

Radiant Heaters

Radiant Heaters	Sheath Materials	Max. Operating Temperatures		Typical Max. Watt Densities		Page
		°F	°C	W/in ²	W/cm ²	
RAYMAX® Panel	Stainless steel	2000	1095	30	4.7	557
Mineral Insulated (MI) Band and Strip Emitters	Stainless steel	1300	700	30	4.7	571

Radiant Heaters





Radiant Heaters

RAYMAX® Panel Heaters

The diverse RAYMAX® radiant panel heater product line from Watlow® allows for customers to solve virtually any application requiring radiant heat.

Watlow's capabilities cover a wide range of needs, from contamination-resistant surfaces to fast responding high-temperature panels.

Applying radiant heaters can be complicated. However, Watlow's engineering staff has the level of training and expertise required to meet most application requirements. Providing a high degree of technical support such as conducting application testing at Watlow's facility, calculating the watt density and temperature requirements and recommending system components such as sensors and controllers.

The RAYMAX family of heaters are part of the custom capability offering except for stock RAYMAX 1120 heaters.

Performance Capabilities

- Maximum face temperature up to 2000°F (1095°C)
- Maximum watt densities up to 30 W/in² (4.7 W/cm²)

Features and Benefits

Variety of styles

- Matches the ideal temperature and watt density requirements of your application

Watlow engineering and application support

- Helps projects run smoothly

Custom designs

- Adaptable for particular needs such as special wattage zoning

Watlow sensors and controllers are completely compatible with RAYMAX heaters

- Offers a single-source thermal system that is reliable and designed just for your application



Typical Applications

- Thermoforming
- Food warming
- Paint and epoxy curing
- Heat treating
- High-temperature furnaces
- Tempering and annealing processes



Caution: Fire Hazard

Radiant heaters must not be operated in the presence of flammable vapors, gases or combustible materials without proper ventilation and safety precautions. Radiant heaters must be properly wired and controlled to comply with all applicable electrical codes.

Radiant Heaters

RAYMAX Panel Heaters

RAYMAX 1010

Designed to resist contamination, the RAYMAX 1010 is ideal for use in screen printing, food warming and other low-heat applications. The heater's "sealed face" keeps contaminants away from the heating element, and the metal surface can be easily wiped or brushed clean whenever needed.

The rugged all-metal construction results in a shock-proof, shatter-proof heater, which is durable and long lasting. No fragile glass, ceramic or fiber is used.

Performance Capabilities

- Face temperature: 1000°F (540°C) maximum
- Watt densities: 10 W/in² (1.5 W/cm²) maximum
- 50 amperes maximum
- Maximum voltage to 480V

Features and Benefits

Uniform full surface heat source

- Provides better, more even heat

No reflectors

- Results in nothing to clean or replace

Convenient ready-to-use package

- Makes installation easier

One-inch thick backside insulation

- Reduces losses

Totally sealed version available

- Suitable for hose down applications

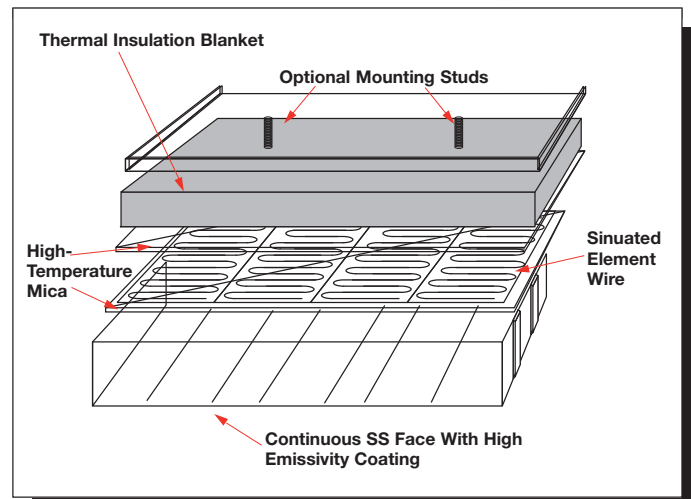
Repeatable temperature sensing options

- Increases accuracy

UL® component recognized versions are available

Typical Applications

- Drying screen-printed textiles
- Curing process coatings on circuit boards
- Food warming/cooking
- Epoxy curing
- Thermoforming



Radiant Heaters

RAYMAX Panel Heaters

RAYMAX 1010

Applications and Technical Data

Sizes and Ratings

Thickness: 1¼ in. (45 mm)

Voltage: Customer specified up to 480V.

Note: Small heaters may not be able to be built at high voltages. Contact your Watlow representative for specific application.

Watt density: Up to 10 W/in² (1.5 W/cm²), 50A max.

