# Single-Mode Cables

- Any combination of connectors, fibers, and cables
- Proprietary epoxy curing for surviving harsh environments
- Built in the USA with quality components

- · ISO 9001 Certified
- 100% Testing
  - Insertion Loss
  - Return Loss
  - Endface Geometry
  - Polish Quality



#### **Connectors**

Connectors	ESCC 3420	E-2000	FC, QFC	ГС	ми	sc	SMA	ST	1.25mm Ferrule	1.8mm Capillary	2.5mm Ferrule
Polish	AP, UPC	APC, UPC	APC, UPC, Flat Angle	APC, UPC	APC, UPC	APC, UPC	UPC	UPC	APC, UPC	APC, UPC	APC, UPC
Туре	Screw on	Push/Pull	Screw on	Push/Pull	Push/Pull	Push/Pull	Screw on	Bayonet	Ceramic Stainless	Borosilicate	Ceramic Stainless Borosilicate

## **Fibers**

Typical values

Fiber Wavelength (nm)	<b>320</b> 320-450	<b>405</b> 405-525	<b>460</b> 450-600	<b>630</b> 600-770	<b>780</b> 780-970	<b>980</b> 980-160	<b>1060 Flex</b> 980-1550	<b>1060</b> 980-1600	<b>1550</b> 1310-1625	<b>2000</b> 1700-2100	
Cut-Off (nm)	<300	350-390	390-450	540-600	700-760	890-950	890-970	870-970	<1260	<1700	
Mode Field (µm)	≈3.0	3.5@515	3.5@515	4.0@630	5.0@850	4.2@980 4.0@980 6.8@1550 6.3@1550		5.9@980 9.5@1550	9.2@1310 10.4@1550	13@1996	
Attenuation (dB/km)	<200@320 <70@400	30@515 12@630	30@515 12@630	12@630	4.0@780 3.5@850	3.5@980	2.5@980 1.0@1550	2.1@980 1.5@1060	0.32@1310 0.18@1550	3db@125M	
Numerical Aperture	0.100	0.090	0.085	0.085	0.110	0.20	0.160	0.110	0.110	0.100	

## **Cables**

OD	900µm	1.6mm	2mm	3mm		
Jacket Material Hytrel, PVC, PVDF, PTFE, PEEK		PVC	PVC, PVDF, ETFE/PEEK, Polyurethane	PVC, PVDF, Polyurethane, Stainless		
Stength Member	None		Kevlar			

## **Performance**

Wavelength	405	460	630	780	850	980	1060	1310	1550	
Insertion Loss (dB)	≤1.5 (≤1.0 Avail)	≤1.15 (≤0.75 Avail)			≤0.60 ≤0.40 (≤0.20 Avail)		≤0.20 (≤0.10 Avail)			
Return Loss (dB)	APC ≥60, UPC ≥50*									

<sup>\*</sup> Return loss on 320 to 1060nm fiber is measured at 1310nm.

<sup>\*\*</sup> Insertion and return loss specifications do not apply to SMA connectors













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## Fiber Optic Cables and Assemblies Certifications





NASA 8739.5

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**Contact Us** 

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