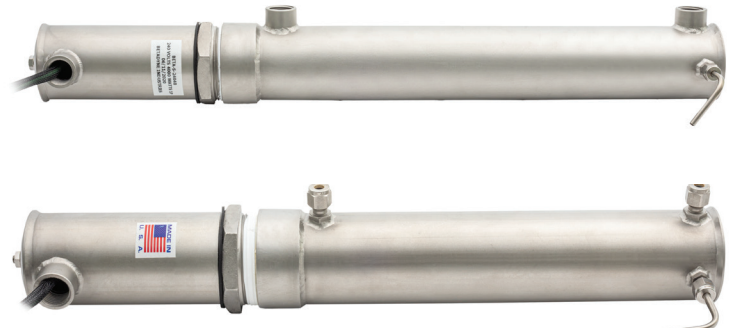


## Air/Nitrogen Heaters

Powerful & On-Demand

Ultra Low Watt Density

Keeps your Liquid/Gas Pure  
and your Process Safe



CRES-ILB Heaters – Threaded/Compression/VCR/etc.



When working with clean medias like DI water, Nitrogen Argon/CDA, Crygen- High Temp (-200 to 1200 deg F) processes for all critical and non-critical heating is imperative. Heating LN<sub>2</sub>/GN<sub>2</sub> and other gases with high watt density heaters (in excess of 60 watts/sq. in.) will impart impurities into the stream break down media efficacy and create oxides, ions and metals from the incredibly small surface areas being used to create such large wattages.

With the CRES ULTRA line of heaters you will have vast heater surface areas for all power ratings, instant response. Further, CRES Heater's low watt densities avoid numerous inherent safety concerns and instant burn outs from High Watt Density Heaters, or exposed Filament Resistance wire heaters.

### FEATURES AND BENEFITS:

#### Compact and Light Weight

- Small, high powered heaters with safe heating surface areas
- Compact with incredibly low watt density
- Replace large standard heaters with CRES a fraction of the size
- All units electrically isolated, not open-coil resistance wire

#### Ultra Low Watt Density (5 to 35 watts/sq in)

- Will not shed contaminates into process (+60 watts/sq in)
- Ultra fast on Demand response heaters
- Clean for all critical and not critical pharma/bio/semi applications

#### Standards

- Fully stainless steel construction 304L-316L
- Low to High pressure 150 standard, 10kpsi custom
- Electric enclosure NEMA<sub>4</sub> standard, Explosion proof available

**Contact Infinity: 508.434.1600**

Infinity Thermal Corp | 306 Sturbridge Rd | Charlton MA 01507 | [www.InfinityThermal.com](http://www.InfinityThermal.com) | [Sales@InfinityThermal.com](mailto:Sales@InfinityThermal.com)

### TECHS AND SPECS:

- Housing 304L SS construction Pharma/Semi Grade
- Element 316L SS construction Pharma/Semi Grade
- Wattage/Surface Area = Watts per square inch (WSI)  
1 kw heater = 8 WSI    10 kw heater = 32 WSI
- Units will not burn out with short periods of no flow
- Units rated to 150 psig standard, custom to 10,000 psig+
- Size from 8" -24" long | Weight from 3 lbs -12 lbs
- Standard Wattages 500 watts - 300,000 watts
- All units come standard with TC measuring liquid temp



All standard fittings/flanges available 



### PROCESS CONTROLS

(Available for all heaters)

Turn key control systems come with micro processor based Process/PID temperature control solid state power controls, tuned and ready for operation direct from factory.

Power disconnects are provided with all of our 480 volt control systems. The systems provide +/-1 control capability with stable flow. The controllers can accommodate all types of thermocouple sensors or RTD's. Temperature controllers can be tuned for every individual process giving you the most stable and uniform control for any process. We will match your heater with the correct control system at your request.

### SPECIFICATIONS

- Compact heaters up to 1kW - kW 600kW
- Process temperatures to 600° C (1200° F)
- Low and high operating pressures
- Optional finishes, electro-polished, passivated and bright annealed
- All standard fittings, sensors and certifications
- Standard type k t/c or 100 Ω Plat RTD 3 wire

### APPLICATIONS

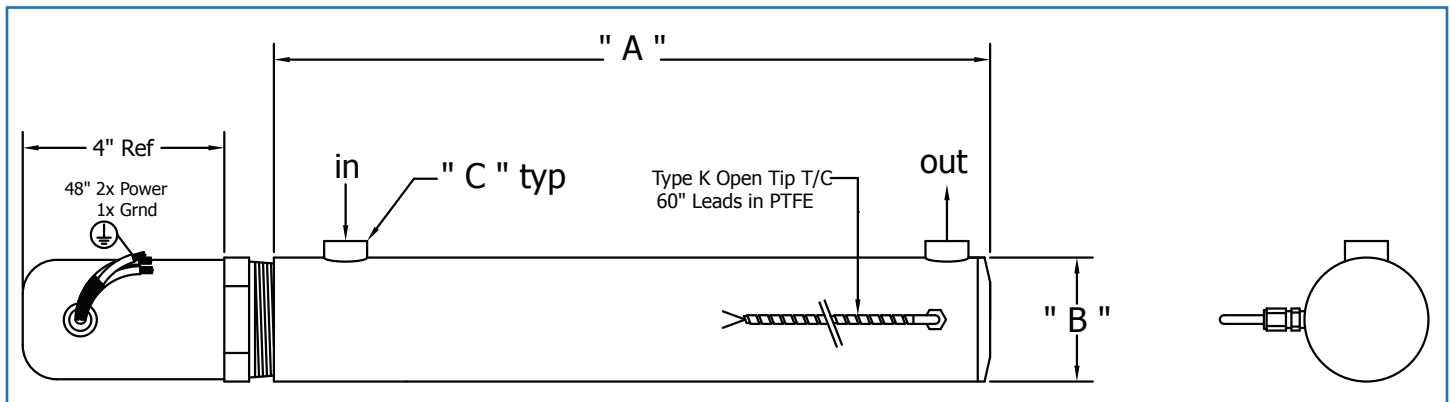
- Where compact, hi power, SAFE electric heat is required
- Semiconductor, Pharma, Lab, Food Service: Water, DI Water, N<sub>2</sub>
- Fuel cell gas and liquid heating
- Printing, cleaning, bio-tech, sterilization and plastics industries
- Purification
- Humidity generation
- Metal, poly and ceramic parts cleaning

