

# Single-Mode Cables



## Innovative

- Proprietary assembly procedures
- Any combination of connectors fibers and cables
- Different epoxy curing cycles for a multitude of environments

## Reliable

- 100% Testing of insertion loss, return loss, endface geometry and polish quality
- Built in the USA with quality components
- Apply quality procedures learned in building cables for satellites to every cable built

## Responsive

- Pricing of standard cables available on the web
- Fast quotations for custom cables
- Small quantity orders ship in two days

## Performance

- Low Insertion Loss
- High Return Loss
- 100% Testing
- Custom wavelength cables available
- All connector types supported

Coastal Connections custom engineers single-mode cables to the tightest specifications in the industry. Our dedicated assemblers have 55 years combined experience terminating a large variety of cables. We use the best polishers, fixtures, and test equipment in the industry for reliability and consistency. We use proprietary processes that were developed in a multi-million dollar military program to build the most reliable connector possible.

# Single-Mode Cable Specifications

## Connectors

Connectors	Din	E-2000	FC	LC	SC	ST	FC Ferrule	Ferrule Stick	Capillary
Polish	UPC	APC UPC	APC UPC	APC UPC	APC UPC	UPC	APC UPC	APC UPC	APC UPC
Type	Screw on	Push Pull	Screw on	Push Pull	Push Pull	Bayonet	2.5mm OD with Flange	2.5mm OD 10.5mm Long	1.8mm OD 10mm Long

## Fibers

Fiber	1310nm 1550nm SMF-28E	1550nm Bend Insensitive	980nm 1550nm Hi-1060	980nm HI 980	780 nm 850nm 780-HP	630nm 630-HP	460nm 460-HP	320nm 450nm UV-VIS
Cut-Off (nm)	1260	1400+/-50	920 +/-50	930+/-50	730+/-30	570+/-30	430+/-20	320
Mode Field (um)	9.2 @ 1310 10.4 @ 1550	9.5	5.9 @ 980 6.2 @ 1060 9.9 @ 1550	5.5	5 @ 850	4.0 @ 630	3.3 @ 515	3
Numerical Aperture	0.14	0.13	0.14	0.20	0.13	0.13	0.13	0.12
Attenuation (dB/km)	0.35 0.22	0.5	2.1 @ 980 1.5 @ 1060	2.5	4 3.5	<12	<12	200 @ 320 70 @ 400

## Cables

OD	250um	400um	900um Tight	900um Loose	1.6mm PVC	3mm PVC Tight	3mm PVC Loose	3mm Steel	3mm Steel
Jacket Material	Acrylate	Acrylate	PVC	Hytrel (Nylon) or PTFE (Teflon)	PVC	PVC	PVDF + PVC	Stainless Steel	Galvanized Steel + PVC
Strength Member	-	-	-	-	Kevlar	Kevlar	Kevlar	Stainless Steel	Kevlar

## Performance

Wavelength	1550	1310	1060	980	850	780	630	400
Insertion Loss (dB)	≤0.2 (0.1 Avail)		≤0.3 (0.15 Avail)		≤0.50 (≤0.15Avail)	≤1.0 (≤0.5 Avail)		
Return Loss (dB)	APC ≥70*, UPC ≥50*				NA	NA		

\* Return loss on 980 & 1060nm fiber is measured at 1310nm