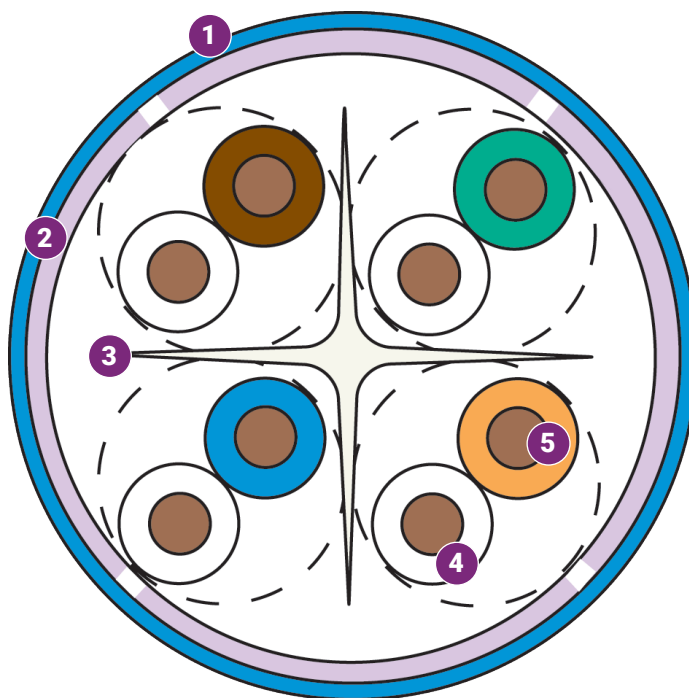


Category 6A TL UTP 4-Pair Cable

Regional Availability – North America



Siemon's Category 6A Tri-Layer (TL) UTP cable features an innovative multi-layer barrier construction which enables a typical UTP installation process and smaller cable diameter while providing improved heat dissipation and virtually zero alien crosstalk. These properties make this cable ideal for supporting applications using both remote powering and 10 Gb/s application speeds such as IEEE 802.11ac or IEEE 802.11ax wireless access points or other high speed emerging or converging IP building automation technologies.



1. Jacket

Nominal Cable O.D.
CMP: 6.35mm (0.25 in.) CMR: 7.2mm (0.283 in.)

2. Tri-Layer (TL) ANEXT Barrier

Maximizes geometric pair isolation.

3. Isolation Member

Maintains pair geometry before, during and after installation for optimal NEXT Loss Performance.

4. Insulation

Max. O.D. = 1.11mm (0.044 in.)

5. Conductor

23AWG solid copper 0.57mm (0.022 in.)



Compliance

- ANSI/TIA-568.2-D
- IEC 61156-5 Ed 3.0
- ISO/IEC 11801-1 Ed. 1.0
- UL CMP or ETL CMP
- CSA FT6
- CMP-LP(0.6A) 120W
- UL CMR or ETL CMR

Cable Construction

- TL UTP
- 0.57mm (0.022 in.) 23 AWG solid bare copper
- Nominal Jacket Diameter:
CMP: 6.35mm (0.25 in.)
CMR: 7.2mm (0.283 in.)
- Central isolation member
- Tri-layer non-conductive tape applied over an aluminum core
- Reverse sequential measurement markings on jacket

Applications Support

- 10GBASE-T
- 1000BASE-T
- 100BASE-T
- 10BASE-T
- HDBASE-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)



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).

ELECTRICAL SPECIFICATIONS

DC RESISTANCE	<9.38/100m
DC RESISTANCE UNBALANCE WITHIN PAIRS	≤2%
DC RESISTANCE UNBALANCE BETWEEN PAIRS	≤5%
MUTUAL CAPACITANCE	≤5.6 nF/100m
CAPACITANCE UNBALANCE	≤330 pF/100m
NVP	71% CMP; 67% CMR
TCL	≥30-10 log(f/100) dB
DELAY SKEW	≤45ns

PHYSICAL PROPERTIES CMP

PULLING TENSION (MAX)	110 N (25 lbf)	110 N (25 lbf)
BEND RADIUS (MIN)	50.8 mm (2.0 in.)	57.6 mm (2.27 in.)
INSTALLATION TEMPERATURE	5 to 50°C (+41 to 122°F)	0 to 50°C (+32 to 122°F)
STORAGE TEMPERATURE	-20 to 75°C (-4 to 167°F)	-20°C to 75°C (-4 to 167°F)
OPERATING TEMPERATURE	-20 to 90°C (-4 to 194°F)	-20°C to 75°C (-4 to 167°F)

