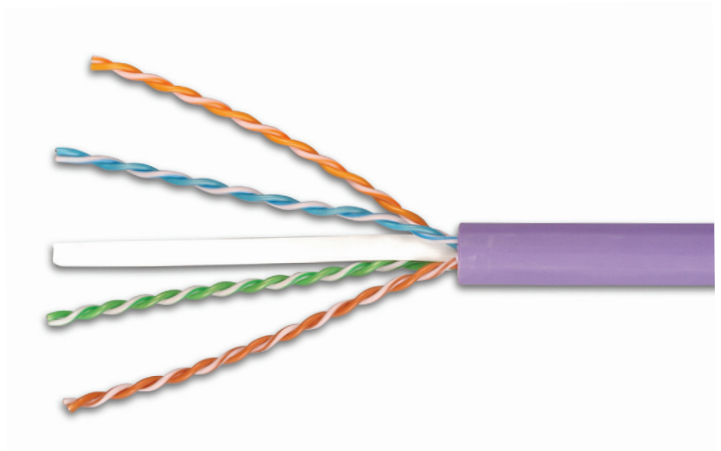


# Category 6A UTP Cable - International

Siemon's Category 6A UTP cable exceeds ANSI/TIA and ISO/IEC transmission performance requirements including alien crosstalk. When combined with Z-MAX 6A UTP connectivity, the result is a channel capable of supporting 10GBASE-T operation over 100-meter, 4-connector topologies. The 6A UTP cabling system supports emerging and converging IP applications like Voice Over IP (VoIP), IP video and other 10GBase-T applications.



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).



## CABLE FEATURES

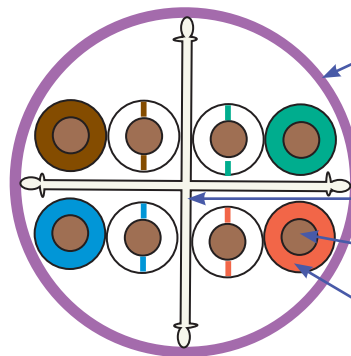
- UTP
- Nominal jacket OD: 7.95 (0.31 in.)
- 23 AWG 0.58mm (0.023 in.) solid bare copper
- Center Isolation Member
- 75° C temperature rating

## STANDARD COMPLIANCE

- ISO/IEC 11801-1 Ed 1.0
- ANSI/TIA-568.2-D
- IEC 61156-5 Ed 2.1
- CM: UL, IEC, 60332-1
- LSOH: ISO/IEC 60332-1, IEC 60754 and IEC 61034
- EN 50575 Class Eca

## 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)
- Power over HDBaseT (PoH)



### Jacket

- Cable O.D.: 7.95mm (0.31 in.)  $\pm$  0.3mm
- Jacket Material: LSOH  
LSOH – Polyethylene  
CM – Polyethylene

### Center Isolation Member

### Conductor

- 23AWG solid  
0.58mm (0.023 in.)

### Insulation

- Conductor Insulation: HDPE  
1.05mm nominal outside diameter

# Product Information

## ELECTRICAL SPECIFICATIONS

DC Resistance	8.6Ω/100m nominal
DC Resistance Unbalance	within pairs ≤2%, between pairs ≤5%
Mutual Capacitance	5.6 nF/100m
Capacitance Unbalance	<330 pF/100m
NVP	65%
TCL	≥50-10* log(f/100) dB
Delay Skew	≤45ns

## PHYSICAL PROPERTIES

LSOH/CM	
Pulling Tension (max)	100N (22 lbf)
Bend Radius (min)	64mm (2.52 in.)
Installation Temperature	0 to 50°C (+32 to 122°F)
Storage Temperature	-20 to 75°C (-4 to 167°F)
Operating Temperature	-20 to 75°C (-4 to 167°F)