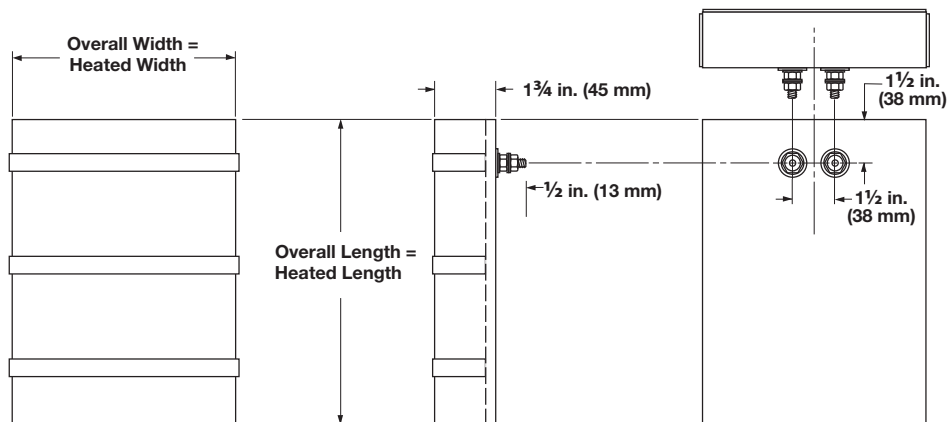
Face temperature: Up to 1000°F (540°C)

Typical peak energy wavelength: 3.5-4 microns

Specifications

Heater Dimensions	Min.	Max.	Increments
Width: in. (mm)	4 (102)	20 (508)	2 (50.8)
Length: in. (mm)	10 (254)	68 (1727)	0.06 (1.6)
Area: in ² (cm ²)		864 (5574)	any

Note: Less than maximum length x width may exceed maximum area.



Options

- Terminal box
- Thermowell (VAT style thermocouple required)
- Thermocouple pocket (thermocouple required)
- Thermocouple welded to hot face
- Mounting studs
- Totally sealed construction
- Food-safe surface treatment

Radiant Heaters

RAYMAX Panel Heaters

RAYMAX 1120

The RAYMAX 1120 is a lightweight, yet sturdy and durable radiant heater panel. The emitter sheath is stainless steel with a black coating, which makes it a highly efficient radiating surface. In addition, the heater's low mass allows rapid start-up and fast response to controllers.

The patented RAYMAX heater features 1 in. (25 mm) wide emitter strips, which are individually replaceable for lower maintenance costs. Weighing only 5.5 lbs/ft² (26.8 kg/m²), the heater is easy to mount.

Performance Capabilities

- Face temperature: 1100°F (595°C) maximum
- Watt density: 20 W/in² (3 W/cm²) maximum
- Maximum voltage to 480V
- UL® component recognized versions are available

Features and Benefits

Replaceable emitters

- Reduces your cost

High temperature mica

- Insulates nickel chromium resistance wire, permitting longer heater life

High emissivity coating on emitter strips

- Improves radiant heating efficiency

¾ in. (22.2 mm) thick thermal insulation

- Backs the emitter strips to reduce backside losses

Uniform full surface heat source

- Provides better, more even heat

Special requirements are easily met

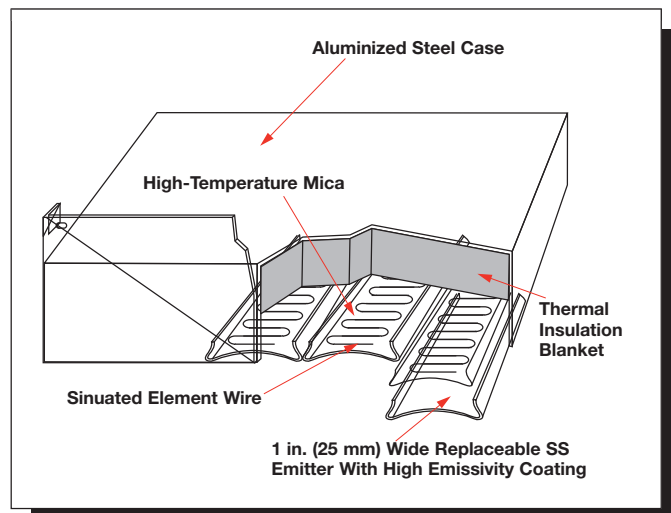
- Assures availability of custom sizes and ratings

Next day shipment

- Provides quick delivery to meet customer's needs

Typical Applications

- Thermoforming
- Textile drying
- Paint curing
- Powder coating fusing
- Shrink wrapping
- Circuit board soldering



Radiant Heaters

RAYMAX Panel Heaters

RAYMAX 1120

Applications and Technical Data

Specifications

Heater Dimensions	Min.	Max.	Increments
Width: in. (mm)	1 (25)	36 (914)	1 (25.0)
Length: in. (mm)	6 (152)	94 (2388)	0.06 (1.5)
Area: in ² (cm ²)	6 (38.7)	864 (5574.2)	any

Note: Less than maximum length x width may exceed maximum area.

Sizes and Ratings

Face Temperature: 1100°F (595°C) max.

