

# Ceramoptec®

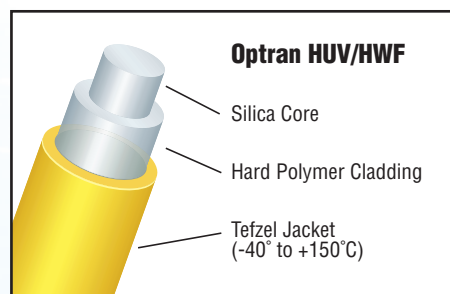
Innovative Fiber Optics...Every Step of the Way™



Optran HUV and Optran HWF hard polymer-clad fibers offer high numerical apertures to suit a broad range of applications, from remote illumination to photodynamic therapy. This high quality fiber offers easy termination with no pistoning effect and is a cost effective alternative to silica/silica fiber. We offer a choice of several jacket types and sizes—as well as custom-designed products and sizes to meet your specifications.

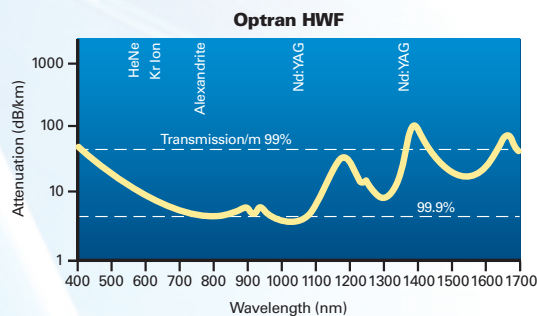
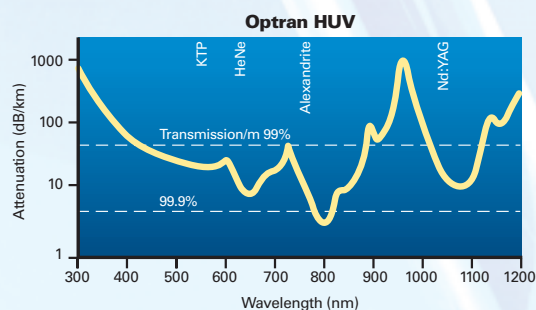
## Features

- High numerical apertures (0.37, 0.48)
- High fiber strength
- Reduced static fatigue
- Lower microbend losses
- Biocompatible materials
- Sterilizable by ETO and other methods
- Manufactured at GMP and ISO 9001 compliant facility
- Radiation resistant
- High concentricity
- Cost effective (compared to silica/silica fibers)
- Easy termination with no pistoning effect



## Applications

- Medical
  - Medical diagnostics
  - Laser delivery
  - Photodynamic therapy
- Industrial / Scientific
  - Spectroscopy
  - Remote illumination
  - Sensors
  - Laser welding / soldering / marking
  - Laser delivery
  - Thomson scattering
  - UV photolithography
  - Nuclear plasma diagnostics
  - Analytical instruments
  - Laser diode pigtailling
  - Pyrometry
  - Semiconductor capital equipment



## Properties

- Pure silica core
- Proprietary bonded hard polymer cladding
- Step index profile
- Numerical aperture: 0.37 (standard) or 0.48 (high)  $\pm$  0.02
- Broad spectral range:
  - Optran HUV: 350 – 1200 nm
  - Optran HWF: 400 – 2200 nm
- Standard proof test: 70 kpsi
- Bend radius: Momentary – 100 x core radius  
Long term – 300 x core radius

## Specifications

Product Code – UV	ØCore (µm) $\pm$ 2%	ØClad (µm) $\pm$ 2%	ØJacket (µm) $\pm$ 5%
HUV 125/140 T	125	140	400*
HUV 200/230 T	200	230	500
HUV 300/330 T	300	330	650
HUV 400/430 T	400	430	730
HUV 600/630 T	600	630	1040
HUV 800/830 T	800	830	1040
HUV 1000/1035 T	1000	1035	1400
HUV 1500/1550 T	1500	1550	2000

Product Code – WF	ØCore (µm) $\pm$ 2%	ØClad (µm) $\pm$ 2%	ØJacket (µm) $\pm$ 5%
HWF 125/140 T	125	140	400*
HWF 200/230 T	200	230	500
HWF 300/330 T	300	330	650
HWF 400/430 T	400	430	730
HWF 600/630 T	600	630	1040
HWF 800/830 T	800	830	1040
HWF 1000/1035 T	1000	1035	1400
HWF 1500/1550 T	1500	1550	2000

Suffix product code with “48” to indicate high (0.48) NA. Example: HUV 600/660 T 48

## Notes:

Custom sizes are available upon request.

\*Core/Clad ratio may not support transmission for long wavelengths.

Because attenuation may vary below 400 nm, Optran HUV is not recommended for use below this wavelength.

NA is measured at the 95% intensity angle.

Tefzel® jacket can be omitted upon request. Tefzel® is a registered DuPont product.

CeramOptec strives to ensure the accuracy of all information provided; however, we imply no warranties and disclaim any liability in connection with the use of this information.

A nylon jacket is also available.

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## Innovative Fiber Optics...Every Step of the Way

CeramOptec was founded in 1986 and today is a global leader in the production of stock and custom silica / silica, plastic-clad silica, and hard polymer-clad silica optical fibers; fused capillary tubing; DPSS lasers; diode modules; and low loss bundles and assemblies for UV, VIS, and IR transmission, medical laser delivery, sensors, plasma fusion, and spectroscopy.

With several facilities worldwide, we are able to provide our customers with local, prompt, and reliable service and products. By maintaining complete control over the entire manufacturing process—from preform manufacturing to finished fiber product—we are able to provide the highest quality control, custom solutions, and competitive pricing to our customers.

Please visit <http://www.ceramoptec.com> for more information.

CeramOptec is a subsidiary of biolitec™ AG.

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