CMR

TRANSMISSION PERFORMANCE

Siemon Guaranteed Worst Case

Siemon Typical

TEST PARAMETER	FREQUENCY (MHz)																
	1.0	4.0	10.0	16.0	20.0	31.25	62.5	100.0	160.0	200.0	250.0	300.0	400.0	500.0	550.0*	625.0*	750.0*
INSERTION LOSS (dB)	2.1	3.8	5.9	7.5	8.4	10.5	15.0	19.1	24.5	27.6	31.1	34.3	40.1	45.3	-	-	-
	1.9	3.5	5.4	6.8	7.6	9.5	13.6	17.3	22.1	24.8	28.0	30.8	36.0	40.8	43.8	46.5	51.8
NEXT (dB)	75.3	66.3	60.3	57.2	55.8	52.9	48.4	45.3	42.2	40.8	39.3	38.1	36.3	34.8	-	-	-
	96.7	81.5	74.5	71.6	70.9	65.1	62.4	58.4	57.0	53.6	48.5	46.0	42.1	42.9	39.9	40.5	28.5
PS NEXT (dB)	73.3	64.3	58.3	55.2	53.8	50.9	46.4	43.3	40.2	38.8	37.3	36.1	34.3	32.8	-	-	-
	93.2	80.6	72.1	68.0	68.2	62.3	59.2	56.6	53.7	51.8	45.4	44.2	41.6	40.7	39.4	36.9	28.2
ACR-F (dB)	73.3	61.3	53.3	49.2	47.3	43.4	37.4	33.3	29.2	27.3	25.3	23.8	21.3	19.3	-	-	-
	96.5	84.8	75.7	71.6	69.8	66.4	61.1	59.6	55.4	52.6	50.0	47.9	48.2	41.7	35.9	34.7	33.2
PS ACR-F (dB)	71.3	59.3	51.3	47.2	45.3	41.4	35.4	31.3	27.2	25.3	23.3	21.8	19.3	17.3	-	-	-
	93.5	82.4	73.4	69.5	67.4	64.0	57.3	56.0	52.6	49.7	47.0	44.5	47.5	38.3	35.2	32.4	30.7
RETURN LOSS (dB)	20.0	23.0	25.0	25.0	25.0	23.7	21.5	20.1	18.7	18.0	17.3	16.8	15.9	15.2	-	-	-
	27.4	35.3	33.4	37.2	38.4	38.7	35.8	31.6	35.2	32.1	26.6	26.2	25.4	24.2	23.5	18.6	18.0
ACR-N (dB)	73.2	62.5	54.4	49.8	47.4	42.4	33.4	26.2	17.7	13.2	8.3	3.9	-3.8	-10.4	-	-	-
	94.8	78.0	69.1	64.9	63.6	55.6	49.1	41.5	35.0	28.7	20.7	15.2	6.1	2.1	-3.9	-6.0	-23.3
PS ACR-N (dB)	71.2	60.5	52.4	47.8	45.4	40.4	31.4	24.2	15.7	11.2	6.3	1.9	-5.8	-12.4	-	-	-
	91.4	77.2	66.8	61.4	60.7	52.9	45.9	39.6	32.0	27.1	18.0	13.4	5.7	0.3	-4.2	-9.0	-23.4
PS ANEXT (dB)	77.0	77.0	77.0	77.0	77.0	75.1	72.1	70.0	67.0	65.5	64.0	62.8	61.0	59.5	-	-	-
	93.3	94.3	92.5	93.3	89.7	90.7	89.0	91.3	90.3	89.4	91.2	89.1	89.6	86.6	85.3	83.4	86.4
PS AACRF (dB)	72.0	70.3	62.1	58.1	56.1	52.2	46.1	42.0	37.9	36.0	34.1	32.5	30.0	28.0	-	-	-
	93.1	92.6	90.0	89.6	82.8	80.7	77.2	73.3	70.1	65.9	61.7	58.1	52.9	47.1	43.3	39.3	39.8
PROPAGATION DELAY (ns)	570	552	545	543	542	540	539	538	537	537	536	536	536	536	-	-	-
	471	467	463	462	461	460	459	459	459	459	458	458	458	458	458	458	461

All performance based on 100 meters (328 ft.). *Values above 500 MHz are informational only.

Ordering Information

305m (1000 ft.) Reel (North America only)

Part Number	Description
9U6P4-A5-01AR1A	Plenum (CMP, CSA FT6), Black
9U6P4-A5-02AR1A	Plenum (CMP, CSA FT6), White
9U6P4-A5-03AR1A	Plenum (CMP, CSA FT6), Red
9U6P4-A5-04AR1A	Plenum (CMP, CSA FT6), Gray
9U6P4-A5-05AR1A	Plenum (CMP, CSA FT6), Yellow
9U6P4-A5-06AR1A	Plenum (CMP, CSA FT6), Blue
9U6P4-A5-07AR1A	Plenum (CMP, CSA FT6), Green
9U6P4-A5-08AR1A	Plenum (CMP, CSA FT6), Violet
9U6P4-A5-09AR1A	Plenum (CMP, CSA FT6), Orange
9U6R4-A5-01AR1A	Riser (CMR, CSA FT4), Black
9U6R4-A5-02AR1A	Riser (CMR, CSA FT4), White
9U6R4-A5-03AR1A	Riser (CMR, CSA FT4), Red
9U6R4-A5-04AR1A	Riser (CMR, CSA FT4), Gray
9U6R4-A5-05AR1A	Riser (CMR, CSA FT4), Yellow
9U6R4-A5-06AR1A	Riser (CMR, CSA FT4), Blue
9U6R4-A5-07AR1A	Riser (CMR, CSA FT4), Green
9U6R4-A5-08AR1A	Riser (CMR, CSA FT4), Violet
9U6R4-A5-09AR1A	Riser (CMR, CSA FT4), Orange

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

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