Wattage: Watt densities up to 20 W/in² (3 W/cm²)

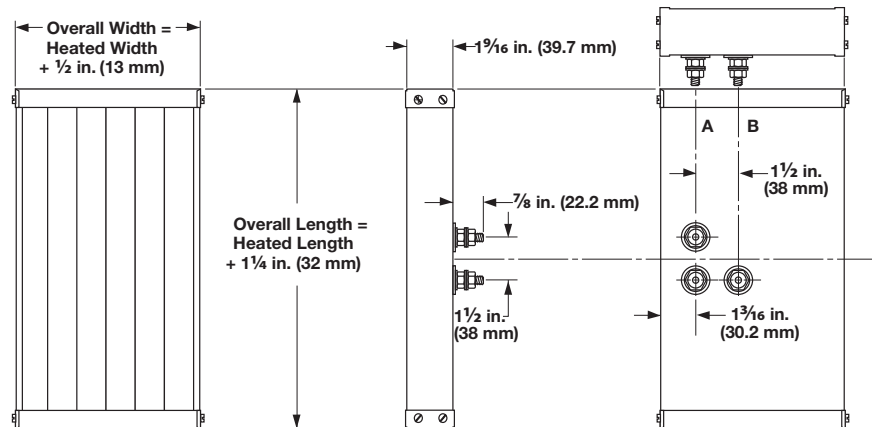
Voltage: Customer specified up to 480V. Balanced 3-phase available on unit widths divisible by three.

Note: Small heaters may not be able to be built at high voltages. Contact your Watlow representative for specific application.

Terminals: Non-standard locations are available. Please specify.

Tolerance: ±1/16 in. (1.6 mm)

Typical Peak Energy Wavelength: 3-3.5 microns



Panel Overall Size in. (mm)		Panel Heated Size in. (mm)		Volts	Watts	Watt Density W/in ² (W/cm ²)	Approx. Net Wt. lbs (kg)	Delivery	Code Number
Width	Length	Width	Length						
6 1/2 (165)	25 1/4 (641)	6 (152)	24 (610)	240	2880	20 (3.1)	6 (2.7)	Stock	P0624AX050
12 1/2 (318)	13 1/4 (337)	12 (305)	12 (305)	240	2880	20 (3.1)	6 (2.7)	Stock	P1212AX030
12 1/2 (318)	25 1/4 (641)	12 (305)	24 (610)	240	5760	20 (3.1)	12 (5.4)	Stock	P1224AX062
12 1/2 (318)	49 1/4 (1251)	12 (305)	48 (1219)	480 3-phase	11,520	20 (3.1)	24 (10.8)	Stock	P1248AX073

• Stock delivery, same day shipment

Note: • Panels are equipped with terminal box, thermocouple well with bayonet adapter and mounting studs.

- Radiant panels must be properly applied for safe operation.
- Please contact your Watlow representative with the application before ordering.

Radiant Heaters

RAYMAX Panel Heaters

RAYMAX 1220 and 2030

Easy to install and capable of high surface temperatures, the RAYMAX 1220 and 2030 are ideal for many process heating applications requiring “hot-face” temperatures above 1000°F (540°C).

Each unit consists of a ceramic fiber heater mounted in a 2½ in. (64 mm) deep sheet metal case providing thermal insulation. The case includes post terminals for electrical connections and provides a mounting system that can be used with virtually any flat ceramic fiber unit. Since any of the flat unit heating element configurations can be used—exposed sinuated, embedded coil or foil elements—watt density and temperature capabilities can be tailored to meet a specific radiant application.

Performance Capabilities

- RAYMAX 2030 (uses sinuated or coil elements): temperatures up to 2000°F (1095°C); watt densities up to 30 W/in² (4.7 W/cm²)
- RAYMAX 1220 (uses an etched foil element): temperatures up to 1200°F (650°C); watt densities up to 20 W/in² (3 W/cm²)
- Maximum voltage up to 600V

Features and Benefits

Lightweight, low mass design

- Allows fast response to controllers

Self insulation with 2½ in. (64 mm) thick mounting case

- Provides high efficiency

Thermocouple mounting clamp

- Makes process system control easier

Aluminized steel case

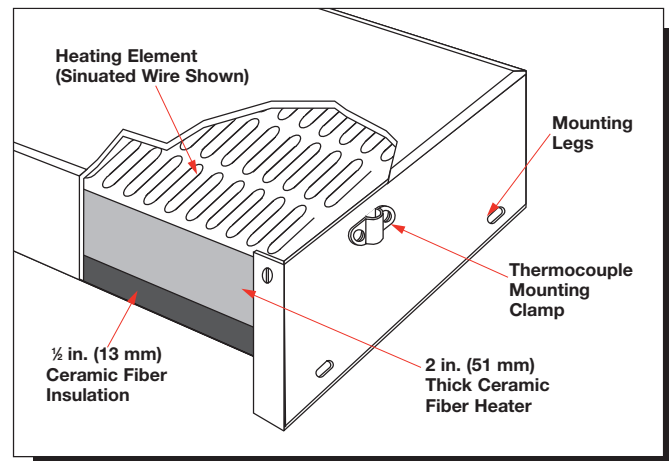
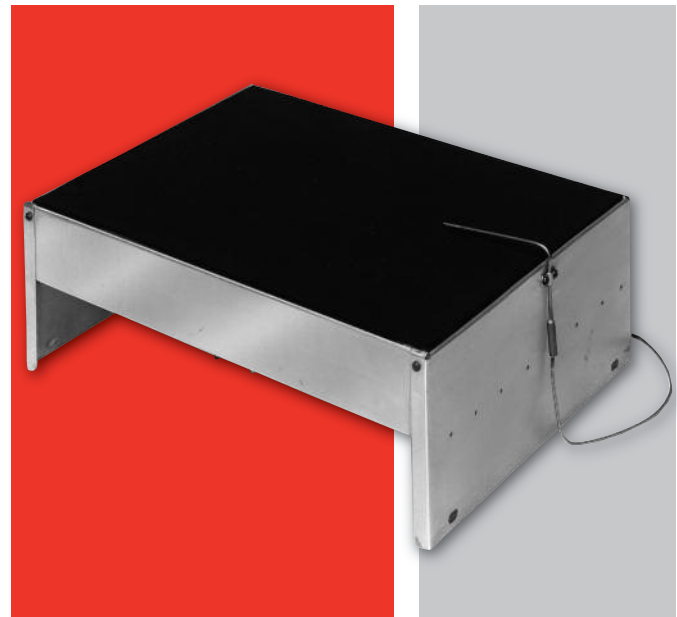
- Handles temperatures up to 1100°F (595°C)

