

TERA® E12 CABLE - INTERNATIONAL - SPECIAL

Siemon's fully shielded TERA end-to-end cabling solution is the highest-performing, most secure twisted-pair copper cabling system available. Siemon's TERA E12 SFTP cable perfectly complements the performance of the TERA outlet. TERA E12 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.



Jacket

- Nominal Cable O.D: 8 ± 0.3 mm
- Jacket Material: LSOH

Outer Shield

Tinned Copper Braid

Individual Shield

Aluminum Foil Tape

Conductor

- 0.64mm, 22 AWG solid bare copper

Insulation

- Conductor Insulation: PE

CONSTRUCTION

- S/FTP
- Reverse sequential measurement markings on jacket
- Pairs individually shielded with aluminum-polyester foil
- Overall tinned-copper braid

COMPLIANCE

- ISO/IEC 11801: Ed 2.2 (Class FA)
- EN 50288 • EN55022
- EN 50173 • EN55024
- ISO/IEC 15018 BCT Channel Application
- IEC 61156-7 Ed 1.1
- IEC 61156-5 Ed 2.1 (Category 7A)
- LSOH: IEC 60332-1, IEC 60754, and IEC 61034

ETHERNET APPLICATIONS SUPPORT

- 10GBASE-T
- 1000BASE-T
- 100BASE-T
- 10BASE-T

PRODUCT INFORMATION

ELECTRICAL SPECIFICATIONS

DC Resistance	≤6 Ω/100m
DC Resistance Unbalance	≤2%
Mutual Capacitance	5.6 nF/100m
Capacitance Unbalance	≤120 pF/100m
Characteristic Impedance (ohms)	1-100 MHz: 100 ± 15% 100-250 MHz: 100 ± 22% 250-1200 MHz: 100± 22%
NVP	76%
TCL	40-10 x log(f)dB
Delay Skew (Nom./100m)	≤5ns
Voltage Safety Rating	300V (per NEC 800.179)

PHYSICAL PROPERTIES

	LSOH
Pulling Tension (max)	150N
Bend Radius (min)	50mm
Installation Temperature	0° to 50°C
Storage Temperature	-20 to 75°C
Operating Temperature	-20 to 75°C

TRANSMISSION PERFORMANCE

GUARANTEED WORST CASE (IEC 61156-7)

SIEMON TYPICAL

Frequency (MHz)	Insertion Loss (dB)		NEXT (dB)		PSNEXT (dB)		ACR (dB)		PSACR (dB)		ACR-F (dB)		PSACR-F (dB)		Return Loss (dB)		Propagation Delay (ns)	
1*	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	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	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	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	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	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	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	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	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	34.3	30.8	67.8	108.4	64.8	101.0	33.6	77.6	30.6	70.3	43.1	107.5	40.1	97.8	17.3	39.0	501.9	443
400	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	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	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	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	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	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	69.0	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	501.0	441
1300*	-	62.2	-	95.2	-	87.6	-	33.0	-	25.4	-	66.1	-	59.6	-	19.7	-	445
1500*	-	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 informational only.

All performance based on 100 metres.

TERA® E12 MHz 4-pair Solid S/FTP Cable:

- 9T7L4-E12-08R1N.....LSOH (IEC 60332.1), Violet Jacket, 305m
- 9T7L4-E12-08R2N.....LSOH (IEC 60332.1), Violet Jacket, 500m
- 9T7L4-E12-08R4N.....LSOH (IEC 60332.1), Violet Jacket, 1000m

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

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For related product information request Spec Sheet(s):

- TERA Outlets (PROD-SS-TRAO)
- TERA Patch Panels (PROD-SS-TRAPP)
- TERA Patch Cords (PROD-SS-TRAPC)
- TERA S/FTP Trunking Cable Assemblies (PROD-SS-TRATC)

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