

CAT5e Unshielded UTP Cable

24AWG · 4 Twisted Pairs · Solid Copper · U/UTP ·
200 MHz



Key Features

- ✓ Bandwidth tested up to 200MHz
- ✓ Suitable for gigabit speeds – up to 2.5Gbps
- ✓ Rohs/REACH complied PVC Jacket
- ✓ In compliance with ANSI/TIA 568.2-D
- ✓ Supports PoE and PoE+ (IEEE 802.3af/at) upto 30W and 300V DC
- ✓ Installation temperature: -30°C - +50°C

Technical Data

Category	U/UTP CAT5e – 4P-PVC			
Test Standard	ISO/IEC 11801, TIA-568			
Conductor	Material	Solid Bare copper		
	Nom. O.D (mm)	0.50 ± 0.005		
Insulation	Material	HDPE		
	Diameter	0.88 ± 0.03 mm		
Sheath	Thickness	0.50 ± 0.05 mm	Sheath Physical Properties	Before Aging: Tensile Strength (Mpa) ≥ 13.5 Elongation (%) ≥ 150
	External O.D.	5.0 ± 0.4 mm		Aging Period (°C x hrs): 100 °C x 24hrs x 7d
	Surface	Clean, Frap, Satiation		After Aging: Tensile Strength (Mpa) ≥ 12.5 Elongation (%) ≥ 125
	Material	PVC		Cold bend (20 ± 2 °C x4h) 8xcable O.D. No visible cracks
Surface Printing	Letter height	3.0 ± 0.3 mm	Electrical Characteristics (20 °C)	1.0 – 100.0MHz: Impedance (Ω) 100 ± 15
	Color	Black		1.0 – 100.0MHz: Delay Skew (ns/100m) ≤ 45
	Print Error & Space	≤ ±0.5%.1 mm		NVP: 69%
Core Color	1 White-Blue /Blue	2 White-Orange /Orange		Capacitance (nF/100m) max: 5.6
	3 White-Green /Green	4 White-Brown /Brown		DC Resistance (Ω/100m) max: 9.5
Packing	Carton			DC Conductor Resistance Unbalance (%) max: 5.0
Carton Dimension	35cm x 35cm x 20cm			
Packing Lenght	(305 ± 1.5)m			
Rip Cord	Yes			
Drain Wire	No			

Technical Performance (100m):

Frequency (MHz)	Return Loss \geq dB	Attenuation \leq dB	NEXT \geq dB	Phase Delay \leq ns
1	20.0	2.0	65.3	570.00
4	23.0	4.1	56.3	552.00
8	24.5	5.8	51.8	516.73
10	25.0	6.5	50.3	545.38
16	25.0	8.2	47.2	543.00
20	25.0	9.3	45.8	542.05
25	24.3	10.4	44.3	541.2
31.25	23.6	11.7	42.9	540.44
62.5	21.5	17.0	38.4	538.55
100	20.1	22.0	35.3	537.60
200	18.0	32.4	30.8	536.50

Frequency (MHz)	PSNEXT \geq dB	ELFEXT \geq dB	PSELFEXT \geq dB
1	62.3	63.8	60.8
4	53.3	51.8	48.8
8	48.8	45.7	42.7
10	47.3	43.8	40.8
16	44.4	39.7	36.7
20	42.8	37.8	34.8
25	41.3	35.8	32.8
31.25	39.9	33.9	30.9
62.5	35.4	27.9	24.9
100	32.3	23.8	20.8
200	27.8	17.7	14.7





