

Category 6 UTP Cable

Part Number: PROCAT6PLUS



Application

Voice, Data, Security and Video Applications.
IP Megapixel CCTV/Analog Installations
Wire Access Points
Gigabit Video/data installations
Long distance PoE feeding
250MHz Broadband Video Voice, T1, ISDN

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
CM

Construction

Conductor	Bare copper wire (AWG23/1)
Insulation	Polyethylene, $\varnothing 1.02 \pm 0.02$ 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	4 x D
	during operation	-20 °C ~ + 60 °C
	during installation	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°C
Max. Ring resistance	16.8 Ohm/100M at 20°C
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 535 ns/100m
Delay skew	Nominal 20 ns/100m
Test voltage (DC, 1 min)	1000 V
Core/Core Coupling attenuation	≥ 40 dB

Nominal transmission characteristics @ 20°C

Frequency (Mhz)	Impedance (Ω)	RL (dB)	ATT (dB/100)	NEXT (dB)	PS.NEXT (dB)	ELFEXT (dB)	PS-ELFEXT (dB)
0.772	100±15	19.44	1.84	76	74	70	67
1	100±15	20	2.04	74.3	72.3	67.8	64.8
4	100±15	23.01	3.81	65.3	63.3	55.8	52.8
10	100±15	25	5.99	59.3	57.3	47.8	44.8
16	100±15	25	7.6	56.2	54.2	43.7	40.7
20	100±15	25	8.52	54.8	52.8	41.8	38.8
25	100±15	24.32	9.57	53.3	51.3	39.8	36.8
31.25	100±15	23.64	10.74	51.9	49.9	37.9	34.9
62.3	100±15	21.54	15.48	47.4	45.4	31.9	28.9
100	100±15	20.1	19.92	44.3	42.3	27.8	24.8
125	100±22	19.42	22.49	42.8	40.8	25.9	22.9
200	100±22	18	29.15	39.8	37.8	21.8	18.8
250	100±32	17.32	33.04	38.3	36.3	19.8	16.8
300	-	-	36.10	41.0	38.0	32.0	30.0
400	-	-	41.70	39.0	36.0	30.0	28.0

Product Code Table

Product Description	Packing Length	Part Number
23AWG Cat.6 UTP 4P PVC UL CM White Color	1000ft easy pull box	PROCAT6PLUSW
23AWG Cat.6 UTP 4P PVC UL CM Blue Color	1000ft easy pull box	PROCAT6PLUS
23AWG Cat.6 UTP 4P PVC UL CM Orange Color	1000ft easy pull box	PROCAT6PLUSN/1000
23AWG Cat.6 UTP 4P PVC UL CM Gold Color	1000ft easy pull box	PROCAT6PLUSD/1000
23AWG Cat.6 UTP 4P PVC UL CM White Color	500ft easy pull box	PROCAT6PLUSW/500
23AWG Cat.6 UTP 4P PVC UL CM Blue Color	500ft easy pull box	PROCAT6PLUS/500
23AWG Cat.6 UTP 4P PVC UL CM White Color	100mts box	PROCAT6PLUSW/100M
23AWG Cat.6 UTP 4P PVC UL CM Blue Color	100mts box	PROCAT6PLUS/100M
23AWG Cat.6 UTP 4P PVC UL CM White Color	1000mts drum	PROCAT6PLUSW/1000M
23AWG Cat.6 UTP 4P PVC UL CM Blue Color	1000mts drum	PROCAT6PLUS/1000M

© SYSCOM, All Rights Reserved

All sizes and values without tolerances are reference values. Specifications are for product as supplied by Syscom: any modification or alteration afterwards of product may give different result.

The information contained within this document must not be copied, reprinted or reproduced in any form, either wholly or in part, without the written consent of Syscom. The information is believed to be correct at the time of issue. Syscom reserves the right to amend this specification without prior notice. This specification is not contractually valid unless specifically authorised by Syscom.



Cable ID: PROCAT6PLUS/500-EHLX003[1

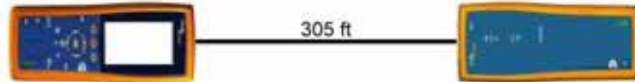
Test Summary: PASS

Date / Time: 04/20/2017 08:59:18am
 Headroom: 6.6 dB (NEXT 12-78)
 Test Limit: TIA Cat 6 Perm. Link
 Cable Type: Cat 6 UTP

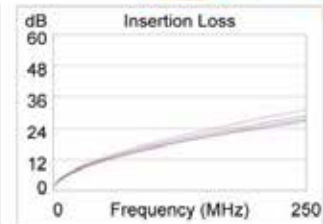
Operator: Your Name
 Software Version: 2.7400
 Limits Version: 1.9300
 NVP: 69.0%

