



### Quartz Tungsten Medium

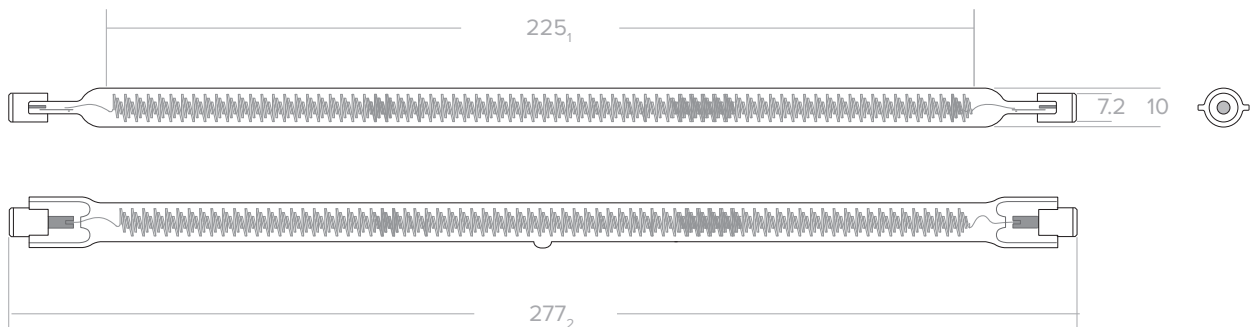
Ceramicx medium-wave linear quartz infrared heaters are designed for applications that need very fast heat-up times and/or high power, with peak output between 1.6-1.9  $\mu\text{m}$ .

They come in three standard sizes—QTL, QTM, and QTS. Each heater is made with 10 mm quartz glass and uses the common R7s connection, which fits into standard R7s holders for mounting and power.

Custom power levels, voltages, lengths, and connection types are also available. For more information, please contact Ceramicx or use the enquiry form on our website.

### Technical specification

Material	Quartz glass tube with tungsten filament
Heater Voltage	240 V (standard)
Power	1000 W
Overall length	277 <sub>2</sub> mm
Heater length	225 <sub>1</sub> mm
~ Coil temperature	1450 °C
Tube diameter	10 mm
Weight	30 g
Average operating life	Up to 5 000 hrs depending on conditions
Standards	CE
Termination	R7s



## Installation, handling and Safety Information

- The body of the Halogen/tungsten heater is a sealed quartz glass tube. Like all glass products, these heaters should be handled with care. Excessive mechanical or physical force during handling or installation could break or damage the glass tube. Broken glass may be hazardous to personnel and also the heating process.
- Ensure the heater is not exposed to vibration during operation as this will also reduce the operating life of the heater.
- Gloves should be worn while handling the heater. Finger prints can affect the optical properties of the glass tube and may reduce the operating life of the heater. Clean any dirt, oil or lint from the heater with alcohol and a lint free cloth or tissue.
- Always turn the electrical power off before inserting, removing or cleaning the heater.
- Halogen/tungsten heaters are high intensity infrared heaters. Care should be taken to ensure that personnel cannot touch the heater during operation and that a safe distance from the heater is always maintained to ensure there is no risk of burning due to the radiant output of the heater.
- Halogen heaters can produce high intensity white light which could cause damage to human eyes. Care should be taken to ensure that personnel cannot look directly at the heaters during operation. If necessary, a filter to reduce the glare or protective glasses should be provided. In such cases, personnel should be warned of the danger using suitable signage.
- The temperature of the glass tube may exceed 600°C. As with all high temperature heat sources, care should be taken to ensure that the atmosphere within which the heater is operating is free of potentially explosive gases which could be ignited by contact with the glass tube. In all cases, the operator is responsible for ensuring that the heater is suitable for use in their specific application.
- Ensure the temperature of the glass tube does not exceed 800°C.
- Ensure heaters do not radiate directly on to nearby heaters as this will increase operating temperature and reduce operating life.
- The heater should be installed by a qualified person ensuring that all relevant electrical safety standards are adhered to.
- Ensure the heater is connected to an electrical supply corresponding to the rated voltage of the heater. Excessive voltage will reduce the operating life of the heater.
- The heater is designed for horizontal operation only unless clearly specified for vertical operation.
- The pinch seal section of the heater (the flattened glass section at the ends) should not be exposed to temperatures exceeding 350°C. Temperatures exceeding this value may cause gas leakage and therefore reduce the operating life of the heater.
- Halogen/tungsten heaters can take more than 10 times the normal operating current when operated from cold (normal room temperature). Ensure that fuses or other protective devices are correctly specified to handle this starting current.
- The heaters should only be used in approved fixtures designed for halogen/tungsten heaters.
- Ensure the heaters are operated at a safe distance from combustible materials.