

HEP3965 - May 18, 2023

Item # HEP3965 was discontinued on May 18, 2023. For informational purposes, this is a copy of the website content at that time and is valid only for the stated product.

BROADBAND INFRARED TUNGSTEN BULB

- ▶ Broadband IR Emission from 450 to 5500 nm
- ▶ 1900 K Color Temperature
- ▶ TO-8 Can Package
- ▶ SM1-Threaded Mounting Adapter Available



HEP3965



HEPM

SM1-Threaded Mounting Adapter
(Bulb Sold Separately)

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OVERVIEW


Features

- Broadband Output from 450 to 5500 nm (Click for Spectrum)
- 1900 K Color Temperature
- TO-8 Can Package
- Externally SM1-Threaded (1.035"-40) Mounting Adapter Available

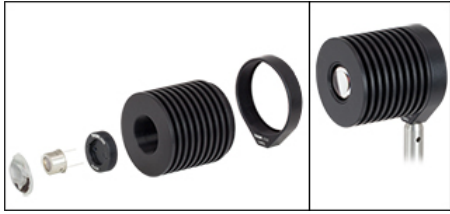
The HEP3965 Tungsten Infrared Bulb is a broadband light source with a color temperature of 1900 K and is packaged in a TO-8 can. The bulb is used in Thorlabs' SLS202 Stabilized IR Light Source. It can be driven by a voltage source of up to 3.5 V.

Please note that during operation the bulb generates a large amount of heat and measures must be taken to ensure the package temperature does not rise above 100 °C. For example, the HEPM adapter can be used in conjunction with our HSLT2 heat sink (as shown below) to keep the temperature of the bulb safely below 100 °C. When mounting the bulb in our HEPM Mounting Adapter, an electrically insulating thermal compound, such as Thermalcote 250G, must be used between the bulb and the aluminum adapter body.

Specifications

Specifications	
Item #	HEP3965
Bulb Type	Tungsten IR
Color Temperature	1900 K
Spectrum (Click to Enlarge)	 Raw Data
Max Voltage	3.5 V
Max Current	2.0 A
Max Power	7.2 W
Max Operating Temperature	100 °C
Lifetime	5,000 Hours
Window Material	Sapphire
Package	TO-8 Can

The HEPM Mounting Adapter has external SM1 (1.035"-40) threads that enable the HEP3965 bulb to be integrated into our Ø1" Lens Tube Systems and SM1-Threaded Kinematic Mounts. The bulb is held in the HEPM mount using an SM17RR Ø17 mm Retaining Ring (included),



From left to right are shown an uncoated plano-convex calcium fluoride lens, an HEP3965 bulb, the HEPM mounting adapter, an HSLT2 heat sink lens tube, and an LMR2(/M) fixed optic mount. Electrically insulating thermal compound (not shown) must be used between the bulb and mounting adapter for proper heat dissipation.

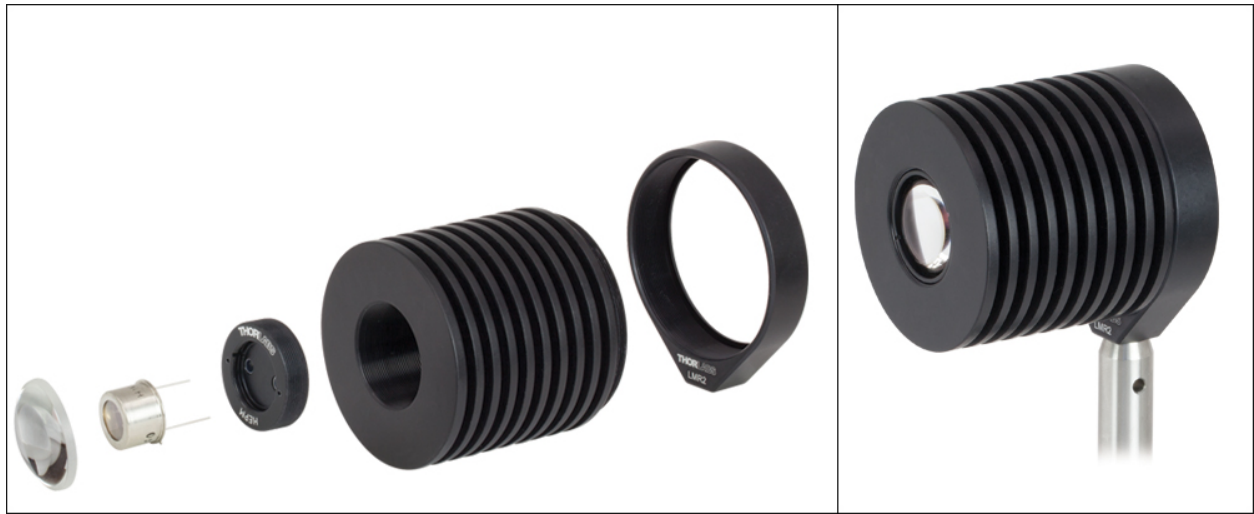
which can be tightened using our SPW801 Adjustable Spanner Wrench. The adapter can be installed in an SM1-threaded lens tube or mount using the SPW909 or SPW801 Spanner Wrenches.

Note: We strongly recommend wearing gloves when handling the bulb to prevent skin oils from being deposited onto it. If you suspect the bulb is dirty, carefully clean it with alcohol before connecting it to a power supply.

[Hide Part Numbers](#)

Part Number	Description	Price	Availability
HEP3965	Broadband IR Tungsten Bulb, 1900 K, TO-8 Can	\$167.00	Lead Time
HEPM	SM1-Threaded Mounting Adapter for HEP3965 Bulb	\$34.07	Today





HEP3965 Spectral Power Distribution