Special hot-face heating patterns

- Provides a design specifically for an application using an etched foil RAYMAX 1220

Typical Applications

- Conveyor furnaces
- High-temperature vessel heating
- Tempering and annealing processes for glass, wire, ceramics and metals
- Coating, curing and drying of inks, paints, plastics and films



Radiant Heaters

RAYMAX Panel Heaters

RAYMAX 1220

Ceramic Fiber with Foil Element

Panel Overall Size ± 1/16 in. (1.5 mm)		Panel Nominal Heated Size in. (mm)		Volts	Watts	Watt Density		Approx. Net Wt.		Delivery	Code Number
Width	Length	Width	Length			W/in ²	(W/cm ²)	lbs	(kg)		
4 1/4 (108)	12 (305)	4 (102)	12 (305)	120	950	19.8	(3.1)	2.8	(1.3)	Standard	VP504A12F
4 1/4 (108)	24 (610)	4 (102)	24 (610)	240	1900	19.8	(3.1)	4.8	(2.2)	Standard	VP504A24F
8 1/4 (210)	12 (305)	8 (203)	12 (305)	240	1900	19.8	(3.1)	4.5	(2.1)	Standard	VP508A12F
8 1/4 (210)	24 (610)	8 (203)	24 (610)	240	3800	19.8	(3.1)	7.7	(3.5)	Standard	VP508A24F

- Standard delivery, contact your Watlow representative

All units in this table are suitable for use up to 1200°F (650°C) max. surface temperature.

① Thermocouple clasp is not included in the length.

RAYMAX 2030

Ceramic Fiber with Sinuated Element

Nominal Heated Width in. (mm)	Nominal Heated Length in. (mm)	Volts	Watts	Watt Density		Approx. Net Wt.		Delivery	Code Number
				W/in ²	(W/cm ²)	lbs	(kg)		
4 (102)	6 (152)	30	500	20.8	(3.2)	1.9	(0.9)	Standard	VP504A06T
	12 (305)	120	925	19.3	(3.0)	3.1	(1.4)	Standard	VP504A12T ^①
	18 (457)	120	1400	19.4	(3.0)	4.1	(1.9)	Standard	VP504A18T ^①
	24 (610)	240	1850	19.5	(3.0)	5.2	(2.4)	Standard	VP504A24T ^①
	30 (762)	240	2250	19.6	(3.1)	6.3	(2.9)	Standard	VP504A30T ^①
	36 (914)	240	3200	22.2	(3.4)	7.4	(3.3)	Standard	VP504A36T ^①
6 (152)	6 (152)	60	650	18.1	(2.8)	2.4	(1.1)	Standard	VP506A06T ^①
	12 (305)	120	1250	17.4	(2.7)	4.1	(1.9)	Standard	VP506A12T
	18 (457)	240	2000	18.5	(2.9)	5.8	(2.6)	Standard	VP506A18T
	24 (610)	120	2500	17.4	(2.7)	7.4	(3.3)	Standard	VP506A24T
	24 (610)	240	2500	17.4	(2.7)	7.4	(3.3)	Standard	VP506A24U
	30 (762)	240	3400	18.9	(2.9)	9.0	(4.1)	Standard	VP506A30T
8 (203)	36 (914)	240	4000	18.5	(2.9)	10.6	(4.8)	Standard	VP506A36T
	12 (305)	120	1800	18.8	(2.9)	4.7	(2.4)	Standard	VP508A12T
	18 (457)	240	3000	20.8	(3.2)	7.4	(3.3)	Standard	VP508A18U ^①
	24 (610)	240	3600	18.8	(2.9)	9.5	(4.3)	Standard	VP508A24T
30 (762)	240	5000	20.8	(3.2)	11.7	(5.3)	Standard	VP508A30T	
36 (914)	240	6000	20.8	(3.2)	13.9	(6.3)	Standard	VP508A36T	

CONTINUED

- Standard delivery, contact your Watlow representative

All units in this table are suitable for use up to 1800°F (982°C) max. surface temperature.