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

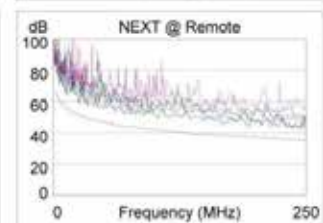
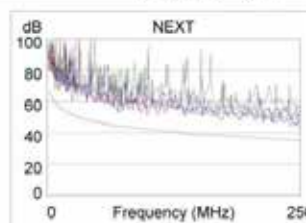
Wire Map (T568B)
PASS



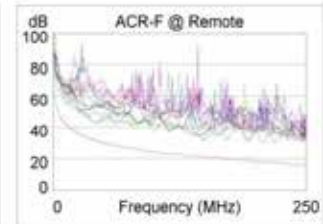
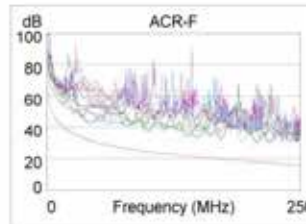
Length (ft), Limit 295	[Pair 78]	305
Prop. Delay (ns), Limit 498		470
Delay Skew (ns), Limit 44		20
Resistance (ohms)	[Pair 78]	13.0
Insertion Loss Margin (dB)	[Pair 45]	2.4
Frequency (MHz)	[Pair 45]	250.0
Limit (dB)	[Pair 45]	31.1



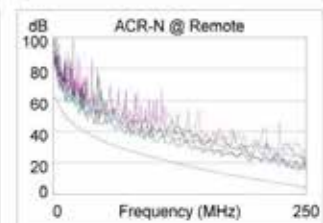
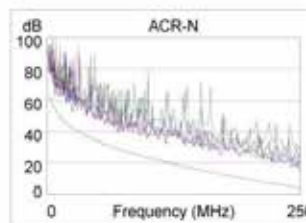
	Worst Case Margin		Worst Case Value	
	MAIN	SR	MAIN	SR
PASS				
Worst Pair	12-36	12-78	12-36	12-78
NEXT (dB)	6.8	6.6	6.8	6.6
Freq. (MHz)	250.0	250.0	250.0	250.0
Limit (dB)	35.3	35.3	35.3	35.3
Worst Pair	12	12	12	12
PS NEXT (dB)	8.1	7.0	8.1	7.0
Freq. (MHz)	250.0	243.5	250.0	243.5
Limit (dB)	32.7	32.9	32.7	32.9



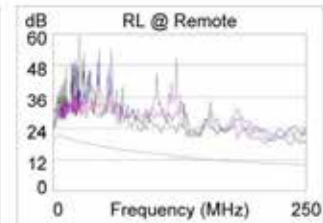
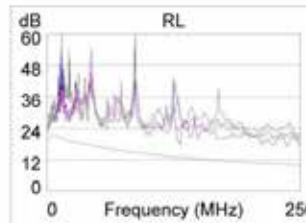
	Worst Case Margin		Worst Case Value	
	MAIN	SR	MAIN	SR
PASS				
Worst Pair	36-45	45-36	12-78	78-12
ACR-F (dB)	10.8	11.2	13.1	12.6
Freq. (MHz)	41.3	41.3	222.0	222.0
Limit (dB)	31.9	31.9	17.3	17.3
Worst Pair	45	36	36	12
PS ACR-F (dB)	13.7	13.4	15.9	14.3
Freq. (MHz)	41.3	41.3	245.5	245.5
Limit (dB)	28.9	28.9	13.4	13.4



	Worst Case Margin		Worst Case Value	
	MAIN	SR	MAIN	SR
N/A				
Worst Pair	12-78	12-78	12-36	12-36
ACR-N (dB)	8.3	8.1	10.1	10.1
Freq. (MHz)	8.4	26.3	250.0	241.0
Limit (dB)	54.0	42.1	4.2	5.1
Worst Pair	12	12	36	36
PS ACR-N (dB)	9.9	9.5	11.4	11.0
Freq. (MHz)	8.4	41.0	250.0	245.0
Limit (dB)	51.6	34.1	1.6	2.1



	Worst Case Margin		Worst Case Value	
	MAIN	SR	MAIN	SR
PASS				
Worst Pair	78	78	45	45
RL (dB)	4.6	5.3	6.5	6.9
Freq. (MHz)	6.5	8.8	237.5	235.0
Limit (dB)	21.0	21.0	10.2	10.3



Compliant Network Standards:
 10BASE-T 100BASE-TX 100BASE-T4
 1000BASE-T ATM-25 ATM-51
 ATM-155 100VG-AnyLan TR-4
 TR-16 Active TR-16 Passive