

CAT6A U/UTP 23AWG 4 Pair Copper Lan Cable

Model No: HFR-6UTP

Application

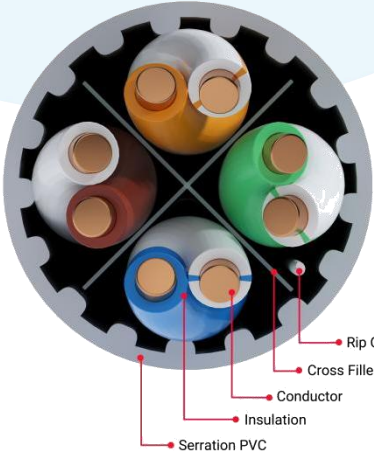
Especially suitable for all Class EA applications.
Gigabit Ethernet 1000 Base-T,10G Base-T.
High Speed Horizontal Cabling
Gigabit Ethernet

Standard Compliance

TIA /EIA-568-B.2 -1
ISO/IEC 11801
EN50173



Construction Characteristics ▼

Conductor	Material	BC	
	AWG	23	
	Diameter(±0.01mm)	0.57	
Insulation	Material	HD-PE	
	Average Thickness(mm)	0.22	
	Diameter(±0.01mm)	1.02	
	Min.Point Thickness(mm)	0.20	
Jacket	Material	PVC	
	Outer Diameter (±0.2mm)	7.60	
	Min Thickness (±0.1mm)	0.55	
	AVG.Thickness (mm)	0.60	
	Rip Cord	Nylon	
	Color	Blue RAL 5015	

Wire Color:

- A.Blue, White-Blue
- B.Orange, White-Orange
- C.Green, White-Green
- D.Brown, White-Brown

Physical & Electrical Properties

Impedance(ohms): 100 ± 15
Rated Temperature°C: 75
Delay Skew(ns/100m): <=45
DC Resistance 20°C: 9.8
Insulation Resistance: >5000MΩ*Km
Dielectric Strength: DC 2500V 2S



Pair-to-Ground Capacitance Unbalance (pF/100m): 3300
Max. Conductor DC Resistance 20°C (ohms/km): 68
Resistance Unbalance (%) : <=5

Mechanical Characteristics

Test Object: Jacket

Test Material: PVC

Before Tensile Strength (Mpa): >=13.8

Aging Elongation (%): >=100

Aging Condition (°Cxhrs): 100×168

After Tensile Strength (Mpa): >=85% of unaged

Aging Elongation (%): >=50% of unaged

Cold Bend(-20±2°Cx4hrs): No crack

Bending Radius: ≥ 4*OD (without load)

Temperature Range: -40°C ~ 75°C

during operation: -20°C-75°C

during installation: -0°C--60°C

Voltage Rating: 30V

Performance ▼

Frequency	Return loss	Attenuation	NEXT	PSNEXT	ELFEXT	PSELFEXT	Delay Max
(MHz)	(Min dB)	Max (dB/100m)	(Min dB)	Min (dB)	Min (dB/100m)	Min (dB/100m)	(ns/100m)
1	20.0	1.8	74.3	72.3	67.8	64.8	570.0
4	23.0	3.7	65.3	63.3	55.7	52.7	552.0
8	24.5	5.3	60	58.8	49.7	46.7	546.7
16	25.0	7.5	56.3	54.3	43.7	40.7	543.0
20	25.0	8.4	54.8	52.8	41.7	38.7	542.0
62.5	21.5	15.4	47.4	45.4	31.8	28.8	538.6
100	20.1	19.8	44.3	42.3	27.8	24.8	537.6
200	18	29.0	39.8	37.8	21.7	18.7	536.5
250	17.3	32.8	38.3	36.3	19.8	16.8	536.3
300	16.8	36.4	37.2	35.2	18.2	15.2	536.1
400	15.9	43.0	35.3	33.3	15.7	12.7	535.8
550	14.9	51.8	33.2	31.2	12.9	9.9	535.5

Packing ▼

-Wooden Reel 305 Meter

-Approx.Weight (KG): 17.5

-Approx. Dimension(CM): 35*35*26

Jacket Color ▼

RAL 5015	RAL 3020	RAL 1023
RAL 7036	RAL 1016	RAL 9017
RAL 6024	RAL 4005	RAL 9003





Cable ID: CAT6A UTP BLUE

Test Summary: PASS

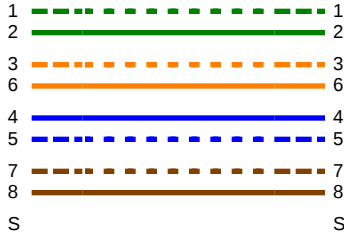
Date / Time: 04/15/2024 10:08:16am
Headroom: 5.6 dB (NEXT 36-78)
Test Limit: TIA Cat 6A Channel
Cable Type: Cat 6A U/UTP

Operator: NEC FIELDING
Software Version: 2.7800
Limits Version: 1.9500
NVP: 68.2%

Model: DTX-1800
Main S/N: 9463009
Remote S/N: 9463010
Main Adapter: DTX-CHA001
Remote Adapter: DTX-CHA001

Wire Map (T568A)