① Vee sinuated

Radiant Heaters

RAYMAX Panel Heaters

RAYMAX 2030 (Continued)

Nominal Heated Width		Nominal Heated Length		Volts	Watts	Watt Density		Approx. Net Wt.		Delivery	Code Number
in.	(mm)	in.	(mm)			W/in ²	(W/cm ²)	lbs	(kg)		
10	(254)	12	(305)	120	2000	16.7	(2.6)	6.3	(2.9)	Standard	VP510A12T
		18	(457)	120	3600	20.0	(3.1)	9.0	(4.1)	Standard	VP510A18T
		24	(610)	240	4500	17.9	(2.8)	11.7	(5.3)	Standard	VP510A24T
		30	(762)	240	6000	20.0	(3.1)	14.4	(6.5)	Standard	VP510A30T
		36	(914)	240	7200	19.4	(3.0)	17.1	(7.8)	Standard	VP510A36T
12	(305)	12	(305)	120	2500	17.4	(2.7)	7.4	(3.3)	Standard	VP512A12T
		12	(305)	240	2500	17.4	(2.7)	7.4	(3.3)	Standard	VP512A12U ^①
		18	(457)	240	4000	18.5	(2.9)	10.6	(4.8)	Standard	VP512A18T
		24	(610)	240	6000	20.8	(3.2)	13.9	(6.3)	Standard	VP512A24T
		30	(762)	240	7200	20.0	(3.1)	17.1	(7.8)	Standard	VP512A30T
14	(356)	36	(914)	240	8400	19.4	(3.0)	20.3	(9.2)	Standard	VP512A36T ^①
		12	(305)	240	3500	20.8	(3.2)	8.5	(3.8)	Standard	VP514A12T
		18	(457)	240	4900	19.4	(3.0)	12.2	(5.5)	Standard	VP514A18T
		24	(610)	240	7000	20.8	(3.2)	16.0	(7.3)	Standard	VP514A24T
		30	(762)	240	8400	20.0	(3.1)	19.8	(9.0)	Standard	VP514A30T ^①
16	(406)	36	(914)	240/240	9800	19.4	(3.0)	23.6	(10.7)	Standard	VP514A36T
		12	(305)	240	3600	18.8	(2.9)	9.5	(4.3)	Standard	VP516A12T
		18	(457)	240	5700	19.8	(3.1)	13.9	(6.3)	Standard	VP516A18T
		24	(610)	240	7100	18.5	(2.9)	18.2	(8.2)	Standard	VP516A24T
		30	(762)	240/240	9600	20.0	(3.1)	22.5	(10.2)	Standard	VP516A30T
36	(914)	240/240	11500	20.0	(3.1)	26.8	(12.2)	Standard	VP516A36T		

• Standard delivery, contact your Watlow representative

All units in this table are suitable for use up to 1800°F (982°C) max. surface temperature.

RAYMAX 1220 or 2030 heaters are assembly stock or standard. Delivery of assembly stock products is three working days.

Delivery of standard products is 15 working days.

^①Vee situated

Ordering Information VP - Radiant Panels

To order, complete the code number to the right with the information below:

1 2 3 4 5 6 7 8 9 * 10 11 12 13 14
V P 5 0 8 A 1 2 T - 0 0 0 0

Base Code Number _____

Modifications Options _____

- 0 = Case only
- 1 = 3 in. (76 mm) leg height and terminal box
- 4 = 4/20 mounting studs
- 5 = 4/20 mounting studs and terminal box
- M = 1 in. (25 mm) leg height
- R = 1 in. (25 mm) leg height and terminal box
- W = Terminal box in standard location
- Y = 3 in. (76 mm) leg height

Radiant Heaters

RAYMAX Panel Heaters

RAYMAX 1330

The RAYMAX 1330 is the only radiant heater featuring specially insulated heater emitter strips for higher performance. Watlow developed a unique compacted mineral insulation to electrically insulate the element wire, with a result of superior heat transfer and higher operating capabilities.

Because of its rugged stainless steel construction, the RAYMAX 1330 will last longer. Plus, this heater features a high emissivity black coating and a uniform, full surface heat source for better efficiency.

Performance Capabilities

- Maximum face temperature: 1300°F (700°C)
- Maximum watt density: 30 W/in² (4.7 W/cm²)
- Typical peak energy wavelength: 3-3.6 microns
- Maximum voltage to 480V

