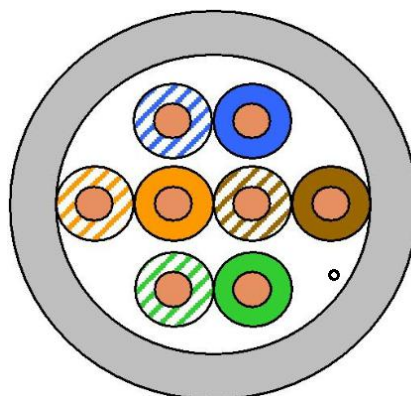


## Category 5e UTP Cable

Part Number:PROCAT5E



## Application

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

## Standards

ANSI EIA/TIA 568 C.2;  
ISO/IEC 11801 2<sup>nd</sup> 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 (AWG24/1)
Insulation	Polyethylene, $\varnothing 0.91 \pm 0.02$ mm
Twisting	2 cores to the pair
Cable lay up	4 pairs to the core
Sheath CM	PVC Grey RAL 7046

## 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 9.38 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

Fre. (MHz)	Attenuation (dB/100m)	NEXT (dB)	PS-NEXT (dB)	ACR (dB/100m)	PS-ACR (dB/100m)	ACRF (dB/100m)	PS-ACRF (dB/100m)	Return loss (dB)
1	1,9	71	68	69,1	66,1	68	65	20
4	3,7	62	59	58,3	55,3	56	53	23
10	6	56	53	50	47,0	48	45	25
16	7,6	53	50	45,4	42,4	44	41	25
20	8,5	51	48	42,5	39,5	42	39	25
31,2	10,7	49	46	38,3	35,3	38	35	24
62,5	15,7	44	41	28,3	25,3	32	29	22
100	19,8	41	38	21,2	18,2	28	25	20
125	22,3	40	37	17,7	14,7	26	23	19
155,5	24,2	38	35	13,8	10,8	24	21	-
175	25,7	37	34	11,3	8,3	23	20	-
200	27,5	36	33	8,5	5,5	22	19	-
250	29,2	35	32	5,8	2,8	20	17	-
300	32,0	34	31	2,0	-1,0	16	13	-

## Product Code Table

Product Description	Packing Length	Part Number
24AWG Cat.5e UTP 4P PVC UL CM White Color	1000ft easy pull box	PROCAT5EW
24AWG Cat.5e UTP 4P PVC UL CM Grey Color	1000ft easy pull box	PROCAT5E
24AWG Cat.5e UTP 4P PVC UL CM Orange Color	1000ft easy pull box	PROCAT5EN/1000
24AWG Cat.5e UTP 4P PVC UL CM Gold Color	1000ft easy pull box	PROCAT5ED/1000
24AWG Cat.5e UTP 4P PVC UL CM White Color	500ft easy pull box	PROCAT5EW/500
24AWG Cat.5e UTP 4P PVC UL CM Grey Color	500ft easy pull box	PROCAT5E/500
24AWG Cat.5e UTP 4P PVC UL CM White Color	100mts box	PROCAT5EW/100M
24AWG Cat.5e UTP 4P PVC UL CM Grey Color	100mts box	PROCAT5E/100M
24AWG Cat.5e UTP 4P PVC UL CM White Color	1000mts drum	PROCAT5EW/1000M
24AWG Cat.5e UTP 4P PVC UL CM Grey Color	1000mts drum	PROCAT5E/1000M

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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.

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## Cable ID: PROCAT5E-HLX028[1]

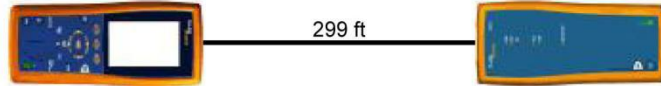
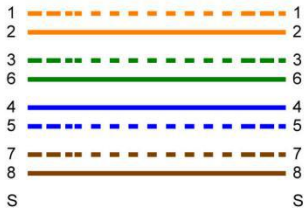
## Test Summary: PASS

Date / Time: 09/08/2016 10:27:54am  
 Headroom: 10.7 dB (NEXT 12-45)  
 Test Limit: TIA Cat 5e Perm. Link  
 Cable Type: Cat 5e UTP

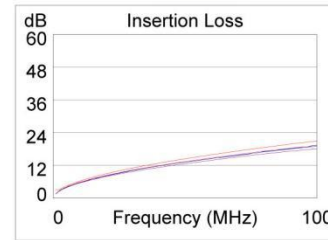
Operator: Your Name  
 Software Version: 2.7400  
 Limits Version: 1.9300  
 NVP: 69.0%

