

Category 7_A 1200 MHz Cable

- International

Siemon's fully shielded Category 7_A 1200 MHz end-to-end cabling solution is the highest-performing, most secure twisted-pair copper cabling system available. Siemon's Category 7_A 1200 MHz cable perfectly complements the performance of the TERA outlet. Category 7_A 1200 MHz cable exceeds all ISO/IEC requirements for Category 7A/Class FA transmission performance and Broadcast Communications Technologies (BCT). A fully shielded cable with individual foils around each pair coupled with a high screen coverage 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. Further, this 7A cable is capable of running multiple lower speed applications, known as cable sharing, from one drop. 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).



COMPLIANCE

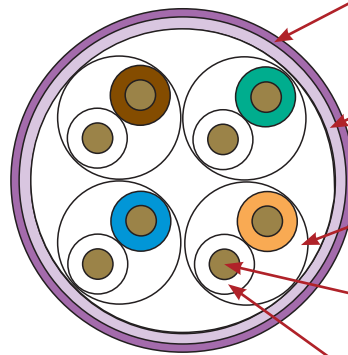
- ISO/IEC 11801-1 Ed 1.0
- ISO/IEC 15018 BCT Channel Application
- IEC 61156-7 Ed 1.1
- IEC 61156-5 Ed 2.1 (Category 7_A)
- EN 50288 • EN 55022
- EN 50173 • EN 55024
- LSOH: IEC 60332-1, IEC 60332-3-22, IEC 60754, and IEC 61034
- EN50575 Class D_{ca}S₁d_{1a}₁

CABLE CONSTRUCTION

- S/FTP
- Nominal jacket OD: 8mm (0.31 in.)
- 0.64mm (0.025 in.) solid (non-tinned) copper
- Sequential measurement markings on jacket
- Pairs individually shielded with aluminium-polyester foil
- Overall tinned-copper braid

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.: 7.9mm (0.31 in.) ± 0.3mm
- Jacket Material: LSOH

Outer Shield

- Tinned Copper Braid

Individual Shield

- Aluminum Foil Tape

Conductor

- 22AWG solid bare copper 0.63mm (0.025 in.) ± 0.02mm

Conductor Insulation

- Foam PE

Product Information

ELECTRICAL SPECIFICATIONS

DC Resistance	<17.0 Ω/100m
DC Resistance Unbalance	2%
Mutual Capacitance	5.6 nF/100m
Capacitance Unbalance	<330 pF/100m
Characteristic Impedance (ohms)	1-100 MHz: 100 ± 15% 100-250 MHz: 100 ± 22% 250-1000 MHz: 100 ± 25%
NVP	80%
TCL	40-10 log(f) dB
Delay Skew	≤25ns

