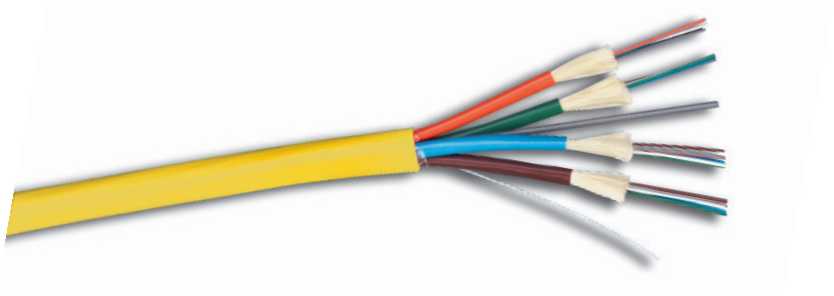
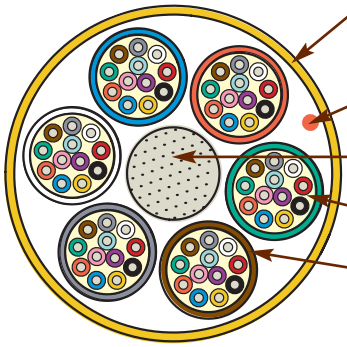
LIGHTSYSTEM® FIBER OPTIC CABLE (SM) — US

Siemon's LightSystem singlemode optical fiber cable is perfectly suited for the support of extended distance 10 Gigabit Ethernet (> 550m) applications as well as emerging applications, such as 40 Gb/s Synchronous Optical Network (SONET), that will operate at speeds beyond 10Gb/s.





Jacket (Yellow)
- Material:
  OFNR— PVC
  OFNP— FRPVC

Rip Cord
- Applied longitudinally under cable jacket

Central Strength Member
- Light-weight solid dielectric

Aramid Yarns

Identification
- Color-coded fibers
- Color-coded buffer tubes

HIGHLIGHTS
- 900µm tight buffer
- 250µm coated optical fiber
- Length markings in 2 ft. increments
- Available in OFNR and OFNP constructions
- Jacket material is lead free

PACKAGING
- Reels

STANDARDS COMPLIANCE
- ISO/IEC 11801:2002 OS1
- ANSI/TIA/EIA-568-B.3
- ANSI/TIA-598-C
- Telcordia GR-409-CORE
- IEC 60793-2 Type B1.1
- ITU-T G.652
- OFNR: Communications Type OFNR (UL) and CSA FT4 c(UL)
- OFNP: Communications Type OFNP (UL) and CSA FT6 c(UL)

ETHERNET APPLICATIONS SUPPORT

APPLICATION	DISTANCE (m)
10GBASE-L (1310 nm)	8,000
10GBASE-E (1550 nm)	30,000
10G Fibre Channel (Serial-1310 nm)	10,000
1000BASE-LX (1300 nm)	5,000
Fibre Channel 266/1062 (1300 nm)	10,000
ATM 52/155/622 (1300 nm)	15,000

PART #	FIBER COUNT	CONSTRUCTION
9BB8(X)002B-E105A	2	1 tube of 2 fibers
9BB8(X)004C-E105A	4	1 tube of 4 fibers
9BB8(X)006D-E105A	6	1 tube of 6 fibers
9BB8(X)008E-E105A	8	1 tube of 8 fibers
9BB8(X)012G-E105A	12	1 tube of 12 fibers
9BB8(X)016C-E105A	16	4 tubes of 4 fibers
9BB8(X)024L-E105A	24	1 tube of 24 fibers
9BB8(X)036D-E105A	36	6 tubes of 6 fibers
9BB8(X)048G-E105A	48	4 tubes of 12 fibers
9BB8(X)072G-E105A	72	6 tubes of 12 fibers

Use (X) to specify cable rating: R = OFNR, P = OFNP
All fiber counts available in lengths of 1640 ft. (500m) and up

OPTICAL SPECIFICATIONS –
Minimum Performance Parameters for LightSystem® Singlemode Fiber

Fiber	Cable Type	Maximum Attenuation (dB/km)		Zero Dispersion		Index of Refraction	
		1310 nm	1550 nm	Wavelength (nm)	Slope (nm²-km)	1310 nm	1550 nm
Singlemode	Indoor	0.50	0.50	1300-1324	<0.093	1.467	1.468

Mode and Fiber Type	Core Size (Microns)*	Cladding Size (Microns)	Coating Size (Microns)	Buffer Size (Microns)	Core Cladding Concentricity (Microns)
Singlemode	8.3 ± 1.0	125 ± 1.0	245 ± 10	900 ± 50	≤0.8

*Mode Field Diameter: 8.8 - 9.3 ± 0.5µm @1310nm

PHYSICAL SPECIFICATIONS

Fiber Count	Nominal Cable Diameter mm (in.)	Maximum Pulling Tension Newtons (lbs)				Maximum Net Weight kg/km (lbs/1000 ft.)	
		Installation		Long Term			
	OFNR/OFNP	OFNR	OFNP	OFNR	OFNP	OFNR	OFNP
2	4.8 (0.19)	400 (90)	400 (90)	120 (27)	120 (27)	17 (12)	20 (13.1)
4	4.8 (0.19)	660 (148)	440 (99)	198 (45)	132 (30)	19 (13)	22 (15)
6	4.8 (0.19)	660 (148)	440 (99)	198 (45)	132 (30)	22 (15)	25 (16.5)
8	5.8 (0.23)	900 (202)	560 (126)	270 (61)	168 (38)	28 (19)	31 (21)
12	5.8 (0.23)	900 (202)	560 (126)	270 (61)	168 (38)	32 (22)	36 (24.4)
16	13.7 (0.54)	1320 (297)	660 (148)	396 (89)	198 (45)	139 (93)	209 (140)
24	8.8 (0.35)	1282 (288)	1282 (288)	641 (144)	641 (144)	78 (52.4)	78 (52.4)
36	16.5 (0.65)	1320 (297)	660 (148)	396 (89)	198 (45)	213 (143)	221 (148)
48	16.0 (0.63)	2700 (607)	1000 (225)	810 (182)	300 (67)	200 (134)	207 (139)
72	19.6 (0.77)	2700 (607)	1000 (225)	810 (182)	300 (67)	310 (208)	322 (216)

Fiber Count	Minimum Crush Resistance (N/mm)	Minimum Flex Resistance Cycles	Operating Temperature (° F)	Installation Temperature (° F)	Storage Temperature (° F)	Minimum Bend Radius	
						Installation	Long Term
2-24	22	25/100	-4 to 122	32 to 140	-40 to 140	15 x DIA.	10 x DIA.
36-72	22	25/100	-4 to 122	32 to 140	-40 to 140	20 x DIA.	10 x DIA.

Example Cable Constructions:

4 & 6 FIBER (6 fiber shown) **12 FIBER** **24 FIBER** **48 FIBER** **72 FIBER**

Because we continuously improve our products, Siemon reserves the right to change specifications and availability without prior notice.

LightSystem® is a trademark of Siemon

Visit our web site for fiber connectivity and related products

PROD-SS-LSSM Rev. E 10/07