

Category 6A UTP Cable

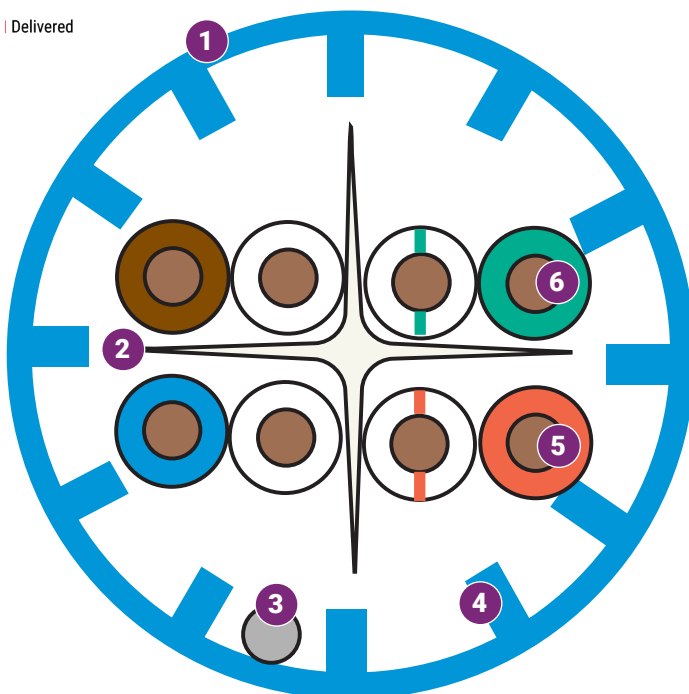
Regional Availability – North America



Siemon's Category 6A UTP cable provides channel performance exceeding TIA and ISO/IEC 6A requirements when used with Z-MAX™ and UltraMAX™ Category 6A UTP connectivity. Siemon's category 6A UTP cable with cross separator uses a central pair separator for optimal pair-to-pair crosstalk isolation as well as Internal Longitudinal Striation (ILS™) jacket construction to reduce alien crosstalk (AXT) coupling between adjacent cables.



Data | Power | Reach | Delivered



1. Jacket

Nominal Cable O.D.:
CMP – 7.9mm (0.310 in.)
CMR – 8.3mm (0.326 in.)

Jacket Material:
CMP – FRPVC
CMR – FRPVC

2. Cross Separator

Maximizes geometric pair isolation.

3. Rip Cord

4. Internal Longitudinal Striations (ILS)

Maintains centric cable core positioning and ensures proper isolation between adjacent cable.

5. Insulation

CMP – FEP
CMR – HDPE
MAX DIA = 1.17mm (0.046 in)

6. Conductor

23AWG X 4P solid bare copper
0.56mm (0.022 in.)



Compliance

- ISO/IEC 11801-1 Ed.1.0
- ANSI/TIA-568.2-E
- UL CMR and CSA FT4
- UL CMP and CSA FT6
- CMP-LP(0.5A) 100W

Cable Construction

- UTP
- CMP Nominal Cable O.D: 7.9mm (0.31 in.)
- CMR Nominal Cable O.D: 8.3mm (0.326 in.)
- 0.56mm (0.022 in.) (23 AWG) solid bare copper
- Round jacket with Internal Longitudinal Striations (ILS)

Ethernet 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)

Product Information

ELECTRICAL SPECIFICATIONS

DC RESISTANCE	9.38Ω/100m @ 20°C
DC RESISTANCE UNBALANCE	4% @ 20°C
MUTUAL CAPACITANCE	5.6 nF/100m
CAPACITANCE UNBALANCE	330 pF/100m
CHARACTERISTIC IMPEDANCE (OHMS)	1 - 100 MHz: 100 ± 15% 100 - 200 MHz: 100 ± 22% 200 - 500 MHz: 100 ± 32%
NVP	67%
TCL	30 -10 log(f/100) dB
PSANEXT	62.5 -15 log(f/100) dB
PSAACRF	38.2 -20 log(f/100) dB
DELAY SKEW	≤45ns/100m
POE	Suitable for PoE Type 1, 2, 3, 4