PHYSICAL PROPERTIES

LSOH	
Pulling Tension (max)	110N (25 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 (dB)		PSACR (dB)		ACR-F (dB)		PS ACR-F (dB)		Return Loss (dB)		Propagation Delay (ns)	
	Guaranteed Worst Case	Siemon Typical	Guaranteed Worst Case	Siemon Typical	Guaranteed Worst Case	Siemon Typical	Guaranteed Worst Case	Siemon Typical	Guaranteed Worst Case	Siemon Typical	Guaranteed Worst Case	Siemon Typical	Guaranteed Worst Case	Siemon Typical	Guaranteed Worst Case	Siemon Typical	Guaranteed Worst Case	Siemon Typical
1.0*	1.9	1.7	78.0	105.2	75.0	99.5	76.1	103.5	73.1	97.7	78.0	99.6	75.0	96.6	20.0	30.0	536.0	455
4.0	3.5	3.2	78.0	107.8	75.0	102.8	74.5	104.6	71.5	99.7	78.0	107.5	75.0	102.6	23.0	27.8	518.0	452
10.0	5.4	4.8	78.0	105.2	75.0	99.4	72.6	100.4	69.6	94.6	74.0	103.1	71.0	97.4	25.0	34.1	511.4	449
16.0	6.8	6.1	78.0	109.1	75.0	101.7	71.2	103.0	68.2	95.6	69.9	104.2	66.9	99.9	25.0	33.1	509.0	447
20.0	7.6	6.9	78.0	107.2	75.0	101.3	70.4	100.3	67.4	94.4	68.0	105.0	65.0	97.4	25.0	34.4	508.0	446
31.25	9.6	8.8	78.0	106.8	75.0	100.0	68.4	98.0	65.4	91.2	64.1	102.3	61.1	96.7	23.6	35.9	506.4	445
62.5	13.7	12.7	78.0	108.3	75.0	102.7	64.3	95.7	61.3	90.0	58.1	104.6	55.1	98.4	21.5	41.1	504.6	444
100.0	17.5	16.2	76.0	105.5	73.0	97.8	58.5	89.3	55.5	81.6	54.0	104.1	51.0	97.7	20.1	36.0	503.6	444
200.0	25.3	23.1	71.5	107.7	68.5	101.9	46.2	84.6	43.2	78.8	48.0	101.6	45.0	95.6	18.0	30.4	502.5	444
250.0	28.5	25.8	70.0	110.4	67.0	101.4	41.5	84.6	38.5	75.5	46.0	107.0	43.0	99.1	17.3	33.5	502.3	443
300.0	31.5	28.3	68.8	105.5	65.8	100.0	37.3	77.2	34.3	71.6	44.5	100.8	41.5	95.3	17.3	34.9	502.1	443
350.0	34.3	30.8	67.8	108.4	64.8	101.0	33.6	77.2	30.6	70.3	43.1	107.5	40.1	97.8	17.3	39.0	501.9	443
400.0	36.9	33.0	67.0	111.2	64.0	103.3	30.1	78.2	27.1	70.2	42.0	107.2	39.0	99.5	17.3	35.5	501.8	443
550.0	44.1	39.0	64.9	105.0	61.9	99.1	20.8	66.0	17.8	60.0	39.2	102.0	36.2	94.9	17.3	33.8	501.5	443
600.0	46.3	40.8	64.3	108.3	61.3	99.3	18.0	67.5	15.0	58.5	38.4	105.2	35.4	96.6	17.3	35.9	501.5	443
800.0	54.5	47.5	62.5	98.7	59.5	93.8	7.9	51.2	4.9	46.2	35.9	93.1	32.9	90.1	16.1	34.0	501.3	443
1000.0	62.0	53.7	61.0	100.2	58.0	93.9	-1.0	46.5	-4.0	40.2	34.0	83.3	31.0	77.1	15.1	25.3	501.1	443
1100.0	65.6	56.6	60.4	106.2	57.4	98.0	-5.2	49.6	-8.2	41.4	33.2	80.9	30.2	74.6	14.7	30.0	501.1	443
1200.0	65.6	61.8	59.8	100.1	56.8	92.6	-9.2	38.3	-12.2	30.8	32.4	78.1	29.4	67.4	14.3	24.8	501.1	441
1300.0*	-	62.2	-	95.2	-	87.6	-	33.0	-	25.4	-	66.1	-	59.6	-	19.7	-	445
1500.0*	-	68.4	-	101.3	-	90.4	-	32.9	-	22.0	-	37.5	-	57.5	-	19.0	=	441

*Values below 4 MHz and above 1200 MHz are for information only.

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

Ordering Information

Part Number Description

- 9T7L4-E12..... LSOH (IEC 60332.1), violet jacket, Class E_{ca}, D_{ca}, 305m (1000 ft.)
- 9T7L4-E12-5CR LSOH (IEC 60332.1), violet jacket, Class E_{ca}, D_{ca}, 500m (1640 ft.)
- 9T7L4-E12-1KR LSOH (IEC 60332.1), violet jacket, Class E_{ca}, D_{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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