

TERA® E10 CABLE — US

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 E10 SFTP cable perfectly complements the performance of the TERA outlet exceeding all ISO/IEC requirements for Category 7_A/Class F_A transmission performance. 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.



CABLE — US

CONSTRUCTION

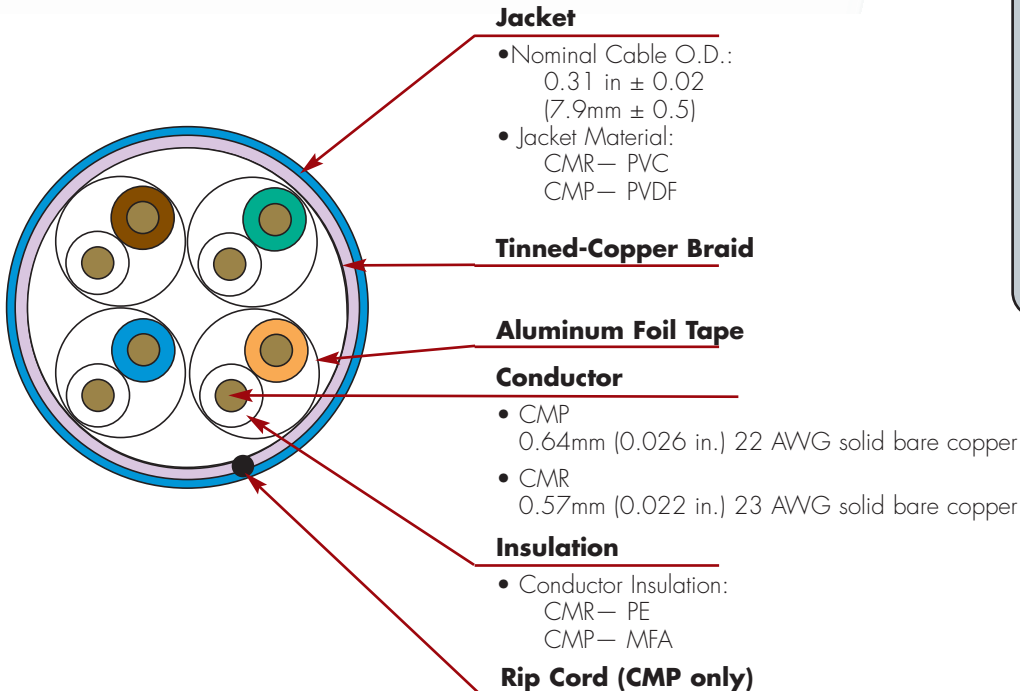
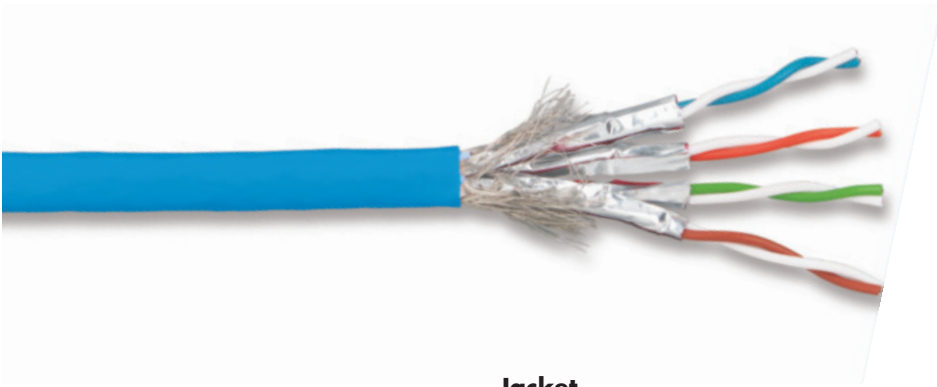
- S/FTP
- Reverse sequential measurement markings on jacket
- Round jacket
- Pairs individually shielded with aluminum-polyester foil
- Overall tinned-copper braid

COMPLIANCE

- IEC 61156-5 Ed 2.0 (Category 7_A)
- ISO/IEC 11801 Ed 2.2
- C (UL) US CMP, CMR 191086
- EN 50288 • EN55022
- EN 50173 • EN55024
- IEEE 802.3an

ETHERNET APPLICATIONS SUPPORT

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



PRODUCT INFORMATION

TERA E10 Cable

ELECTRICAL SPECIFICATIONS

	CMP	CMR
DC Resistance	<9.5 Ω/100m	<9.5 Ω/100m
DC Resistance Unbalance	2%	1%
Mutual Capacitance	5.6 nF/100m	5.6 nF/100m
Capacitance Unbalance	< 160 pf/100m	< 160 pf/100m
NVP	79%	72%
TCL (dB/100m)	> 40-10 x log(f)	> 40-10 x log(f)
Delay Skew	≤ 20 ns/100m	≤ 20 ns/100m

