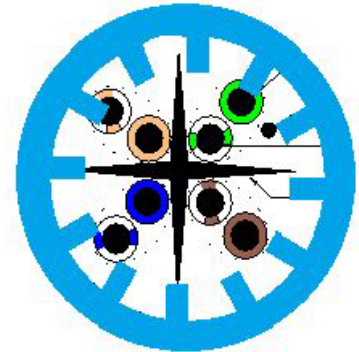


Category 6A UTP Cable

Part Number:PROCAT6A



Cat6A Network Cable

Antimagnetic interference improve transmission quality

Application

10G BASE-T Ethernet ATM CB1G 100 VG-AnyLAN	100BASE-TX Fast Ethernet 155/622 Mbps ATM 4/16 Mbps Token Ring	1000BASE-TX Gigabit Ethernet 100 Mbps TP-PMD	10 G BASE-TX Ethernet
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Standards

ANSI EIA/TIA 568 C.2;
ISO/IEC 11801 2nd Edition; IEC 61156-5
EN 50173; EN 50288-3-1
IEEE 802.3at
UL E488955
ETL

Flame resistance

IEC 60332-1
CMX
CM
CMR

Construction

Conductor	Bare copper wire (AWG23/1)
Insulation	Polyethylene, $\varnothing 1.06 \pm 0.02$ mm
Twisting	2 cores to the pair
Cable lay up	4 pairs to the core
Sheath CM	PVC Blue RAL 5015

Mechanical properties

Minimum bending radius	Installation	8 x D
Temperature range	Installed during operation	4 x D
	during installation	-20° C ~ + 60° C
		0° C ~ + 50° C



Electrical properties @ 20° C

Dielectric strength	2.5 KV dc-2 seconds
Conductor resistance	Max 7.00 ohm/100M at 20
Max. Ring resistance	16.8 Ohm/100M at 20
Max. Mutual capacitance	560 pf/100M
Max. Capacity unbalance	330 pf/100M
Mean characteristic impedance 100 MHz	100 ± 15 Ω
Nominal velocity of propagation	approx. 67 %
Propagation delay	Nominal 43.5 ns/100m
Delay skew	Nominal 18 ns/100m
Test voltage (DC, 1 min)	1000 V
Core/Core Coupling attenuation	≥ 40 dB

Nominal transmission characteristics @ 20° C

Frequency (MHZ)	Attenuation (dB/100m)	NEXT (dB)	PS-NEXT (dB)	ELFEXT (dB/100m)	PS-ELFEXT (dB/100m)	Return loss (dB)
1	2.1	75	72	67	65	20
4	3.8	66	63	55	53	23
10	5.9	60	57	47	45	25
16	7.5	57	54	43	41	25
20	8.4	56	53	41	39	25
31.2	10.5	53	50	37	35	24
62.5	15	48	45	31	29	22
100	19.1	45	42	27	25	20
125	21.5	44	41	25	23	19
155.5	24.1	43	40	23	21	19
175	25.7	42	39	22	20	18
200	27.6	41	38	21	19	18
250	31.1	38.3	36	19	17	17.3
500	45.3	33.8	31.8	13.8	11.8	17.3

Product Code Table

Product Description	Packing Length	Part Number
23AWG Cat.6A UTP 4P PVC UL CM Blue Color	1000ft Wooden Drum/Carton	PROCAT6A



Cable ID: PROCAT6A-HLX038[1]

Test Summary: PASS

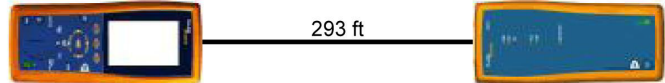
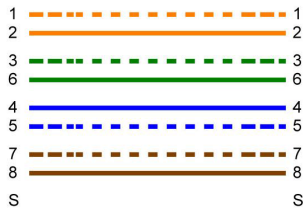
Date / Time: 07/07/2017 10:44:02am
 Headroom: 2.4 dB (NEXT 36-45)
 Test Limit: TIA Cat 6A Perm. Link
 Cable Type: Cat 6A UTP

Operator: Your Name
 Software Version: 2.7400
 Limits Version: 1.9300
 NVP: 69.0%

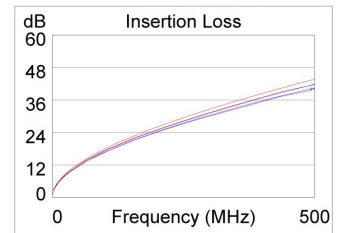
Model: DTX-1800
 Main S/N: 1739303
 Remote S/N: 1739304
 Main Adapter: DTX-PLA002
 Remote Adapter: DTX-PLA002

Wire Map (T568B)

