

# Category 6A TL UTP LSOH 4-Pair Cable

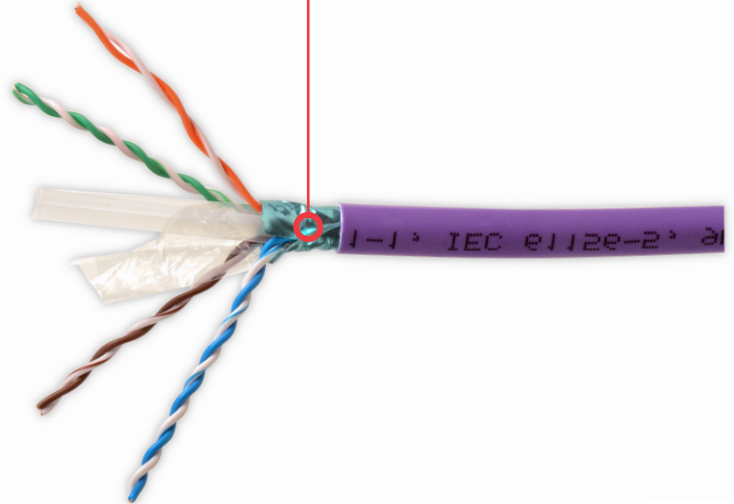
## - International

Simon's Category 6A TL UTP LSOH cable features a tri-layer barrier composed of conductive and non-conductive elements that 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.



Simon'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).

**TL Technology**  
Tri-layer barrier



### CABLE CONSTRUCTION

- Tri-layer "TL" UTP LSOH
- 0.57mm (.022 in.) 23 AWG solid bare copper
- 7.3mm (.287 in.) nom. jacket diameter
- Central isolation member
- Mylar Tape.
- Tri-layer laminated polyethylene over aluminum applied over core
- Reverse sequential measurement markings on jacket

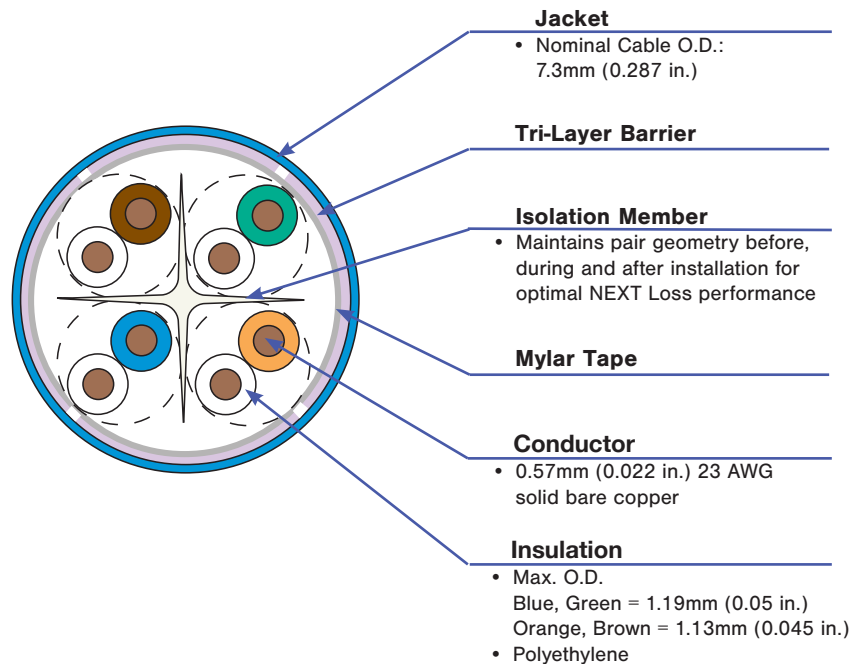
### COMPLIANCE

- TIA-568.2-D
- IEC 61156-5
- ISO/IEC 11801-1
- IEC 60332-1
- IEC 60332-3-22
- IEC 60754-2, 61034
- EN50575 E<sub>ca</sub>

### 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)

*Supports all applications designed for category 6A or lower cabling*



# 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	≤160 pF/100m
NVP	65%
TCL	≥50-10* log(f) dB
Delay Skew	≤45ns

## PHYSICAL PROPERTIES

LSOH	
Pulling Tension (max)	80N (18 lbf)
Bend Radius (min)	60mm (2.36 in.)
Installation Temperature	0 to 50°C (+32 to 122°F)
Storage Temperature	-20 to 50°C (-4 to 122°F)
Operating Temperature	-20 to 75°C (-4 to 167°F)