Cable ID: CAT5E-STAND

Test Limit: TIA Cat 5e Perm. Link

Limits Version: 1.9500

Date / Time: 04/13/2021 09:15:28 AM

Operator: M.G.G

Headroom **6.5 dB (NEXT 1,2-7,8)**

Cable Type: Cat 5e F/UTP

NVP: 69.0%

Main: DTX CableAnalyzer

S/N: 8991028

Software Version: 2.7800

Calibration Date: 02/14/2017

Adapter: DTX-PLA002

S/N: MC4T52L

Remote: DTX CableAnalyzer

S/N: 8991027

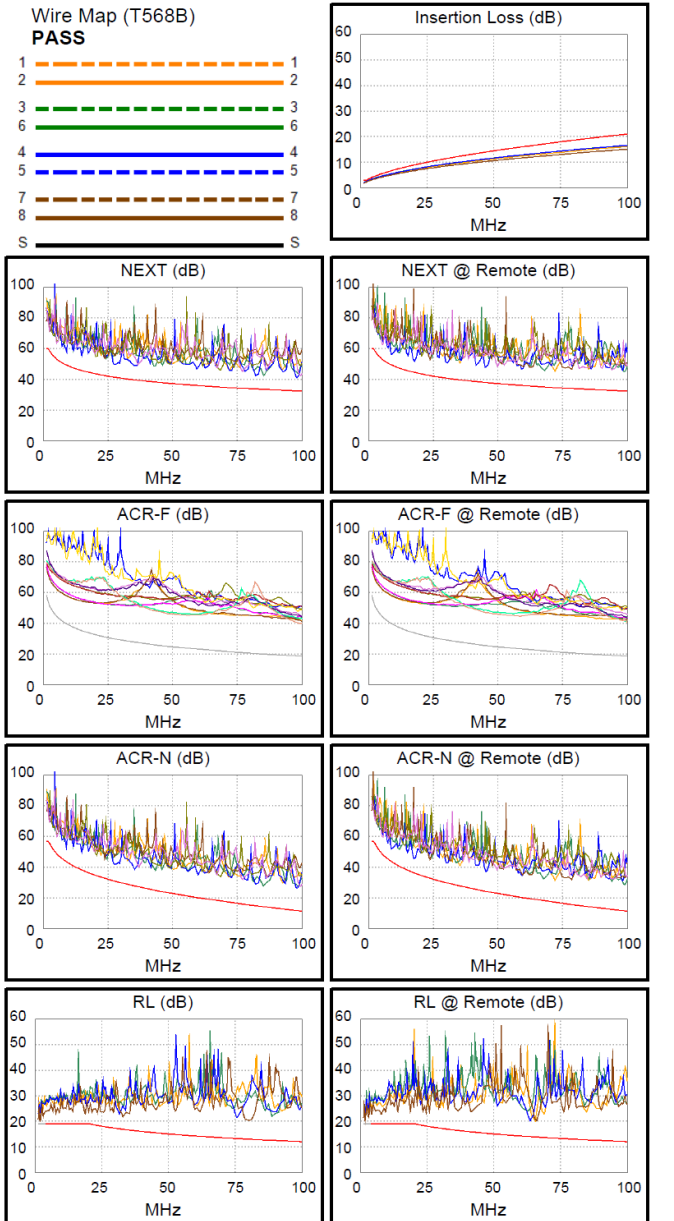
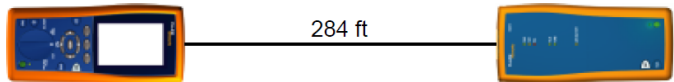
Software Version: 2.7800

Adapter: DTX-PLA002

S/N: MC4T50L

Test Summary: PASS

Length (ft), Limit 295	[Pair 7,8]	284
Prop. Delay (ns), Limit 498	[Pair 3,6]	444
Delay Skew (ns), Limit 44	[Pair 3,6]	25
Resistance (ohms)	[Pair 3,6]	15.9
Insertion Loss Margin (dB)	[Pair 3,6]	4.5
Frequency (MHz)	[Pair 3,6]	100.0
Limit (dB)	[Pair 3,6]	21.0



Worst Case Margin Worst Case Value

PASS	MAIN	SR	MAIN	SR
Worst Pair	1,2-7,8	1,2-7,8	1,2-7,8	1,2-4,5
NEXT (dB)	7.3	6.5	8.8	12.6
Freq. (MHz)	35.5	8.8	98.0	99.0
Limit (dB)	39.6	49.4	32.4	32.4
Worst Pair	7,8	1,2	1,2	1,2
PS NEXT (dB)	9.2	8.9	9.8	12.4
Freq. (MHz)	35.5	8.8	98.3	85.5
Limit (dB)	36.6	46.4	29.4	30.4

PASS	MAIN	SR	MAIN	SR
Worst Pair	1,2-3,6	1,2-3,6	7,8-4,5	1,2-3,6
ACR-F (dB)	17.7	17.5	21.2	22.5
Freq. (MHz)	4.4	4.4	99.3	99.8
Limit (dB)	45.8	45.8	18.7	18.6
Worst Pair	1,2	1,2	4,5	7,8
PS ACR-F (dB)	18.4	18.4	22.3	22.6
Freq. (MHz)	1.6	1.8	99.0	99.3
Limit (dB)	51.4	50.8	15.7	15.7

N/A	MAIN	SR	MAIN	SR
Worst Pair	1,2-7,8	1,2-7,8	1,2-7,8	1,2-4,5
ACR-N (dB)	9.5	8.0	14.6	17.0
Freq. (MHz)	8.6	8.8	98.0	99.0
Limit (dB)	43.8	43.6	11.7	11.5
Worst Pair	7,8	1,2	1,2	4,5
PS ACR-N (dB)	11.5	10.1	14.6	18.3
Freq. (MHz)	5.1	8.8	98.3	99.0
Limit (dB)	45.7	40.6	8.7	8.5

PASS	MAIN	SR	MAIN	SR
Worst Pair	7,8	7,8	7,8	1,2
RL (dB)	3.6	3.4	7.0	6.0
Freq. (MHz)	4.0	7.6	80.8	65.3
Limit (dB)	19.0	19.0	12.9	13.9

Compliant Network Standards:

10BASE-T	100BASE-TX	100BASE-T4
1000BASE-T	2.5GBASE-T	ATM-25
ATM-51	ATM-155	100VG-AnyLan
TR-4	TR-16 Active	TR-16 Passive