Features and Benefits

Field replaceable emitter strips

- Prevents the cost of buying a whole new radiant heater

Rugged metal construction

- Protects heater from contaminants

No reflectors

- Eliminates cleaning and replacement

No fragile glass or ceramic elements

- Prevents possible safety hazards

Backside insulation

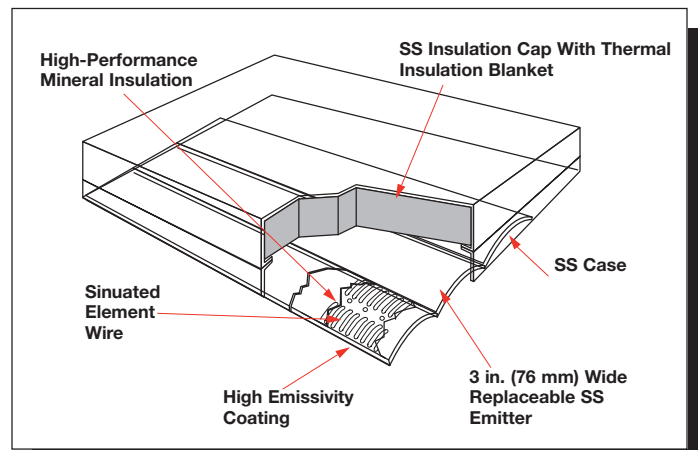
- Results in better heating efficiency

Responsive face temperature sensing options

- Increases accuracy

Typical Applications

- Thermoforming plastics and composites
- Circuit board soldering
- Heat shrinking of plastic



Radiant Heaters

RAYMAX Panel Heaters

RAYMAX 1330

Applications and Technical Data

Sizes and Ratings

Thickness: 2.46 in. (62.5 mm)

Voltage: Customer specified up to 480V. Balanced 3-phase available on units with three or six emitters.

Note: Small heaters may not be able to be built at high voltages. Contact your Watlow representative for specific application.

Maximum Watt Density: 30 W/in² (4.7 W/cm²)

Maximum Face Temperature: 1300°F (700°C)

Typical Peak Energy Wavelength: 3 microns

Standard Tolerances: ±1/16 in. (1.6 mm)

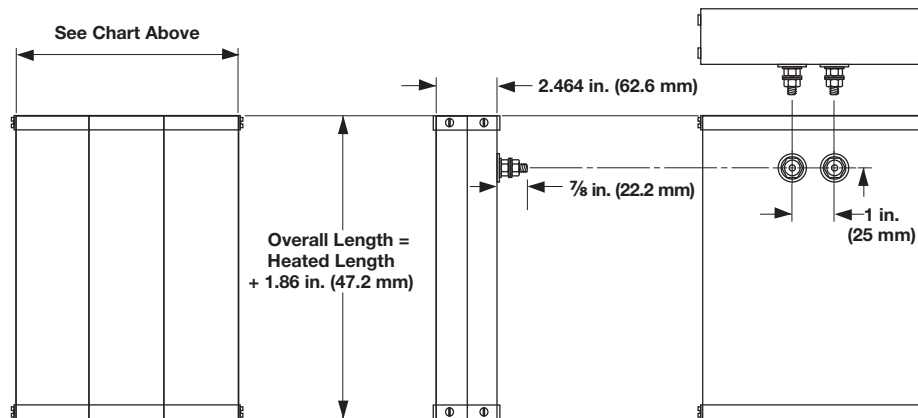
Specifications

Heater Dimensions	Min.	Max.	Increments
Length: in. (mm)	12 (305)	30.5 (775)	0.06 (1.5)

Number of Emitters	Heated Width in. (mm)	Overall Width in. (mm)
1	2.95 (74.9)	3.36 (85.3)
2	6.14 (155.9)	6.54 (166.1)
3	9.33 (236.9)	9.73 (247.1)
4	12.51 (317.8)	12.92 (328.2)
5	15.70 (398.8)	16.11 (409.2)
6	18.89 (479.8)	19.29 (489.9)
7	22.08 (560.8)	22.48 (570.9)
8	25.26 (641.6)	25.67 (652.0)

Options

- Terminal box
- Thermowell
- Thermocouple welded to hot face
- Mounting studs



Radiant Heaters

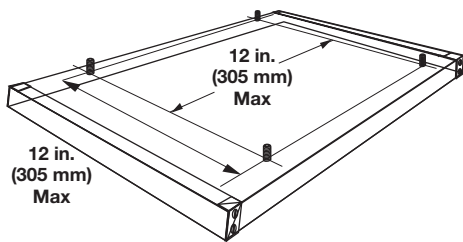
RAYMAX Panel Heaters

Mounting Accessories

Mounting Studs

Standard $\frac{1}{4}$ -20 x $1\frac{1}{2}$ in. (38 mm) or (M6-1 x 40) steel studs are welded to the case. For best support, studs should be approximately located on 12 in. (305 mm) centers. Contact your Watlow representative for exact locations on specific heaters.

Available with RAYMAX 1010, 1120, 1220, 1330 and 2030.

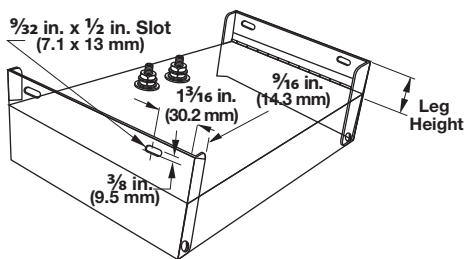


Mounting Legs

Mounting legs are extensions of the steel end caps with mounting slots for bolting directly to field support members. There is no extra charge for legs. They can be supplied in half inch increments from 0.5 in. (13 mm) to 3 in. (76 mm). No slots are provided in legs less than 1 in. (25 mm) long.

