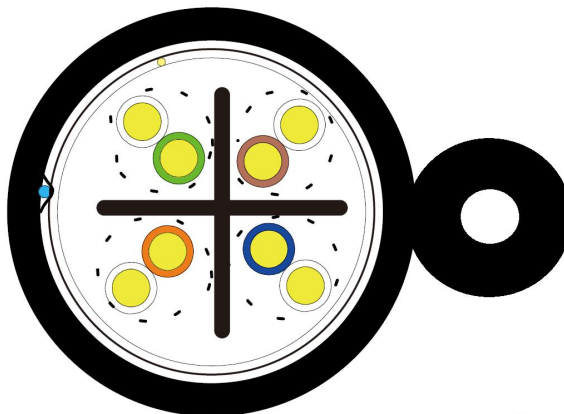


Category 6 FTP Cable (Shielded) for Outdoor Use With Messenger

Model Number:PROCAT6AIR



Application

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

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 - E472815

UV Resistance Rating

EN 50289-4-17

Construction

Conductor	Bare copper wire (AWG23/1)
Insulation	Polyethylene, $\varnothing 1.04\pm 0.02$ mm
Twisting	2 cores to the pair
Cable lay up	4 pairs to the core, with cross separator
Shield	Aluminum Foil, 24AWG Bare Copper Drain Wire
Filling	PE Tap Compound to prevent moisture migration.
Outer Sheath	Black LDPE UV Resistant
Messenger	Galvanized Steel Wire

Mechanical properties

Minimum bending radius	Installation	10 x D
	Installed	5 x D
Temperature range	during operation	-40°C ~ + 70°C
	during installation	-20°C ~ + 50°C

Electrical properties @ 20°C

Dielectric strength	2.5 KV dc-2 seconds
Conductor resistance	Max 8.20 ohm/100M at 20°C
Max. Ring resistance	16.8 Ohm/100M at 20°C
Max. Mutual capacitance	56 pF/M
Max. Capacity unbalance	330 pF/100M
Mean characteristic impedance	100 ± 15 Ω between 1Mhz to 100Mhz
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

Freq. (Mhz)	ATT (dB/100m)		RL (dB)		NEXT (dB/100m)		PS.NEXT (dB/100m)		ELFEXT (dB/100m)		PS-ELFEXT (dB/100m)	
	TIA(1)	Linkedpro	TIA(1)	Linkedpro	TIA(1)	Linkedpro	TIA(1)	Linkedpro	TIA(1)	Linkedpro	TIA(1)	Linkedpro
1	2.03	1.64	20.00	30.10	74.30	84.00	72.30	79.68	67.80	68.40	64.8	66.57
4	3.78	3.34	23.01	32.60	65.27	74.30	63.27	68.40	55.76	63.44	52.76	62.26
10	5.95	5.40	25.00	34.53	59.30	71.94	57.30	64.43	47.80	58.01	44.80	50.00
16	7.55	7.45	25.00	35.92	56.24	69.88	54.24	62.48	43.72	52.07	40.72	49.65
20	8.47	8.15	25.00	30.35	54.78	65.21	52.78	58.46	41.78	49.24	38.78	40.73
25	9.51	9.00	24.32	28.74	53.33	62.44	51.33	57.44	39.84	45.69	36.84	42.20
31.25	10.67	9.98	23.64	29.88	51.88	61.08	49.88	57.31	37.90	42.09	34.90	38.50
62.5	15.38	14.69	21.54	26.84	47.36	57.90	45.36	56.11	31.88	39.50	28.88	38.93
100	19.80	18.98	20.11	25.53	44.30	52.87	42.30	55.97	27.80	30.81	24.80	30.09
125	22.36	22.00	19.43	20.85	42.85	51.23	40.85	55.40	25.86	28.12	22.86	27.14
200	28.98	28.50	18.00	19.08	39.78	49.07	37.78	47.41	21.78	27.34	18.78	25.90
250	32.85	32.65	17.32	18.29	38.33	49.81	36.33	47.18	19.84	23.67	16.84	23.48
300	-	34.32	-	17.43	-	48.65	-	46.42	-	23.24	-	22.06
350	-	35.78	-	23.84	-	46.17	-	44.93	-	19.69	-	18.78

*Frequency above 250Mhz are for information only, values may vary without prior notice.

Product Code Table

Product Description	Packing Length	Part Number
23AWG Cat.6 FTP Shielded Black LDPE Black With Messenger	1000ft Wooden Reel	PROCAT6AIR



Cable ID: PROCAT6AIR-HLX073[1]

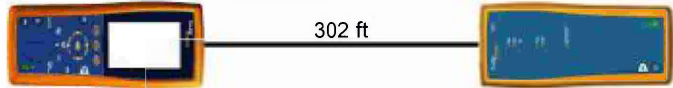
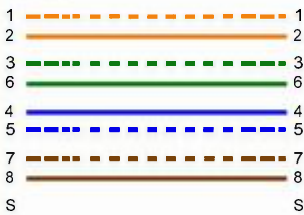
Test Summary: PASS

Date / Time: 03/09/2020 09:38:32am
 Headroom: 3.3 dB (NEXT 36-78)
 Test Limit: TIA Cat 6 Perm. Link
 Cable Type: Cat 6 FTP

Operator: Your Name
 Software Version: 2.7400
 Limits Version: 1.9300
 NVP: 70.0%