PHYSICAL PROPERTIES

	CMP	CMR
Pulling Tension (max)	110N (25 lbf)	179N (40 lbf)
Bend Radius (min)	50mm (2 in.)	50mm (2 in.)
Installation Temperature	0 to 50°C (+32 to 122°F)	-36 to 60°C (-32 to 140°F)
Storage Temperature	-20 to 75°C (-4 to 167°F)	-34 to 75°C (-30 to 167°F)
Operating Temperature	-20 to 75°C (-4 to 167°F)	-34 to 75°C (-30 to 167°F)

TRANSMISSION PERFORMANCE

GUARANTEED WORST CASE
 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*	2.1	1.7	78.0	104.4	75.0	98.9	75.9	102.6	72.9	97.2	105.3	106.5	75.0	92.2	20.0	28.1	512	443
4	3.7	3.2	78.0	112.5	75.0	105.9	74.3	109.3	71.3	102.7	93.3	113.9	75.0	103.6	23.0	30.9	494	443
10	5.8	4.9	78.0	111.3	75.0	104.8	72.2	106.4	69.2	99.9	85.3	104.6	75.0	97.3	25.0	40.7	487	442
16	7.3	6.2	78.0	104.8	75.0	99.9	70.7	98.5	67.7	93.7	81.2	99.7	75.0	93.8	25.0	41.3	485	440
20	8.2	7.0	78.0	106.4	75.0	100.6	69.8	99.4	66.8	93.6	79.3	94.8	75.0	89.4	25.0	43.5	484	440
31.25	10.3	9.0	78.0	108.1	75.0	101.1	67.7	99.1	64.7	92.1	75.4	94.8	72.4	88.7	23.6	45.3	482	439
62.5	14.6	12.9	78.0	107.2	75.0	101.7	63.4	94.3	60.4	88.8	69.4	93.0	66.4	86.0	21.5	43.7	481	438
100	18.5	16.5	78.0	108.0	75.0	101.0	59.5	91.4	56.5	84.4	65.3	92.8	62.3	83.2	20.1	38.5	480	438
200	26.5	23.9	73.9	107.0	70.9	100.6	47.4	83.0	44.4	76.7	59.3	81.9	56.3	77.7	18.0	33.1	479	437
250	29.7	27.0	72.4	106.3	69.4	100.7	42.7	79.4	39.7	73.7	57.3	76.4	54.3	72.6	17.3	35.1	478	437
300	32.7	29.8	71.2	105.3	68.2	98.5	38.6	75.5	35.6	68.6	55.8	71.3	52.8	67.1	17.3	33.7	478	437
350	35.4	32.4	70.2	106.9	67.2	101.0	34.8	74.5	31.8	68.5	54.4	80.4	51.4	67.2	17.3	35.5	478	437
400	38.0	35.0	69.4	104.7	66.4	98.5	31.4	69.7	28.4	63.6	53.3	72.3	50.3	63.0	17.3	33.7	478	437
550	45.0	41.8	67.3	104.3	64.3	98.0	22.3	62.5	19.3	56.2	50.5	66.3	47.5	57.4	17.3	30.8	478	437
600	47.1	43.8	66.7	106.5	63.7	100.5	19.6	62.7	16.6	56.6	49.7	66.4	46.7	54.0	17.3	28.5	477	437
800	54.9	51.7	64.9	105.8	61.9	98.7	9.9	54.1	6.9	46.9	47.2	58.1	44.2	47.8	16.1	29.7	477	437
900	58.5	55.3	64.1	105.8	61.1	97.7	5.6	50.5	2.6	42.3	46.2	51.2	43.2	45.6	15.5	29.9	477	438
1000	61.9	59.4	63.4	102.3	60.4	93.7	1.5	43.0	-1.5	34.3	45.3	50.4	42.3	44.8	15.1	24.5	477	440

*Values below 4 MHz are informational only.

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

TERA S/FTP Plenum 4-Pair Cable (CMP, CSA Type FT6):

9T7P4-E10-06-R1Plenum, blue jacket, 1000 ft. Reel

TERA S/FTP Riser 4-Pair Cable (CMR, CSA Type FT4):

9T7R4-E10-06-R1Riser, blue jacket, 1000 ft. Reel

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)

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

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