PASS



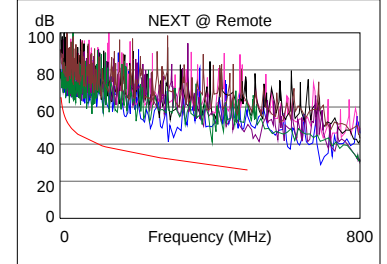
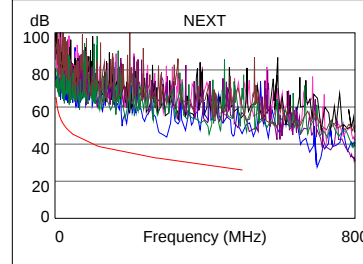
345 ft



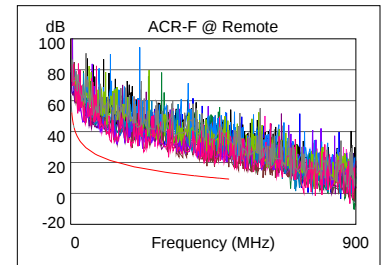
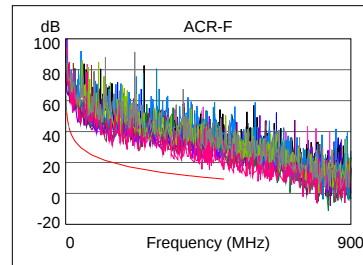
Length (ft), Limit 328	[Pair 78]	345
Prop. Delay (ns), Limit 555		546
Delay Skew (ns), Limit 50		32
Resistance (ohms)	[Pair 12]	16.9
Insertion Loss Margin (dB)	[Pair 45]	1.6
Frequency (MHz)	[Pair 45]	499.0
Limit (dB)	[Pair 45]	49.3



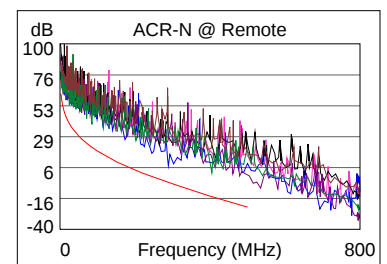
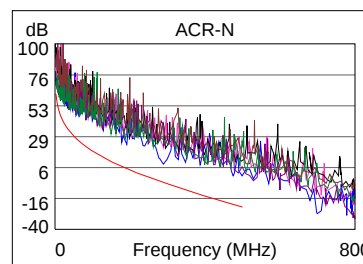
	Worst Case Margin		Worst Case Value	
PASS	MAIN	SR	MAIN	SR
Worst Pair	36-78	36-78	12-36	36-78
NEXT (dB)	5.6	7.6	7.9	12.4
Freq. (MHz)	3.0	2.6	293.0	406.0
Limit (dB)	65.0	65.0	31.9	28.6
Worst Pair	36	36	36	36
PS NEXT (dB)	6.2	7.1	10.7	14.8
Freq. (MHz)	3.0	2.9	293.0	405.0
Limit (dB)	62.0	62.0	28.9	25.6



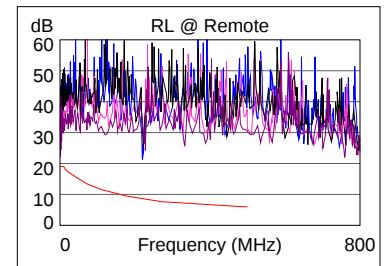
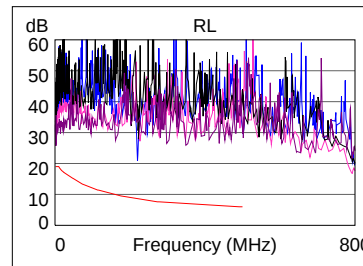
PASS	MAIN	SR	MAIN	SR
Worst Pair	78-36	36-78	78-36	36-78
ACR-F (dB)	4.7	6.3	5.7	7.2
Freq. (MHz)	420.0	420.0	493.0	493.0
Limit (dB)	10.8	10.8	9.4	9.4
Worst Pair	36	78	36	78
PS ACR-F (dB)	7.6	7.5	8.2	8.6
Freq. (MHz)	420.0	420.0	499.0	499.0
Limit (dB)	7.8	7.8	6.3	6.3



N/A	MAIN	SR	MAIN	SR
Worst Pair	36-78	36-78	36-45	36-45
ACR-N (dB)	6.3	8.4	19.7	22.1
Freq. (MHz)	3.0	2.6	494.0	491.0
Limit (dB)	61.4	61.6	-22.7	-22.5
Worst Pair	36	36	36	45
PS ACR-N (dB)	6.8	7.8	22.1	24.9
Freq. (MHz)	3.0	2.9	494.0	491.0
Limit (dB)	58.4	58.4	-25.6	-25.4



PASS	MAIN	SR	MAIN	SR
Worst Pair	78	78	12	12
RL (dB)	8.1	6.8	12.3	12.7
Freq. (MHz)	3.3	3.3	220.0	220.0
Limit (dB)	19.0	19.0	8.6	8.6



Compliant Network Standards:

10BASE-T
100BASE-T
ATM-51
TR-4

100BASE-T4
ATM-25
100VG-AnyLan
TR-16 Passive