



## Mini-IR\*

mini-beam infrared source  
for gas analysis and spectroscopy

### Description

This ultra-small, high efficiency mini-beam infrared source is designed and optimized for application flexibility and ease of use. The Mini-IR features high emissivity with a low input power requirement. The emitting element is mounted on a GE emersion lens is housed in an open, super-rugged Ultem body, providing years of maintenance-free operation in demanding medical and industrial applications. The Mini-IR is already designed into in medical CO<sub>2</sub> monitors manufactured by Spacelabs and Physio-Control.

### Features

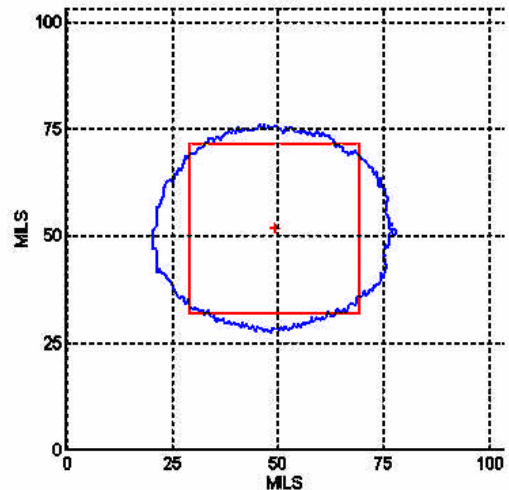
- Low input power - less than 270mW
- Small size (.195" Dia x .185" High)
- High stability IR source at 83mA power
- Very high emissivity (.93 @ 780°C)
- Extremely stable, no IR drift
- Ruggedized housing withstands 6-foot drop onto a concrete floor
- Rated for operation in temperatures over 100°C
- Very reliable, minimum 2 years continuous operation

### Applications

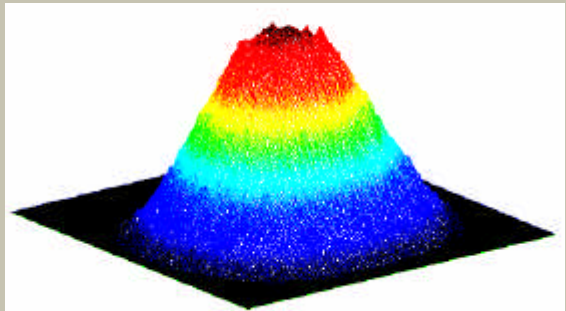
- Gas analysis, spectroscopy, and calibration
- Medical and environmental monitoring
- Air pollution monitoring
- Hydrocarbon detection in natural gas and petroleum
- Temperature monitoring
- Fire alarm systems

### Custom design

ESTC's expert optics design and manufacturing team provides customer-driven sensor solutions for custom applications. Their GMP-compliant production facility provides high temperature, thick film fabrication as well as materials development and evaluation.



Intensity Contour  
-3dB drop at detector (.040" x .040")



Beam Profile, .10" x .10" at focal plane

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