

Submarine and Long-Haul Fiber Selection Guide

Advanced fibers for subsea, terrestrial backhaul, and core networks enable higher capacity and lower latency through best-in-class optical performance.

Corning is at the forefront of connecting the unconnected, as our innovations enable new high-performance subsea and terrestrial core networks worldwide. With a commitment to total quality in every aspect of our operation, we continue to deliver industry-leading products, improved attribute performance and best price-value for our customers. Our state-of-the-art manufacturing processes provide large-scale capacity to meet industry requirements and the needs of our global customers.

Submarine Fiber Portfolio

Connecting global cloud and content provider networks with higher capacity and low latency

Vascade® EX2500 fiber

With a very large effective area and the lowest loss of all Corning's subsea fibers, it is designed to enable high-capacity subsea and terrestrial core networks, providing a simpler network design and seamless connectivity.

Vascade® EX2000 fiber

A versatile combination of ultra-low-loss and large effective area fiber, designed for advanced-performance submarine SDM systems.

SMF-28® ULL S+ fiber

For cost-optimized undersea SDM systems in or near the linear power regime, it offers industry-leading attenuation, large-scale manufacturing capacity, and options for higher density.

Product Name	Industry Standard	Coating Diameter	Nominal 1550 nm Attenuation	Nominal Effective Area
Vascade® EX2500 fiber	ITU-T G.654.B/D/E	242 & 200 µm	0.148 dB/km	125 µm ²
Vascade® EX2000 fiber	ITU-T G.654.B/D	250 & 200 µm	0.149 dB/km	115 µm ²
SMF-28® ULL S+ fiber	ITU-T G.654.C	242 & 200 µm	0.156 dB/km	82 µm ²

All fiber types are available with ColorPro® identification technology.

Terrestrial Fiber Portfolio



Long-haul & core network connections

require ultra-low loss and lower latency to enable higher data rates and scalable capacity.

SMF-28® ULL fiber with advanced bend

Meeting macrobend loss requirements of the ITU-T G.657. A1 standard, this best-in-class fiber preserves ultra-low-loss performance in a wide range of high-density cable designs.

New backbone network designs deliver the highest possible optical transport capacity and lowest latency over long distances.

TXF® fiber

Combining both ultra-low loss and very large effective area, TXF fiber offers cost-effective backbone transport capacity with data rates $\geq 800\text{G}$.

Vascade® EX2500 fiber

With a very large effective area and the lowest loss of all Corning terrestrial fibers, it's designed to enable high-capacity subsea and terrestrial core networks, providing a simpler system design and seamless connectivity.



Seamless connectivity and compatibility in existing metro and access networks.

SMF-28® ULL fiber

ITU-T G.652-compliant and compatible with legacy single-mode fibers, SMF-28 ULL fiber extends optical reach and dB margin in high-capacity wideband transmission systems.



Product Name	Industry Standard	Coating Diameter	Nominal 1550 nm Attenuation	Nominal Effective Area
SMF-28® ULL fiber with advanced bend	ITU-T G.654.C	242 & 200 μm	0.158 dB/km	82 μm^2
TXF® fiber	ITU-T G.654.E	242 μm	0.166 dB/km	125 μm^2
Vascade® EX2500 fiber	ITU-T G.654.B/D/E	242 & 200 μm	0.150 dB/km	125 μm^2

All fiber types are available with ColorPro® identification technology.

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