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### CRES-ILB

- Full SS construction 316L Heater element
- Ultra Low Watt Density Heater: 5-32 wsi std
- Ultra Fast Response with large surface area
- Temperature Sensor monitors fluid temps



Model	Watts	Volts	Phase	Dim "A"	Dim "B"	Fitting "C"	Dia	Length	Watt Dens	Weight
CRES-ILB-12 0010-K	1,000	120	1	12 in	2 in	¼ fnpt	2 in	12 in	5 wsi	3 lbs
CRES-ILB-12 0020-K	2,000	120	1	12	2	¼	2"	12"	10	3
CRES-ILB-24 0020-K	2,000	240	1	12	2	¼	2"	12"	10	3
CRES-ILB-24 0040-K	4,000	240	1	16	3	½	3"	16"	16	4
CRES-ILB-208 0040-K-3P	4,000	208	3	20	3	½	3"	20"	16	8
CRES-ILB-208 0060-K-3P	6,000	208	3	20	3	½	3"	20"	22	8
CRES-ILB-208 0080-K-3P	8,000	208	3	24	3	½	3"	24"	26	8
CRES-ILB-208 0100-K-3P	10,000	208	3	24	3	½	3"	24"	32	12
CRES-ILB-48 0100-K-3P	10,000	480	3	24	3	½	3"	24"	32	12

- All standard voltages available including low voltage apps from 12 volts to 600 volts
- Custom in/out configurations available, with all standard industry fittings available
- Watt densities available to meet DI Water quality requirements for any power levels <22wsi



# INFINITY FULL LINE OF PRODUCTS

## STANDARD INLINE HEATER PRODUCTS

### CLEAN WATER / AIR HEATERS



**STANDARD CLEAN INLINE HEATER—ECONOMICAL/CLEAN/POWERFUL**  
Clean Air/N<sub>2</sub> gas heaters. Cryo-1200 deg F (ULTRA LOW WATT DENSITY)  
Clean Water/DI/CIP heaters. 32-212 deg F  
For all non-critical Pharma, Semiconductor, Industrial, Food applications.

### SANITARY WATER / AIR HEATERS



**SANITARY CLEAN— INLINE HEATERS—ECONOMICAL/PURE/COMPACT**  
Critical Air/N<sub>2</sub> gas heaters. Cryo-1200 deg F (ULTRA LOW WATT DENSITY)  
Critical Clean Water/DI/CIP heaters. 32-212 deg F  
For all Direct Contact Pharma, Semiconductor, Industrial, Food applications.  
Where media purity and maintenance is crucial. Ultra low watt densities ensure the safety of your media, your process and personnel.

### ULTRA PURE WATER / AIR HEATER



**ULTRA PURE— INLINE HEATERS—ECONOMICAL/ULTRA PURE/RELIABLE**  
Clean Air/N<sub>2</sub> gas heaters. Cryo-1200 deg F (ULTRA LOW WATT DENSITY)  
Clean Water/DI/CIP heaters. 32-212 deg F  
For all Direct Contact Pharma, Semiconductor, Industrial, Food applications.  
Where media purity and maintenance is crucial. Ultra low watt densities ensure the safety of your media, your process and personnel.

### FULL TEMPERATURE / PROCESS CONTROLS



**ECONOMICAL CONTROL UNITS AVAILABLE AS STANDARD WITH EACH UNIT OR STAND-ALONE PRODUCT.**  
Solid state power controls—PID Temperature Control—  
Fully wired and Tuned from Factory, Available in Standards from NEMA4 to EXPLOSION PROOF CLxDIVx.

## EXCLUSIVE INLINE PRODUCTS

### CLEAN STAINLESS STEAM GENERATOR

**ECONOMICAL/COMPACT/PURE**

Clean steam generator Atm-150psi (+600 psi)  
Replace standard conventional stainless boilers for the price of comparable carbon steel units.  
From Food to Medical Processing.



### ULTRA PURE STAINLESS STEAM GENERATOR

**ECONOMICAL/ULTRA PURE/COMPACT**

Clean steam generator Atm-150psi (+600 psi)  
Replace standard conventional stainless boilers for the price of comparable carbon steel units.  
From Food to Medical Processing.



### HIGH PRESSURE AND EXPLOSION PROOF (XP, ATEX)

**ECONOMICAL/ULTRA PURE/COMPACT**

Clean steam generator Atm-150psi (+600 psi)  
Replace standard conventional stainless boilers for the price of comparable carbon steel units.  
From Military to Mining Semi Conductor.



### EMERGENCY SHOWER/ EYE WASH

**ECONOMICAL—FULLY ISOLATED HEATER ELEMENTS NOT EXPOSED FILAMENT/WIRE IN WATER STREAM.**

Tepid water heaters from 10kw-300Kw all stainless steel construction, low watt density Construction.



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**Request a Quote:**