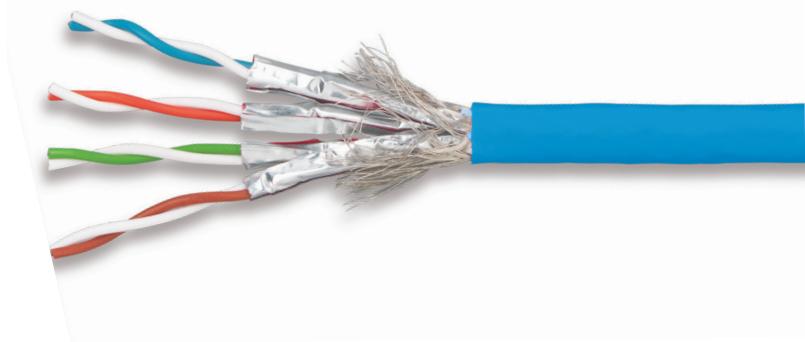


# Category 7A 1000 MHz Cable

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 7A/Class F<sub>A</sub> 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.



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).

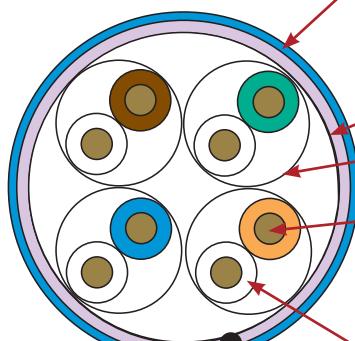


## COMPLIANCE

- ISO/IEC 11801: Ed 2.2 (Class F<sub>A</sub>)
- IEC 61156-5 Ed 2.1 (Category 7A)
- IEEE 802.3an
- EN 50288
- EN 50173
- EN 55022
- EN 55024

## CABLE CONSTRUCTION

- S/FTP
- Nominal Cable O.D: 7.9mm (0.31 in.)
- CMP: 0.64mm (0.025 in.) 22 AWG (solid bare copper)
- CMR: 0.57mm (0.022 in.) 23 AWG (solid bare copper)
- Pairs individually shielded with aluminum-polyester foil
- Overall tinned copper braid



### Jacket

- Nominal Cable O.D.: 0.31 in. ± 0.02 (7.9mm ± 0.5)
- Jacket Material: CMR-PVC CMP-PVDF

### Tinned-Copper Braid

### Aluminum Foil Tape

### Conductor

- CMP 0.64mm (0.026 in.) 22AWG solid bare copper
- CMR 0.57mm (0.022 in.) 23AWG solid bare copper

### Insulation

- Conductor Insulation: CMR-PE CMP-MFA

### Rip Cord (CMP only)

# Product Information

## ELECTRICAL SPECIFICATIONS

DC Resistance	<7.32 Ω/100m
DC Resistance Unbalance	2%
Mutual Capacitance	5.6 nF/100m
Capacitance Unbalance	<330 pF/100m
NVP	CMR = 79% - CMP = 72%
TCL	40-10 log(f) dB
Delay Skew	≤20ns

## PHYSICAL PROPERTIES

	CMP	CMR
Pulling Tension (max)	110N (25 lbf)	179N (40 lbf)
Bend Radius (min)	50mm (2.0 in.)	50mm (2.0 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



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)		
1.0*	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
4.0	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
10.0	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
16.0	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
20.0	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
100.0	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
200.0	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
250.0	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
300.0	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
350.0	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
400.0	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
550.0	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
600.0	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
800.0	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
900.0	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
1000.0	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 above industry requirements are for information only.

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

## Ordering Information

### Part Number Description

9T7P4-E10-06-R1 .... Plenum (CMP, CSA FT6), Blue Jacket, 305m (1000 ft.) Reel  
 9T7R4-E10-06-R1 .... Riser (CMR, CSA FT4), Blue Jacket, 305m (1000 ft.) Reel



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

