



# DESCRIPTION

Hyperline brings Category 6A UTP performance to a new level. This cable meets the internal and alien cross-talk performance requirements of ANSI/TIA-568-C.2 as tested in a 6 around 1 configuration. With guaranteed performance up to 500 MHz and independently verified and monitored by UL, 6A cable demonstrates superior capability for 10 Giga bit Ethernet (10GbE) and all other bandwidth intensive and legacy application when compared to TIA guidelines; meets or surpasses the specifications in every category. The cable construction is comprised of 8 x 23-gauge solid bare copper cores, which are then insulated with high density polyethylene insulation and organized into four color coded twisted pair sets of conductors and designed for Plenum rated spaces

# **CONTRUCTION:**

Conductor:	23 AWG Bare Copper
Stranding	Solid
Number of Conductors	8 (4 Pair)
Insulation	Fluoropolymer
Rip Cord	Polyester
Jacket Material	PLÉNUM LS FR PVC
Overall Cable Diameter	0.260" Nom. (6.6 mm)

### **MECHANICAL & ENVIROMENTAL PROPERTIES:**

Max. Recommended Pull Tension	25 lbs.
Min. Bend Radius (Installed)	1" Min.
RoHS Compliant	Yes
Storage Temp Range	-20°C to +75°C
Installation Temp Range	0°C to +50°C
Operating Temp Range	-20°c to +75°C



#### **ELETRICAL SPECIFICATIONS:**

Operating Temperature Rating	-20°C To +75°C
Operating Voltage Rating	300 V RMS
DC Resistance	9.383 Ω/100 @ 20ºC Max.
Mutual Capacitance	5.6 nF/100 meters max
Resistance Unbalance	<3%
Capacitance Unbalance	330 pF/100 Meters
Input Impedance	100Ω+/-15Ω (100Mhz), +/-15Ω(100-250 MHz)
	+/-25Ω (251-500 MHz)
Delay Skew	45ns/100m
NVP %	67.7%

### **TRANSMISSION SPECIFICATIONS:**

FREQ	INSERTION	NEXT	PS NEXT	ACRF PS ACRF		RETURN PRO		ALIEN CROSSTALK			
FREQ	LOSS	NEAT	FONEAT	ACRF PSACRF	LOSS	DELAY	PS ANEXT	PS AACRN	PS AACRF		
(MHz)	(dB/100m)	(dB/100m)	(dB/100m)	(dB/100m)	(dB/100m)	(dB)	(ns/100m)	(dB/100m)	(dB/100m)	(dB/100m)	
	max	min	min	min	min	min	max	min	min	min	
1.0	2.1	75.3	73.3	71.8	68.8	20.0	570.0	74.5	72.4	74.5	
4.0	3.8	66.3	64.3	59.8	56.8	23.0	552.0	74.5	70.7	73.7	
8.0	5.3	61.8	59.8	53.7	50.7	24.5	546.7	74.5	69.2	67.6	
10.0	5.9	60.3	58.3	51.8	48.8	25.0	545.4	74.5	68.6	65.7	
16.0	7.5	57.2	55.2	47.7	44.7	25.0	543.0	74.5	67.0	61.6	
20.0	8.4	55.8	53.8	45.8	42.8	25.0	542.0	74.5	66.1	59.7	
25.0	9.4	54.3	52.3	43.8	40.8	24.3	541.2	74.5	65.1	57.7	
31.25	10.5	52.9	50.9	41.9	38.9	23.6	540.4	74.5	64.0	55.8	
62.5	14.9	48.4	46.4	35.9	32.9	21.5	538.6	73.1	58.2	49.8	
100.0	19.0	45.3	43.3	31.8	28.8	20.1	537.6	70.0	51.0	45.7	
200.0	27.4	40.8	38.8	25.8	22.8	18.0	536.9	65.5	38.1	39.7	
250.0	30.8	39.3	37.3	23.8	20.8	17.3	536.5	64.0	33.2	37.7	
300.0	34.0	38.1	36.1	22.3	19.3	16.8	536.3	62.8	28.8	36.2	
350.0	36.9	37.1	35.1	20.9	17.9	16.3	536.1	61.8	24.9	34.8	
400.0	39.7	36.3	34.3	19.8	16.8	15.9	535.9	61.0	21.3	33.7	
450.0	42.3	35.5	33.5	18.7	15.7	15.5	535.8	60.2	17.9	32.6	
500.0	44.8	34.8	32.8	17.8	14.8	15.2	535.6	59.5	14.7	31.7	
550.0	47.2	34.2	32.2	17.0	14.0	14.9		58.9	11.7	30.9	
600.0	49.5	33.6	31.6	16.2	13.2	14.7	-	58.3	8.8	30.1	
650.0	51.7	33.4	31.1	15.5	12.5	14.4	-	57.8	6.1	29.4	
750.0	56.0	32.2	30.2	14.3	11.3	14.0		56.9	0.9	28.2	

ENG SWEEP TO 750MHZ, values above 550 MHz are for internal reference only.

# ORDERING

Part Number	Product Description
UTP4-C6A-SOLID-HB2-CMP-WH-305	Category 6A Plenum, UTP 23 AWG White 305meter/ 1000FT Reel
UTP4-C6A-SOLID-HB2-CMP-BL-305	Category 6A Plenum, UTP 23 AWG Blue 305meter/ 1000FT Reel