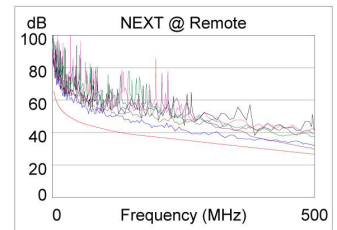
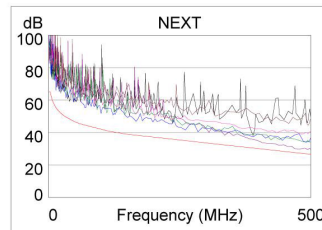
PASS



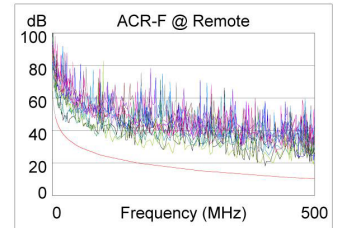
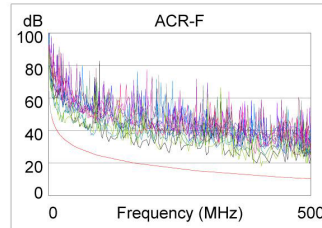
Length (ft), Limit 295	[Pair 78]	293
Prop. Delay (ns), Limit 498		453
Delay Skew (ns), Limit 44		22
Resistance (ohms)	[Pair 78]	12.4
Insertion Loss Margin (dB)	[Pair 36]	1.7
Frequency (MHz)	[Pair 36]	499.0
Limit (dB)	[Pair 36]	43.7



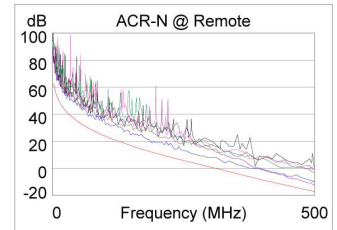
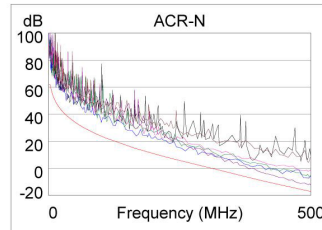
	Worst Case Margin		Worst Case Value	
	MAIN	SR	MAIN	SR
PASS				
Worst Pair	36-45	36-45	36-45	36-45
NEXT (dB)	2.4	3.0	2.4	3.0
Freq. (MHz)	481.0	500.0	481.0	500.0
Limit (dB)	27.2	26.7	27.2	26.7
Worst Pair	36	36	36	36
PS NEXT (dB)	3.3	3.3	3.4	3.3
Freq. (MHz)	483.0	500.0	492.0	500.0
Limit (dB)	24.3	23.8	24.0	23.8



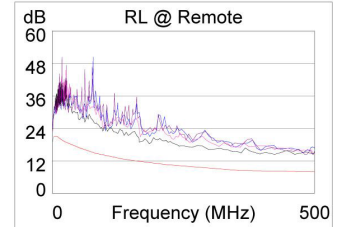
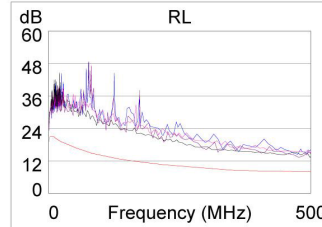
	Worst Case Margin		Worst Case Value	
	MAIN	SR	MAIN	SR
PASS				
Worst Pair	78-12	78-12	78-12	12-78
ACR-F (dB)	6.1	6.1	6.1	6.2
Freq. (MHz)	406.0	391.0	406.0	406.0
Limit (dB)	12.0	12.3	12.0	12.0
Worst Pair	12	78	12	78
PS ACR-F (dB)	9.0	8.9	9.0	8.9
Freq. (MHz)	406.0	406.0	406.0	406.0
Limit (dB)	9.0	9.0	9.0	9.0



	Worst Case Margin		Worst Case Value	
	MAIN	SR	MAIN	SR
N/A				
Worst Pair	36-45	36-45	36-45	36-45
ACR-N (dB)	4.2	4.8	4.7	4.8
Freq. (MHz)	469.0	498.0	500.0	500.0
Limit (dB)	-14.6	-16.9	-17.1	-17.1
Worst Pair	36	36	36	36
PS ACR-N (dB)	4.8	5.2	5.4	5.2
Freq. (MHz)	484.0	499.0	496.0	500.0
Limit (dB)	-18.7	-19.9	-19.7	-20.0



	Worst Case Margin		Worst Case Value	
	MAIN	SR	MAIN	SR
PASS				
Worst Pair	78	45	78	45
RL (dB)	5.1	6.1	5.1	6.1
Freq. (MHz)	475.0	459.0	475.0	459.0
Limit (dB)	8.0	8.0	8.0	8.0



Compliant Network Standards:

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