For panels over 24 in. (610 mm) long, mounting studs are recommended for the best panel support.

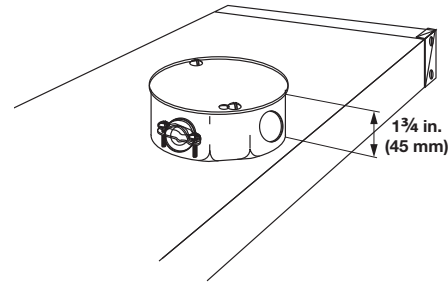
Available with RAYMAX 1120, 1220 and 2030.



Application note: Allow for some thermal expansion of the heater case during operation. An expansion of up to 1 percent can occur when the case reaches its normal maximum limit of 1100°F (595°C). If the equipment has mounting screws to connect to the slots in the mounting legs, allow for a small amount of extra length. If mounting holes are used to interface with the mounting studs on the back of the RAYMAX case, make sure the holes are oversized. Also, use washers and avoid overtightening.

Terminal Accessories

Terminal Box



To protect electrical connections, a standard NEMA octagon terminal box is available. The standard size is $3\frac{3}{16}$ x $3\frac{3}{16}$ x $1\frac{1}{2}$ in. (90.5 x 90.5 x 38 mm) with knockouts for $\frac{1}{2}$ in. (13 mm) conduit. Other NEMA sizes are also available.

Care should be taken to use lead wire capable of withstanding the ambient temperatures.

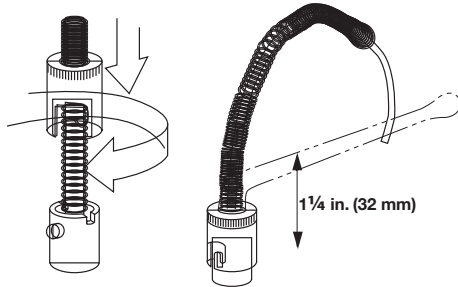
Available with RAYMAX 1010, 1120, 1220, 1330 and 2030.

Radiant Heaters

RAYMAX Panel Heaters

Temperature Control

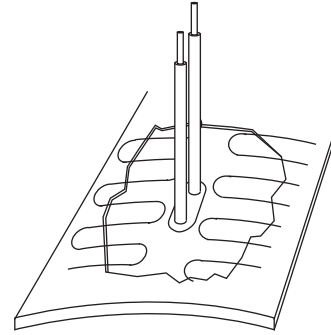
Thermowells



A thermowell allows for the use of a thermocouple with a bayonet fitting to monitor heater temperature. The thermowell is located on the back of the panel to allow easy access for thermocouple replacement. Spring tension holds the tip of the thermocouple in contact for close control of the heater temperature. Thermocouple is not included.

Available with RAYMAX 1010, 1120 and 1330.

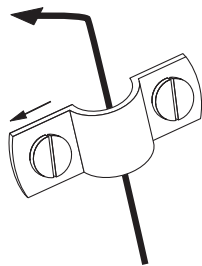
Welded Thermocouple



A thermocouple junction is welded to the emitting surface to provide optimum temperature sensing accuracy and responsiveness. This option permits the actual radiating face temperature to be precisely monitored and controlled. The standard length of the thermocouple wire is 12 in. (305 mm).

Available with RAYMAX 1010, 1120 and 1330.

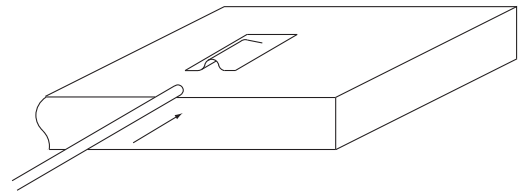
Thermocouple Clamps



A thermocouple mounting clamp can be provided on the end of the heater case. The clamp is suitable for use with $\frac{1}{8}$ in. (3.2 mm) and $\frac{1}{4}$ in. (6 mm) O.D. sheath thermocouples, which should be bent 90° so the sensing tip is just above and lightly touching the hot face at an element location.

Available with RAYMAX 1220, 1525 [$\frac{1}{8}$ in. (3.2 mm) only], 1626 [$\frac{1}{8}$ in. (3.2 mm) only] and 2030.

Thermocouple Pocket



A thermocouple pocket is welded to the emitting surface. The pocket accepts a 0.063 in. (1.6 mm) diameter thermocouple (not included). This option provides accurate temperature sensing and easy thermocouple replacement.

Available with RAYMAX 1010, 1120 and 1330.

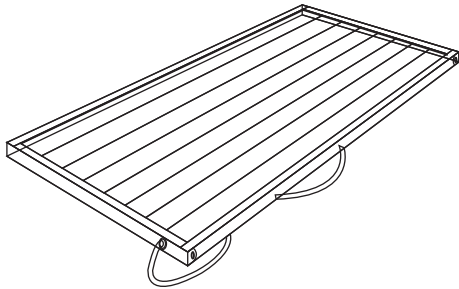
Radiant Heaters

**EXTENDED
CAPABILITY**

Extended Capability For RAYMAX Panel Heaters

Mounting Accessories

Low Profile

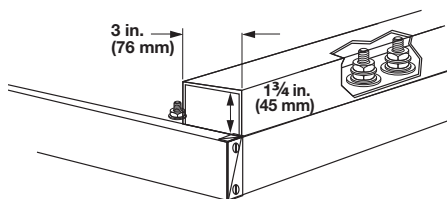


This design may be required where mounting space is limited. For example, when converting existing equipment or designs to radiant panels.

