

Category 7 600 MHz Cable - International

Siemon's Category 7 600 MHz cable perfectly complements the performance of our TERA outlets. Siemon cable exceeds all ISO/IEC requirements for category 7/class F transmission performance beyond 600 MHz. A fully shielded cable with individual foils around each pair coupled 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 can be installed in environments up to 60°C and will not experience degradation due to heat rise inside the cable bundle. Siemon cable is the ideal way to ensure optimum channel performance and is essential for a complete end-to-end warranted solution.



Siemon's **PowerGUARD** technology with a 75°C operating temperature improves heat dissipation for reduced length derating and bundling requirements in remote powering applications, including PoE and power over HDBaseT (POH).

CABLE FEATURES:

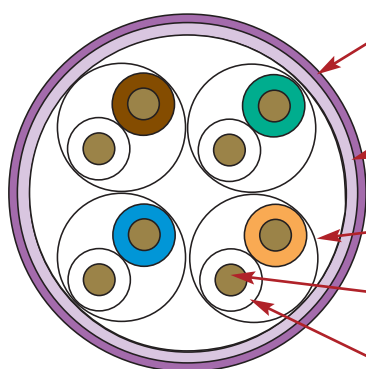
- S/FTP
- Nominal jacket OD: 7.1mm (0.28 in.)
- 23 AWG 0.57mm (0.022 in.) solid (non-tinned) copper
- Sequential measurement markings on jacket
- Pairs individually shielded with aluminum-polyester foil
- Overall tinned-copper braid
- 75° C temperature rating

STANDARDS COMPLIANCE:

ISO/IEC 11801-1 Ed 1.0 (Class F)
EN 50173 (Class F)
IEC 61156-5 (Category 7)
EN 50288-4-1 (Category 7)
ISO/IEC 14763-2 (Segregation Class d)
EN 50174-2 (Segregation Class d)
EN 55022, EN 55024
EN 50575 Class B2ca s1a d0 a1
LSOH: IEC 60332-1, 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)



Jacket

- Nominal Cable O.D: 7.1mm (0.28 in.) $\pm$ 0.3mm
- Jacket Material: LSOH

Outer Shield

- Tinned Copper Braid

Individual Pair Shield

- Aluminum Polyester Foil Tape

Conductor

- 0.56mm (0.022 in.) 23 AWG solid bare copper

Conductor Insulation

- HDPE, FRPE

Product Information

ELECTRICAL SPECIFICATIONS (Nominal)

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 $\pm$ 15% 100-600 MHz: 100 $\pm$ 22%
NVP	72%
TCL	40-10 x log(f)dB
Delay Skew	$\leq$ 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)		NEXT (dB)		PS NEXT (dB)		ACR (dB)		PSACR (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 #	Description
9T7L4-E6	LSOH (IEC 60332-1), violet jacket, Class E _{ca} , D _{ca} , C _{ca} , B2 _{ca} , 305m (1000 ft.)
9T7L4-E6-5CR	LSOH (IEC 60332-1), violet jacket, Class E _{ca} , D _{ca} , C _{ca} , B2 _{ca} , 500m (1640 ft.)
9T7L4-E6-1KR	LSOH (IEC 60332-1), violet jacket, Class E _{ca} , D _{ca} , C _{ca} , B2 _{ca} , 1000m (3281 ft.)



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

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