

Sumitomo Submarine Optical Fibers

~Field-proven over 3 decades~

Since the 1980s, Sumitomo Electric have proven their excellent reliability of optical fibers supplied to the submarine cable industry by contributing to global network constructions exceeding 2 million fiber km.

Z Fiber series including Z Fiber®, Z-PLUS Fiber®, Z-PLUS Fiber® 130, and Z-PLUS Fiber® 150 are pure-silica core fibers made with VAD technologies and compliant with ITU-T G.654.

Z-PLUS Fiber 130 and Z-PLUS Fiber 150 offer attenuations as low as 0.152dB/km setting a world record for commercially available fibers. Their enlarged effective core area, A_{eff} , combined with ultra-low attenuation can enhance system performance to realize repeatered 100Gb/s-and-beyond digital coherent trans-oceanic systems.

PureBand® Submarine, compliant with ITU-T G.652.D, is a low attenuation fiber contributing to a low cost transmission system, while assuring Sumitomo's renowned "submarine quality".

Product Information

Typical values at 1550 nm

	PureBand Submarine	Z Fiber	Z-PLUS Fiber	Z-PLUS Fiber 130	Z-PLUS Fiber 150
ITU-T Compliance	G.652.D	G.654.C	G.654.B G.654.D	G.654.D	G.654.D
A_{eff} μm^2	81	78	112	130	150
Attenuation dB/km	0.174	0.171	Std: 0.168 LL: 0.160 ULL: 0.154	Std : 0.162 ULL: 0.152	0.152
Chromatic dispersion ps/nm*km	16.5	18.5	20.5	20.5	20.9
Dispersion slope ps/nm ² *km	0.06	0.06	0.06	0.06	0.06
PMD ps/ $\sqrt{\text{km}}$	0.02	0.02	0.02	0.02	0.02