Available options may vary from the standard units when you specify a low-profile design. Contact your Watlow representative for further information.

Available with RAYMAX 1010, 1120, 1220 and 2030.

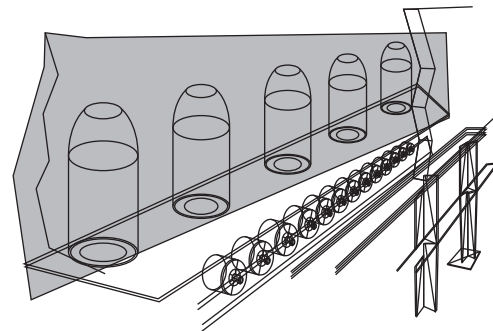
Wiring Raceway



A steel raceway provides electrical and physical protection for all terminal connections. This can be particularly useful for multi-zone panels.

Available with RAYMAX 1010, 1120, 1220, 1330 and 2030.

Zoning



Watt densities can be varied across the entire width of RAYMAX heaters. If desired, each zone can have an individually controlled power supply.

Zoning can be very valuable when part of the product requires more heat, or when it must compensate for heat losses at the edges. By separately turning off part of the heated width, it can adjust for various widths of material.

Available with RAYMAX 1010, 1120, 1220, 1330 and 2030.

Radiant Heaters

**EXTENDED
CAPABILITY**

Extended Capabilities For Mineral Insulated (MI) Band and Strip Emitters

These heaters are constructed using Watlow's exclusive mineral insulation, which has high thermal conductivity. The band and strip emitters are also constructed of rugged stainless steel sheath with a high emissivity coating. These heaters can operate at temperatures to 1300°F (700°C), and 30 W/in² (4.7 W/cm²).

Performance Capabilities

- Maximum operating temperature up to 1300°F (704°C)
- Maximum watt densities up to 30 W/in² (4.7 W/cm²)

Sizes

Strip Emitters

Width: 2 in. (51 mm), 3 in. (76 mm)

Length: 6 in. (152 mm) minimum, 31 in. (787 mm) maximum

Band Emitters

Width: 1 in. (25 mm), 2 in. (51 mm), 3 in. (76 mm) maximum

- Segment Length: 6 in. (152 mm) minimum to 42 in. (1067 mm) maximum
- Partial arcs to full 360° coverage, contact your Watlow representative.
- High emissivity coating on inside standard. For high emissivity coating on outside, contact your Watlow representative.
- Post terminals standard; high-temperature leads available on bands only.

Options

- Mounting studs
- Mounting clips for 3 in. (76 mm) wide emitter strips, part #MM6063
- Thermocouple welded to sheath
- Thermocouple pocket welded to sheath
- Bayonet fitting for VAT style thermocouple

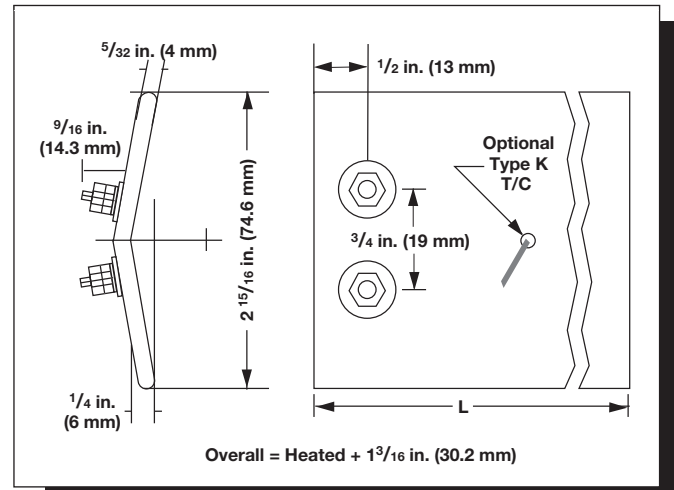
Features and Benefits

Exclusive mineral insulation

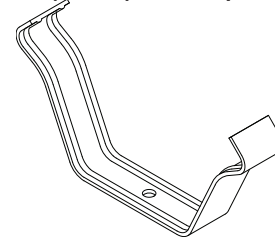
- Combines dielectric strength and superior thermal conductivity
- Transfers heat rapidly to the sheath

High thermal conductivity of MI

- Gives an almost instant response to temperature control
- Eliminates thermal lag and temperature overshoot associated with other heaters



Mounting Clip (Part # MM6063) (For 3 in. (76 mm) wide strip heater)



Typical Applications

- Heating rotating drums and rollers
- Tube ovens
- Small spot heating
- Heat shrinking and curing wire coatings
- Heat laminating wheels