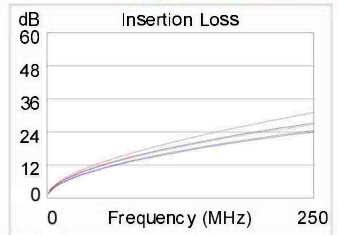
Model: DTX-1800
 Main S/N: 1739303
 Remote S/N: 1739304
 Main Adapter: DTX-PLA002
 Remote Adapter: DTX-PLA002

Wire Map (T568B) PASS

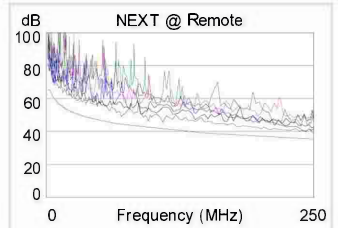
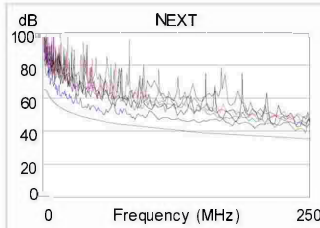


Length (ft), Limit 295	[Pair 12]	302
Prop. Delay (ns), Limit 498		477
Delay Skew (ns), Limit 44		38
Resistance (ohms)	[Pair 78]	12.3

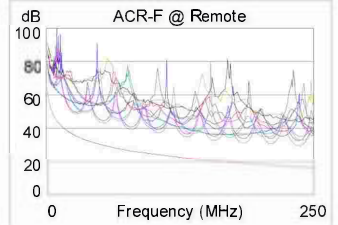
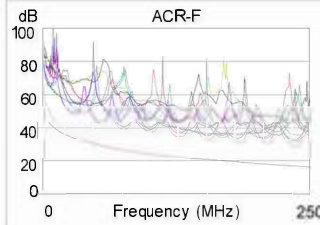
Insertion Loss Margin (dB)	[Pair 45]	3.9
Frequency (MHz)	[Pair 45]	250.0
Limit (dB)	[Pair 45]	31.1



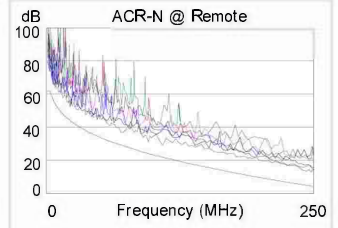
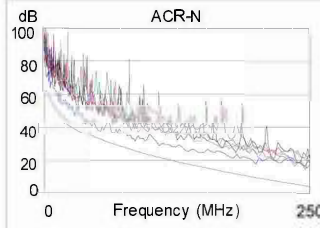
	Worst Case Margin		Worst Case Value	
	MAIN	SR	MAIN	SR
PASS				
Worst Pair	36-78	45-78	36-78	45-78
NEXT (dB)	3.3	3.6	3.3	3.6
Freq. (MHz)	245.5	249.5	245.5	249.5
Limit (dB)	35.5	35.4	35.5	35.4
Worst Pair	36	45	36	45
PS NEXT (dB)	3.7	3.8	3.7	3.9
Freq. (MHz)	245.5	241.0	245.5	249.0
Limit (dB)	32.8	33.0	32.8	32.7



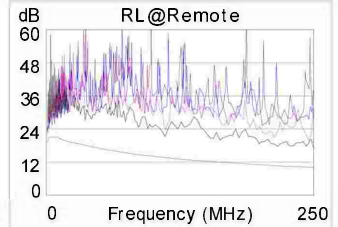
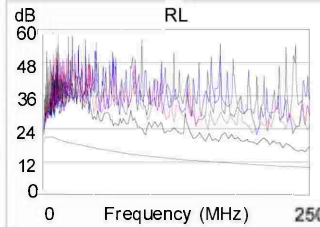
	Worst Case Margin		Worst Case Value	
	MAIN	SR	MAIN	SR
PASS				
Worst Pair	12-45	12-45	12-45	12-45
ACR-F (dB)	12.0	12.0	12.5	12.6
Freq. (MHz)	182.5	182.5	235.5	235.5
Limit (dB)	19.0	19.0	16.7	16.7
Worst Pair	45	45	45	12
PS ACR-F (dB)	12.8	13.5	13.8	15.3
Freq. (MHz)	132.0	1.6	235.5	235.5
Limit (dB)	18.8	57.0	13.7	13.7



	Worst Case Margin		Worst Case Value	
	MAIN	SR	MAIN	SR
NA				
Worst Pair	12-36	12-36	36-78	36-45
ACR-N (dB)	5.3	6.4	9.8	8.7
Freq. (MHz)	43.5	7.1	245.5	247.5
Limit (dB)	35.8	55.5	4.7	4.5
Worst Pair	36	45	36	45
PS ACR-N (dB)	7.4	7.5	7.9	7.7
Freq. (MHz)	43.5	241.0	245.5	249.0
Limit (dB)	33.4	2.5	2.1	1.7



	Worst Case Margin		Worst Case Value	
	MAIN	SR	MAIN	SR
PASS				
Worst Pair	45	78	45	45
RL (dB)	5.3	4.2	5.3	6.7
Freq. (MHz)	244.5	4.5	244.5	216.5
Limit (dB)	10.1	21.0	10.1	10.6



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

LinkWare Version 6.2