## TRANSMISSION PERFORMANCE



GUARANTEED WORST CASE



SIEMON TYPICAL

Frequency (MHz)	Insertion Loss (dB)		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	1.9	75.3	93.4	73.3	91.6	73.3	89.3	71.3	88.8	20.0	29.6	73.2	91.5	71.2	89.7	570	489
4.0	3.8	3.5	66.3	82.8	64.3	81.6	61.3	78.0	59.3	77.9	23.0	29.2	62.5	79.3	60.5	78.1	552	485
10.0	5.9	5.5	60.3	74.2	58.3	73.2	53.3	69.7	51.3	69.3	25.0	30.1	54.4	68.7	52.4	67.7	545	482
16.0	7.5	7.0	57.2	68.9	55.2	67.4	49.2	65.9	47.2	65.6	25.0	32.7	49.8	62.1	47.8	60.6	543	481
20.0	8.4	7.8	55.8	72.3	53.8	70.3	47.3	63.9	45.3	63.5	25.0	33.7	47.4	64.7	45.4	62.7	542	480
31.25	10.5	9.8	52.9	65.7	50.9	64.1	43.4	60.1	41.4	59.9	23.7	31.9	42.4	56.2	40.4	54.6	540	480
62.5	15.0	13.9	48.4	58.5	46.4	57.6	37.4	53.7	35.4	53.2	21.5	30.5	33.4	45.0	31.4	44.0	539	479
100.0	19.1	17.7	45.3	53.8	43.3	53.6	33.3	50.0	31.3	49.8	20.1	31.5	26.2	36.5	24.2	36.0	538	478
160.0	24.5	22.6	42.2	53.8	40.2	52.2	29.2	46.0	27.2	45.0	18.7	28.9	17.7	31.8	15.7	30.2	537	478
200.0	27.6	25.2	40.8	59.5	38.8	56.6	27.3	44.0	25.3	43.5	18.0	29.9	13.2	34.9	11.2	32.0	537	478
250.0	31.1	28.3	39.3	56.2	37.3	53.4	25.3	42.3	23.3	42.1	17.3	28.2	8.3	28.6	6.3	25.8	536	478
300.0	34.3	31.1	38.1	54.3	36.1	50.3	23.8	40.1	21.8	40.0	17.3	30.2	3.9	24.0	1.9	20.0	536	478
400.0	40.1	36.3	36.3	53.8	34.3	50.5	21.3	37.9	19.3	37.0	17.3	26.7	-3.8	17.6	-5.8	14.2	536	478
500.0	45.3	40.9	34.8	49.0	32.8	46.9	19.3	36.5	17.3	35.7	17.3	23.3	-10.4	8.3	-12.4	6.1	536	478
550.0*	-	43.3	-	49.1	-	46.6	-	34.9	-	32.8	-	22.0	-	5.8	-	3.3	-	478
625.0*	-	46.1	-	40.3	-	39.7	-	35.1	-	33.8	-	23.0	-	-5.7	-	-6.5	-	478
750.0*	-	50.8	-	38.1	-	35.2	-	32.3	-	32.0	-	18.9	-	-12.5	-	-15.4	-	478

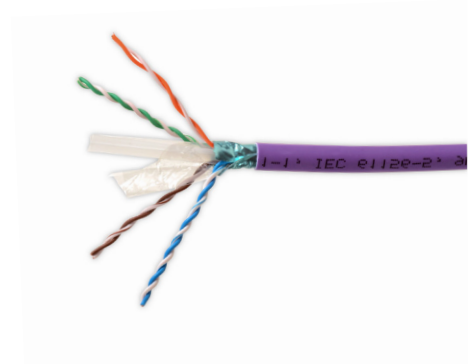
\*Values above 500 MHz are for information only.

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

## Ordering Information

Part Number	Description
9U6L4-A5-08AR1A.....	6A UTP, TL, LSOH (IEC 60332-1, IEC 60332-3-22), violet jacket, 305m (1000 ft.) Reel.

Other colors and put-ups available with longer lead times and MOQ's. Please contact Customer Service for details.



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