## TRANSMISSION PERFORMANCE



GUARANTEED WORST CASE



SIEMON TYPICAL

Frequency (MHz)	Insertion Loss (dB/100)		NEXT (dB)		PS NEXT (dB)		ACR-F (dB)		PS ACR-F (dB)		Return Loss (dB)		ACR-N (dB)		PS ACR-N (dB)		Propagation Delay (ns)		
1.0	2.1	1.8	75.3	101.6	73.3	99.0	73.3	91.7	71.3	89.0	20.0	24.6	73.2	99.8	71.2	97.2	570	557	
4.0	3.8	3.7	66.3	82.7	64.3	81.6	61.3	81.0	59.3	78.0	23.0	29.7	62.5	79.1	60.5	78.0	552	542	
10.0	5.9	5.9	60.3	77.4	58.3	77.1	53.3	74.3	51.3	71.4	25.0	37.4	54.4	71.7	52.4	71.3	545	536	
16.0	7.5	7.4	57.2	81.3	55.2	79.2	49.2	68.2	47.2	66.2	25.0	36.7	49.8	74.0	47.8	71.9	543	534	
20.0	8.4	8.3	55.8	82.1	53.8	78.7	47.3	65.1	45.3	63.5	25.0	35.8	47.4	74.0	45.4	70.6	542	534	
31.25	10.5	10.4	52.9	72.7	50.9	69.9	43.4	59.5	41.4	58.3	23.7	34.8	42.4	62.5	40.4	59.8	540	532	
62.5	15.0	14.8	48.4	67.6	46.4	66.6	37.4	50.7	35.4	49.9	21.5	31.7	33.4	53.2	31.4	52.3	539	530	
100.0	19.1	18.7	45.3	67.6	43.3	65.9	33.3	49.2	31.3	47.4	20.1	33.6	26.2	49.3	24.2	47.8	538	530	
160.0	24.5	23.8	42.2	61.0	40.2	58.4	29.2	49.0	27.2	46.3	18.7	29.8	17.7	37.7	15.7	35.3	537	529	
200.0	27.6	26.6	40.8	58.0	38.8	55.1	27.3	43.2	25.3	41.3	18.0	29.1	13.2	32.0	11.2	29.1	537	529	
250.0	31.1	29.9	39.3	56.9	37.3	54.9	25.3	44.2	23.3	42.3	17.3	27.5	8.3	28.0	6.3	26.0	536	528	
300.0	34.3	32.9	38.1	49.4	36.1	49.3	23.8	42.1	21.8	39.1	17.3	24.8	3.9	17.3	1.9	17.1	536	528	
400.0	40.1	38.3	36.3	47.5	34.3	47.2	21.3	37.5	19.3	35.1	17.3	21.2	-3.8	10.1	-5.8	9.8	536	528	
500.0	45.3	43.1	34.8	47.3	32.8	46.3	19.3	32.3	17.3	31.8	17.3	21.6	-10.4	5.1	-12.4	3.9	536	528	
550.0*	-	45.2	-	44.9	-	43.4	-	30.5	-	29.3	-	20.6	-	0.4	-	-1.1	-	528	
625.0*	-	48.1	-	35.1	-	35.0	-	29.0	-	26.8	-	20.0	-	-12.3	-	-13.0	-	528	
750.0*	-	54.2	-	41.8	-	39.5	-	32.6	-	30.0	-	21.0	-	-10.9	-	-13.1	-	528	

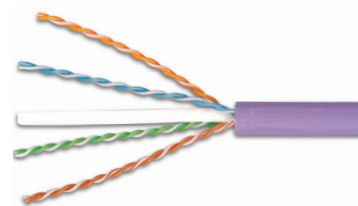
\*Values above 500 MHz are for information only.

## Ordering Information

### Part Number Description

9C6L4-A5..... LSOH (IEC 60332-1), class E<sub>ca</sub> violet jacket 305m (1000 ft.) reel  
 9C6M4-A5-04-R1A.. CM (IEC 60332-1), class E<sub>ca</sub> gray jacket, 305m (1000 ft.) reel

For additional reel put-ups and cable colors, please contact Siemon Customer Service.



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

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**Siemon Interconnect Solutions**  
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