



Specialty Fiber



Issue date: 02/11
Supersedes: 12/09

Product Type: High Efficiency Nano-Particles C-Band
Coating Type: Dual Layer Primary Coating (DLPC9)

For the Telecommunication industry

- DWDM amplifiers
- CATV amplifiers
- 980 and/or 1480 nm pumps
- Terrestrial and Submarine telecommunications
- Defense/Military/Aerospace
- Lasers/Lidars

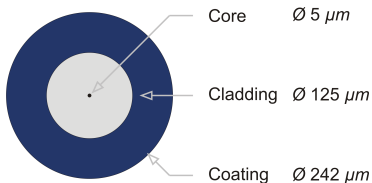
The Draka's eNanoElite family gathers erbium doped fibers using Draka patented NanoElite technology. The erbium ions are included in nano-particles that permit a sharp control of their chemical environment. Notably it avoids erbium ions pairing and its associated quenching effect; to the immediate benefit of energy conversion.

The eNanoElite-VPW-6 has been optimized to offer a very high efficiency at high power over the C-Band telecommunication window. It exceeds designer's expectations in power conversion efficiency and gain flatness over a wide wavelength range. It can then advantageously be used to manufacture high performance boosters or in-line WDM amplifiers.

Thanks to the Draka's NanoElite technology, it is now possible to produce amplifiers with more than 30 nm bandwidth while maintaining excellent power conversion efficiency at high output power.



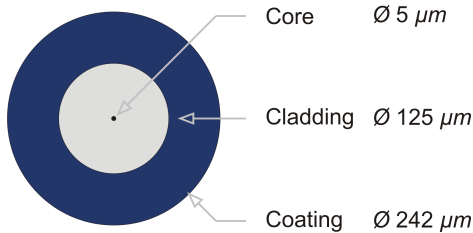
Value Innovation is a way of looking at the world. How we can help our customers do more, make more, save more, achieve more.



Features	Benefits
Excellent fiber uniformity	Easy to design amplifiers
Industrial process control	Insensitivity to hydrogen ageing
High power conversion efficiency over the amplification bandwidth	Minimizes pump requirements (and hence reduces costs)
Exceptional spectral uniformity	Ensures a high quality, reliable EDFA product
Larger MFD	Lower splice loss to coupling fibers resulting in higher amplifier PCE and a lower noise figure
Consistent reproducibility	Reduces manufacturing costs and increases production yield
Wide Erbium doping range	Ensures the most cost effective fiber choice for your applications
Industry leading fiber geometry	Increases signal transfer with precision core alignment
Low PMD	Enables EDFA design for high data rate applications
Standard Dual Acrylate coating	Provides superior mechanical resistance specifications

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Optical Specifications

Parameters	Typical	Specified Value
Peak absorption coefficient ¹ at 1532 nm (Max [1530 – 1534 nm])	6 dB/m	[3 – 9] dB/m
Peak absorption variation on 250 m length	≤ 1%	≤ 2.5 %
Background Loss (min. 1100 – 1300 nm)	≤ 2 dB/km	≤ 6 dB/km
Bending sensitivity (at 100 m, over 15 mm radius, $\lambda < 1620$ nm)		0.1 dB
Cut-off wavelength	1150 nm	≤ 1300 nm
Mode Field Diameter (at 1550 nm)		6.7 ± 0.7 μ m
Numerical Aperture		0.19 ± 0.02
Splicing Loss (with G652 at 1300 & 1700 nm)	0.1 dB	≤ 0.2 dB
Polarization Mode Dispersion (100 m)		≤ 0.25 ps


Geometrical Specifications

Parameters		
Cladding Diameter	125 ± 1 μ m	125 ± 2 μ m
Core/Cladding Offset	≤ 0.3 μ m	≤ 0.5 μ m
Coating Diameter		242 ± 15 μ m
Coating/Cladding Offset		≤ 12.5 μ m

Mechanical Specifications

Parameters	
Elongation proof test (1 second)	1.5 % kpsi

Environmental Specifications

Parameters	
Storage Temperature	- 40°C to + 85°C
Operating Temperature range	- 40°C to + 85°C
Storage Humidity range (non condensing)	5 % to 95 %
Operating Humidity range (non condensing)	5 % to 95 %

¹ Other values available on request

How can we be of service to you?

Value Innovation is a way of looking at the world. How can we help our customers do more, make more, save more, achieve more?

Take DrakaElite™. Based on our proprietary manufacturing process and our control of all technological building blocks, we offer an extensive portfolio of specialized optical fibers that have been designed, developed, manufactured

and tested for every environment. Whether you want to guide, amplify, transmit, process, control or sense light, Draka has the fiber you need, whatever your environment. And if for some reason we don't have exactly what you need, well, we'll just make it.

That's Value Innovation in action.

Draka Communications

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The Draka Communications policy of continuous improvement may cause in changed specifications without prior notice