PHYSICAL PROPERTIES

CMP

CMR

PULLING TENSION (MAX)	110 N (25 lbf)	110N (25 lbf)
BEND RADIUS (MIN)	34mm (1.3 in.)	34mm (1.3 in.)
INSTALLATION TEMPERATURE	0 to 50°C (+32 to 122°F)	0 to 50°C (+32 to 122°F)
STORAGE TEMPERATURE	-20 to 75°C (-4 to 167°F)	-20 to 75°C (-4 to 167°F)
OPERATING TEMPERATURE	-20 to 75°C (-4 to 167°F)	-20 to 75°C (-4 to 167°F)

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	-	-	-
	1.8	3.6	5.7	7.3	8.1	10.2	14.6	18.6	23.7	26.5	29.9	32.9	38.4	43.3	45.7	49.4	54.1
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	-	-	-
	96.8	90.6	79.2	75.5	65.0	68.4	65.5	63.6	57.7	59.6	51.8	56.2	45.8	50.5	52.2	45.1	26.4
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	-	-	-
	95.2	88.0	78.7	73.2	64.6	65.8	62.5	60.6	56.6	58.1	50.8	53.1	45.4	47.5	49.1	43.6	26.3
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	-	-	-
	84.7	73.0	65.3	60.9	59.0	55.3	52.7	48.1	46.1	43.4	42.0	41.3	37.6	29.3	34.3	31.7	30.1
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	-	-	-
	82.3	70.7	63.4	59.5	57.7	54.2	50.3	45.0	43.7	46.6	39.4	39.3	35.4	28.2	31.5	28.9	29.2
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	17.3	17.3	17.3	-	-	-
	28.4	30.7	34.8	37.2	36.5	37.6	36.2	34.2	32.7	32.5	28.4	27.3	28.8	23.4	22.6	22.8	21.6
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	-	-	-
	95.1	87.1	73.7	68.6	56.9	58.2	51.5	45.7	34.9	33.9	22.8	24.3	8.5	8.5	7.7	-4.3	-26.0
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	-	-	-
	93.5	84.4	73.1	66.1	56.7	55.9	48.4	42.7	33.7	32.3	21.8	21.2	7.9	5.5	5.3	-4.6	-27.2
PS AACRF (dB)	67.0	65.3	57.1	53.1	51.1	47.2	41.1	37.0	32.9	31.0	29.1	27.5	25.0	23.0	-	-	-
	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
PS ANEXT (dB)	80.0	74.2	70.0	68.1	67.1	65.1	62.1	60.0	57.0	55.5	54.0	52.8	51.0	49.5	-	-	-
	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
PROPAGATION DELAY (ns)	570	552	545	543	542	540	539	538	537	537	536	536	536	536	-	-	-
	533	519	513	511	510	508	507	506	505	505	505	504	504	504	504	504	504

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
9C6P4-A5-01AR1A	Plenum (CMP, CSA FT6), Black
9C6P4-A5-02AR1A	Plenum (CMP, CSA FT6), White
9C6P4-A5-03AR1A	Plenum (CMP, CSA FT6), Red
9C6P4-A5-04AR1A	Plenum (CMP, CSA FT6), Gray
9C6P4-A5-05AR1A	Plenum (CMP, CSA FT6), Yellow
9C6P4-A5-06AR1A	Plenum (CMP, CSA FT6), Blue
9C6P4-A5-07AR1A	Plenum (CMP, CSA FT6), Green
9C6P4-A5-08AR1A	Plenum (CMP, CSA FT6), Violet
9C6P4-A5-09AR1A	Plenum (CMP, CSA FT6), Orange
9C6R4-A5-01AR1A	Riser (CMR, CSA FT4), Black
9C6R4-A5-02AR1A	Riser (CMR, CSA FT4), White
9C6R4-A5-03AR1A	Riser (CMR, CSA FT4), Red
9C6R4-A5-04AR1A	Riser (CMR, CSA FT4), Gray
9C6R4-A5-05AR1A	Riser (CMR, CSA FT4), Yellow
9C6R4-A5-06AR1A	Riser (CMR, CSA FT4), Blue
9C6R4-A5-07AR1A	Riser (CMR, CSA FT4), Green
9C6R4-A5-08AR1A	Riser (CMR, CSA FT4), Violet
9C6R4-A5-09AR1A	Riser (CMR, CSA FT4), Orange



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