

Category 6A UTP Cable - US

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

COMPLIANCE

- ISO/IEC 11801-1 Ed.1.0
- ANSI/TIA-568.2-D
- UL CMR and CSA FT4
- UL CMP and CSA FT6

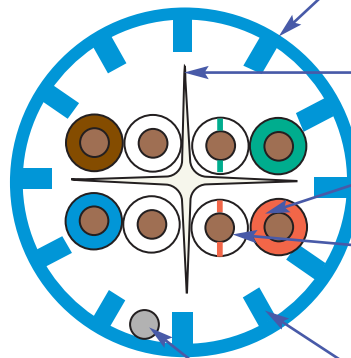
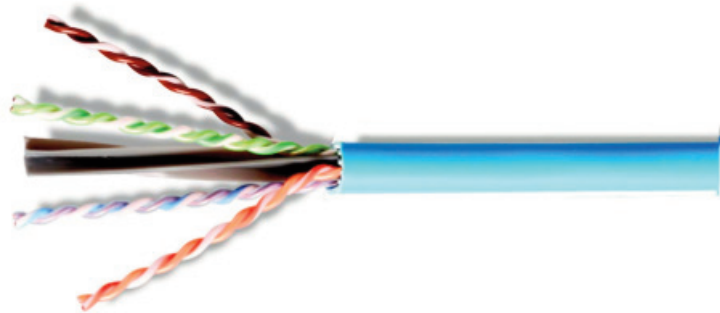
CABLE CONSTRUCTION

- UTP
- CMP Nominal Cable O.D: 7.9mm (0.31 in.)
- CMR Nominal Cable O.D: 8.3mm (0.326 in.)
- 0.58mm (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)

Supports all applications designed for Category 6A or lower cabling



Jacket

- Nominal Cable O.D:
CMP – 0.310 in.
CMR – 0.326 in.
- Jacket Material:
CMP – FRPVC
CMR – FRPVC

Cross Separator

- Maximizes geometric pair isolation

Conductor

- 0.58mm (0.022 in.) 23 AWG X 4P solid bare copper

Insulation

- Conductor Insulation:
CMP – FEP
CMR – HDPE
MAX DIA = 0.046

Internal Longitudinal Striations (ILS)

- Maintains centric cable core positioning and ensures proper isolation between adjacent cables

Ripcord



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	62.5-15log(f /100)dB
PSAACRF	38.2-20log(f /100)dB
Delay Screw	≤45ns/100m
PoE	Suitable for PoE Type 1,2,3,4

PHYSICAL PROPERTIES

	CMP	CMR
Pulling Tension (max)	110N (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 60°C (-4 to 140°F)	-20 to 60°C (-4 to 140°F)

TRANSMISSION PERFORMANCE

GUARANTEED WORSE CASE

Frequency (MHz)	Insertion Loss (dB)	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	74.3	72.3	72.2	70.2	67.8	64.8	20.0	570
4.0	3.8	65.3	63.3	61.5	59.5	55.7	52.7	23.0	552
10.0	5.9	59.3	57.3	53.4	51.4	47.8	44.8	25.0	545
16.0	7.5	56.2	54.2	48.8	46.8	43.7	40.7	25.0	543
20.0	8.4	54.8	52.8	46.4	44.4	41.7	38.7	25.0	542
31.25	10.5	51.9	49.9	41.4	39.4	37.9	34.9	23.6	540
62.5	15.0	47.4	45.4	32.4	30.4	31.8	28.8	21.5	539
100.0	19.1	44.3	42.3	25.2	23.2	27.8	24.8	20.1	538
200.0	27.6	39.8	37.8	12.2	10.2	21.7	18.7	18.0	537
250.0	31.1	38.3	36.3	7.3	5.3	19.8	16.8	17.3	536
300.0	34.3	37.1	35.1	2.9	0.9	18.2	15.2	16.8	536
350.0	37.2	36.1	34.1	-1.1	-3.1	16.9	13.9	16.3	535
400.0	40.1	35.3	33.3	-4.8	-6.8	15.7	12.7	15.9	535
500.0*	45.3	33.8	31.8	-11.4	-13.4	13.8	10.8	15.2	536
625.0*	51.2	32.4	30.4	-18.8	-20.8	11.8	8.8	14.5	535
750.0*	56.7	31.2	29.2	-25.5	-27.5	10.3	7.3	14.0	535

*Performance for frequencies beyond TIA requirements are for information only.

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

Ordering Information

9C6(X)4-A5-(XX)-AR1A 305m (1000 ft.) Reel

Jacket Material
P = Plenum (CMP, CSA FT6)
R = Riser (CMR, CSA FT4)

Jacket Color
01 = Black 04 = Gray 07 = Green
02 = White 05 = Yellow 08 = Violet
03 = Red 06 = Blue 09 = Orange



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

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