main advantage with Kanthal infrared heaters is that the terminals do not have to be cooled. This results in

20–30% higher power yield compared with halogen lamps and gas heated radiators.

SUPERTHAL IR heaters emit shorter wavelength than gas radiators which means more efficient drying operations.

The wavelength is longer than halogen radiators which means better matching with the water absorption spectra.

Power densities 2–3 times higher than gas radiators could be obtained.

Applications

- Preheating, soldering or enamelling of thin materials or selective surface heating
- Drying of painted steel sheets or pipes
- High temperature sintering



Technical Data

Specifications

The dimension of the panel is 150 x 230 mm (5.9 x 9 in), which could be multiplied to fit different customer designs.

The panels can be mounted horizontally or vertically.

They could either be equipped with metallic net or quartz glass to protect the radiator from dirt or mechanical damage.

Product Name

SUPERTHAL IR Radiator

Width	150 mm (5.9 in)
Height	230 mm (9 in)
Depth	90 mm (3.5 in)
Power	7–10 kW (7 kW 300 kW/m ²)
Voltage	90 V
Current	80–90 A
Power density	300 kW/m ² (28 kW/ft ²)
Element temp.	1400–1450°C (2550–2640°F)
Life	>12 000 cycles

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