



4Pairs Cat5e FTP Cable Specification

AX2X0.50		DATE Oct 10 2014																																																	
Cross Section		Performance																																																	
		Electrical Characteristics: <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Frequency (MHz)</th> <th>Return loss (Min dB)</th> <th>Attenuation (Max dB/100m)</th> <th>NEXT (Min dB)</th> </tr> </thead> <tbody> <tr><td>0.772</td><td>19.4</td><td>1.8</td><td>67.0</td></tr> <tr><td>1</td><td>20.0</td><td>2.0</td><td>65.3</td></tr> <tr><td>4</td><td>23.0</td><td>4.1</td><td>56.3</td></tr> <tr><td>8</td><td>24.5</td><td>5.8</td><td>51.8</td></tr> <tr><td>10</td><td>25.0</td><td>6.5</td><td>50.3</td></tr> <tr><td>16</td><td>25.0</td><td>8.2</td><td>47.3</td></tr> <tr><td>20</td><td>25.0</td><td>9.3</td><td>45.8</td></tr> <tr><td>25</td><td>24.3</td><td>10.4</td><td>44.3</td></tr> <tr><td>31.25</td><td>23.6</td><td>11.7</td><td>42.9</td></tr> <tr><td>62.5</td><td>21.5</td><td>17.0</td><td>38.4</td></tr> <tr><td>100</td><td>20.1</td><td>22.0</td><td>35.3</td></tr> </tbody> </table>		Frequency (MHz)	Return loss (Min dB)	Attenuation (Max dB/100m)	NEXT (Min dB)	0.772	19.4	1.8	67.0	1	20.0	2.0	65.3	4	23.0	4.1	56.3	8	24.5	5.8	51.8	10	25.0	6.5	50.3	16	25.0	8.2	47.3	20	25.0	9.3	45.8	25	24.3	10.4	44.3	31.25	23.6	11.7	42.9	62.5	21.5	17.0	38.4	100	20.1	22.0	35.3
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Marking		Frequency PSNEXT ELFEXT PSELFEXT Delay																																																	
Description		(MHz) Min (dB) lin (dB/100m) in (dB/100m) max (ns/100m)																																																	
Rated Temperature (°C)	75	0.772	64.0	66.0	63.0	575.0																																													
Product Standard Certification		1	62.3	63.8	60.8	570.0																																													
Application		4	53.3	51.7	48.7	552.0																																													
Horizontal Wiring in LAN		8	48.8	45.7	42.7	546.7																																													
Reference Standard		10	47.3	43.8	40.8	545.4																																													
UL Subject 444,EIA/TIA568 & ISO/IEC 11801		16	44.3	39.7	36.7	543.0																																													
Construction		20	42.8	37.7	34.7	542.0																																													
Conductor	20% Copper	25	41.3	35.8	32.8	541.2																																													
AWG	24	31.25	39.9	33.9	30.9	540.4																																													
Conductor Dia. (mm)	0.5	62.5	35.4	27.8	24.8	538.6																																													
Insulation	PE	100	32.3	23.8	20.8	537.6																																													
Average Thickness(mm)	0.228	1.0-100.0MHz Impedance (ohms) 100 ± 15 1.0-100.0MHz Delay Skew (ns/100m) ≤45 Pair-to-Ground Capacitance Unbalance (pF/100m) ≤330 Max. Conductor DC Resistance 20°C (ohms/km) 93.8 Resistance Unbalance (%) ≤5																																																	
Min. Point Thickness(mm)	0.205																																																		
Insulation Dia.(±0.01mm)	0.97																																																		
Twisted Pair Dia.(±0.02mm)	1.94																																																		
PE-Tape(mm)	Yes																																																		
Drain wire Dia.(±0.003mm)	0.4CCS																																																		
Al Foil Shield(mm)	Yes																																																		
PE-Tape(mm)	Yes																																																		
Assembly Dia.(±0.2mm)	4.95																																																		
Jacket	LLDPE																																																		
Average Thickness(mm)	0.60																																																		
Min. Point Thickness(mm)	0.54																																																		
Outer Dia.(±0.2mm)	6.15																																																		
Rip Cord	Per request																																																		
Color		Mechanical Characteristics:																																																	
Insulation colors are:		Test Object Jacket																																																	
Blue,White/Blue		Test Material PVC																																																	
Orange,White/Orange		Before	Tensile Strength (Mpa)	≥13.8																																															
Green,White/Green		Aging	Elongation (%)	≥100																																															
Brown,White/Brown		Aging Condition (°Cxhrs)		100x168																																															
Jacket colors:		After	Tensile Strength (Mpa)	≥85% of unaged																																															
Per request		Aging	Elongation (%)	≥50% of unaged																																															
Marking		Cold Bend(-20±2°Cx4hrs) No crack																																																	
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