

Category 7 S/FTP 4-Pair Cable

Regional Availability: International

Siemon's Category 7 fully shielded S/FTP cable was designed to meet the transmission performance requirements specified to 600 MHz per ISO/IEC 11801-1 Class F. Additionally, this cable meets all Category 6A requirements specified by both ANSI/TIA 568.2-D and ISO/IEC 11801-1 Class E_A. This cable is commonly coupled with Z-MAX or TERA shielded connectivity to deliver optimal channel performance. A fully shielded cable with individual foils around each pair combined with an outer braid provides perfect immunity from outside interferences. In addition, the cable jacket has been qualified for mechanical reliability in high temperature environments up to 75°C. In PoE remote power applications, this cable minimizes power loss and sheds heat build-up and can be installed in ambient environments up to 60°C with headroom for 15 degrees of temperature rise and will not experience degradation due to elevated heat inside the cable bundle. This Siemon high-performance cable is the ideal way to ensure optimum channel performance and is essential for a complete end-to-end warranted solution.



CABLE FEATURES

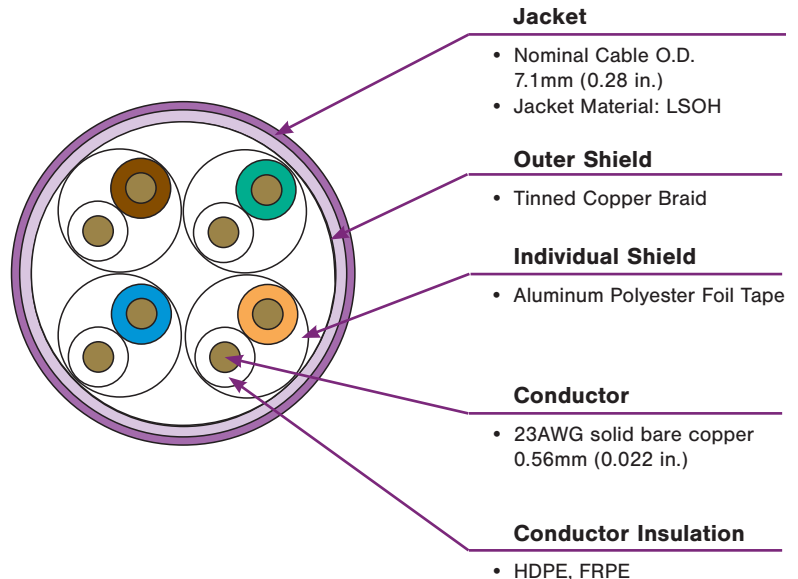
- S/FTP
- Nominal jacket OD: 7.1mm (0.28 in.)
- 23 AWG 0.57mm (0.022 in.) solid (non-tinned) copper
- Sequential measurement markings on jacket
- Pairs individually shielded with aluminum-polyester foil
- Overall tinned-copper braid
- 75° C temperature rating

STANDARDS COMPLIANCE

- ISO/IEC 11801-1 Ed 1.0 (Class E_A and F)
- ANSI/TIA-568.2-D (Category 6A)
- EN 50173 (Class E_A and F)
- IEC 61156-5 (Category 6A and 7)
- EN 50288-4-1 (Category 6A and 7)
- ISO/IEC 14763-2 (Segregation Class d)
- EN 50174-2 (Segregation Class d)
- EN 55022, EN 55024
- EN 50575 Class B2_{ca} S_{1a} d₁ a₁
- LSOH: IEC 60332-1, IEC 60332-3-22, IEC 60754, IEC 61034

APPLICATIONS SUPPORT

- 10GBASE-T
- 1000BASE-T
- 100BASE-T
- 10BASE-T
- IEEE 802.3af (Type 1 PoE)
- IEEE 802.3at (Type 2 PoE)
- IEEE 802.3bt (Type 3 PoE)
- IEEE 802.3bt (Type 4 PoE)
- Power over HDBaseT (PoH)



Data | Power | Reach | Delivered

Product Information

ELECTRICAL SPECIFICATIONS

DC Resistance	<7.32 Ω/100m
DC Resistance Unbalance	2%
Mutual Capacitance	5.6 nF/100m
Capacitance Unbalance	<160 pF/100m
Characteristic Impedance (ohms)	1-100 MHz: 100 ± 15% 100-600 MHz: 100 ± 22%
NVP	72%
TCL	40-10 log(f/100) dB
Delay Skew	≤25ns/100m

