

TECHNICAL OVERVIEW

Spectral Range

350–2200 nm

Core Diameter

100–2000 μm

Core / Cladding Ratio

Standard 1:1.04–1:1.4
or customized upon request

Numerical Aperture

0.37 \pm 0.02
0.48 \pm 0.02
0.52 \pm 0.02
0.57 \pm 0.02
or customized upon request

OH Content

HUV: High (>700 ppm)
HWF: Low (<1 ppm)

Operating Temperature

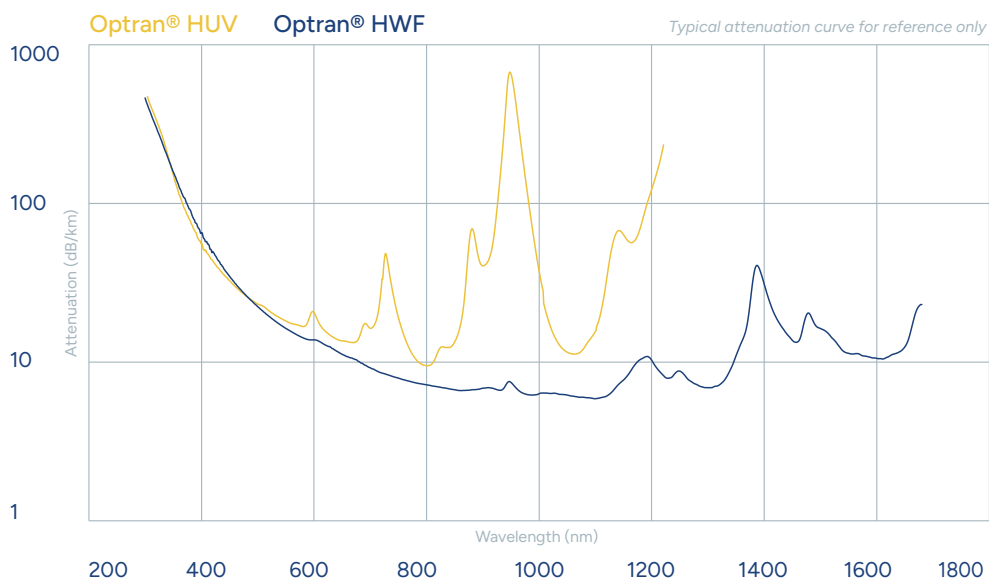
-40 °C to +150 °C

Standard Proof Test

100 kpsi

Silica Core Fiber with Fluorinated Hard Polymer Cladding

Optran® HUV and Optran® HWF are designed for efficient light coupling and reliable transmission in applications requiring high numerical aperture. The fluorinated polymer cladding supports robust handling, making these fibers well suited for illumination and sensing applications across a broad spectral range.



PERFORMANCE & INTEGRATION NOTES

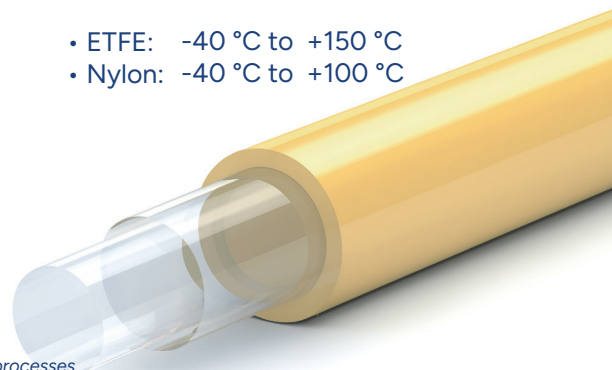
- Cost-effective alternative to all-silica fibers
- Polymer cladding defines thermal and chemical operating limits
- High numerical aperture supports efficient light coupling
- Available as high-OH (HUV) or low-OH (HWF) fiber

APPLICATIONS

- Illumination
- Industrial Sensing
- Photodynamic Therapy (PDT)
- Broadband Sensing Systems
- UV Curing Processes
- Analytical Instrumentation

AVAILABLE JACKETS

- ETFE: -40 °C to +150 °C
- Nylon: -40 °C to +100 °C



*In-house preform production and controlled drawing processes.
Reproducible optical and mechanical properties across production batches.*

*Additional specifications, reference data and project-specific qualification information available upon consultation.
Product specifications are subject to change without notice.*