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

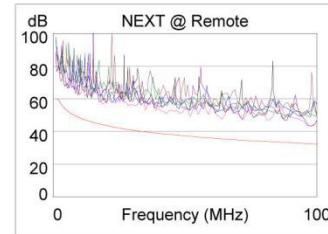
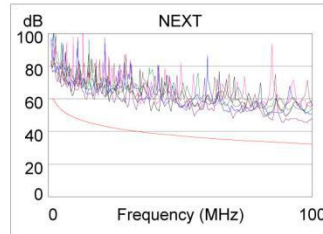
Wire Map (T568B)  
**PASS**



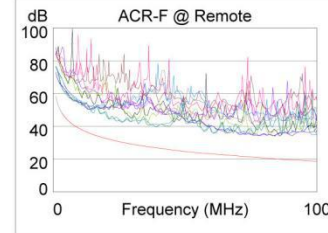
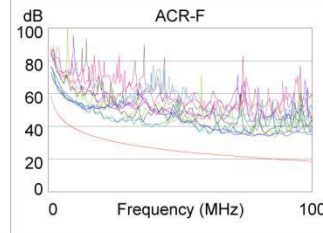
Length (ft), Limit 295	[Pair 78]	299
Prop. Delay (ns), Limit 498		459
Delay Skew (ns), Limit 44		18
Resistance (ohms)	[Pair 78]	15.9
Insertion Loss Margin (dB)	[Pair 36]	1.6
Frequency (MHz)	[Pair 36]	100.0
Limit (dB)	[Pair 36]	21.0



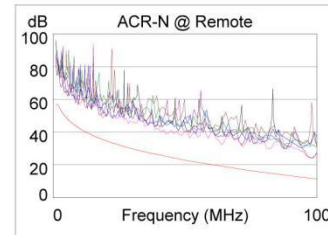
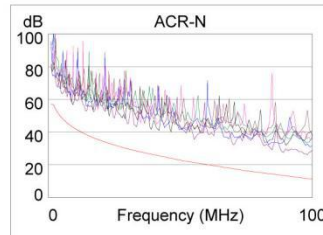
	Worst Case Margin		Worst Case Value	
	MAIN	SR	MAIN	SR
<b>PASS</b>				
Worst Pair	36-45	12-45	36-45	12-45
<b>NEXT (dB)</b>	12.2	10.7	12.2	10.7
Freq. (MHz)	88.8	97.8	88.8	97.8
Limit (dB)	33.2	32.5	33.2	32.5
Worst Pair	36	45	36	45
<b>PS NEXT (dB)</b>	14.1	10.8	14.3	10.8
Freq. (MHz)	88.8	97.0	98.0	97.0
Limit (dB)	30.2	29.5	29.4	29.5



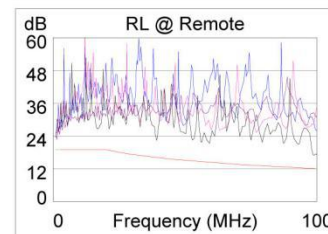
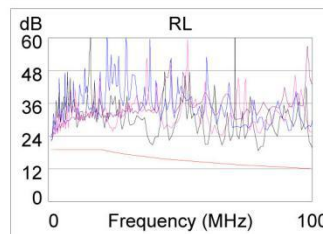
	Worst Case Margin		Worst Case Value	
	MAIN	SR	MAIN	SR
<b>PASS</b>				
Worst Pair	45-36	45-36	78-12	12-78
<b>ACR-F (dB)</b>	12.0	11.9	13.2	14.0
Freq. (MHz)	23.9	25.9	86.0	86.0
Limit (dB)	31.1	30.4	19.9	19.9
Worst Pair	36	12	12	12
<b>PS ACR-F (dB)</b>	13.1	14.0	14.4	14.0
Freq. (MHz)	65.8	76.3	86.3	76.8
Limit (dB)	19.3	18.0	16.9	17.9



	Worst Case Margin		Worst Case Value	
	MAIN	SR	MAIN	SR
<b>N/A</b>				
Worst Pair	12-78	12-45	36-45	12-45
<b>ACR-N (dB)</b>	13.2	12.4	14.5	12.4
Freq. (MHz)	9.0	97.8	98.0	97.8
Limit (dB)	43.3	11.7	11.7	11.7
Worst Pair	36	45	36	45
<b>PS ACR-N (dB)</b>	14.8	12.5	15.9	12.5
Freq. (MHz)	14.3	97.0	98.0	97.8
Limit (dB)	35.6	8.9	8.7	8.7



	Worst Case Margin		Worst Case Value	
	MAIN	SR	MAIN	SR
<b>PASS</b>				
Worst Pair	45	45	45	45
<b>RL (dB)</b>	3.5	4.8	5.3	4.8
Freq. (MHz)	39.0	98.8	79.8	98.8
Limit (dB)	16.1	12.1	13.0	12.1



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