PHYSICAL PROPERTIES

LSOH	
Pulling Tension (max)	80N (18 lbf)
Bend Radius (min)	50mm (2.0 in.)
Installation Temperature	0 to 75°C (+32 to 167°F)
Storage Temperature	-20 to 75°C (-4 to 167°F)
Operating Temperature	-20 to 75°C (-4 to 167°F)

TRANSMISSION PERFORMANCE



GUARANTEED WORST CASE



SIEMON TYPICAL

Frequency (MHz)	Insertion Loss (dB/100)		NEXT (dB)		PS NEXT (dB)		ACR-N (dB)		PSACR-N (dB)		ACR-F (dB)		PS ACR-F (dB)		Return Loss (dB)	
1.0	2.1	1.8	78.0	103.7	75.0	110.0	75.9	101.9	72.9	108.2	78.0	94.8	75.0	102.3	20.0	32.7
4.0	3.7	3.4	78.0	106.8	75.0	117.2	74.3	103.4	71.3	113.8	78.0	90.5	75.0	91.8	23.0	27.4
10.0	5.8	5.3	78.0	111.6	75.0	121.1	72.2	106.3	69.2	115.8	78.0	109.0	75.0	116.2	25.0	35.9
16.0	7.3	6.8	78.0	113.9	75.0	121.9	70.7	107.0	67.7	115.1	78.0	107.0	75.0	114.5	25.0	36.6
20.0	8.2	7.6	78.0	110.2	75.0	117.4	69.8	102.5	66.8	109.7	78.0	115.7	75.0	117.7	25.0	36.4
31.25	10.3	9.7	78.0	112.4	75.0	119.5	67.7	102.7	64.7	109.8	75.4	106.8	72.4	109.8	23.6	39.2
62.5	14.6	13.9	78.0	114.0	75.0	121.6	63.4	100.1	60.4	107.7	69.4	102.4	66.4	109.8	21.5	33.6
100.0	18.5	17.7	78.0	108.3	75.0	117.5	59.5	90.6	56.5	99.8	65.3	100.8	62.3	103.0	20.1	37.8
200.0	26.5	25.2	73.9	112.5	70.9	118.7	47.4	87.3	44.4	93.6	59.3	85.9	56.3	90.9	18.0	38.9
250.0	29.7	28.3	72.4	108.6	69.4	115.0	42.7	80.3	39.7	86.8	57.3	88.2	54.3	89.5	17.3	35.2
300.0	32.7	31.1	71.2	106.2	68.2	112.2	38.6	75.1	35.6	81.1	55.8	84.7	52.8	90.1	17.3	36.9
400.0	38.0	36.1	69.4	108.0	66.4	116.9	31.4	71.9	28.4	80.8	53.3	71.9	50.3	76.8	17.3	36.2
500.0	42.8	40.4	67.9	96.1	64.9	103.4	25.2	55.7	22.2	62.9	51.3	79.6	48.3	83.6	17.3	32.8
600.0	47.1	44.4	66.7	97.0	63.7	101.8	19.6	52.5	16.6	57.4	49.7	69.9	46.7	71.7	17.3	34.8
700.0	-	48.2	-	98.8	-	106.0	-	50.6	-	57.8	-	59.9	-	61.0	-	33.5
800.0	-	51.8	-	94.6	-	103.7	-	42.8	-	51.9	-	60.9	-	62.9	-	29.9
850.0	-	53.9	-	82.2	-	94.7	-	28.4	-	40.8	-	48.1	-	55.2	-	31.0

*Values above 600 MHz are for information only.

All performance based on 100 meters (328 ft.).

Ordering Information

Part Number Description

9T7L4-E6Category 7, 600 MHz, 4-pair, solid, S/FTP LSOH cable, violet jacket, 305m reel
 9T7L4-E6-5CR.....Category 7, 600 MHz, 4-pair, solid, S/FTP LSOH cable, violet jacket, 500m reel
 9T7L4-E6-1KR.....Category 7, 600 MHz, 4-pair, solid, S/FTP LSOH cable, violet jacket, 1000m reel



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Siemon OEM Technologies
P: (1) 860 945 4213
www.siemon.com/OEM