



# Structured Cable Products®

Quality Installations Deserve Quality Products

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**SCP PART#: CAT6-P-GY**

Rev03/20

CAT6 PLENUM- ENHANCED 550 MHz SOLID BC 4PR UTP, ANSI/TIA 568.2-D, ISO/IEC 11801 CLASS E, UL CMP FT6, JKT- GRAY - 1000 FT/305M REEL IN BOX

Sheath Printing	STRUCTURED CABLE PRODUCTS P/N CAT6-P - CAT6 ENHANCED 550 MHz UTP VERIFIED TO ANSI/TIA 568.2-D E198134 -Z (UL) CMP 4PR 23AWG 75C---EU RoHS EC **** FEET MM/YY																																																																																																																																											
Category	U/UTP CAT6-4P-CMP PVC																																																																																																																																											
Test Standard	ISO/IEC11801 ANSI/TIA 568.-D YD/T1019																																																																																																																																											
Conductor	Material	SOLID-Bare Copper																																																																																																																																										
	Nom.O.D.(mm)	0.565				up	+0.005																																																																																																																																					
			down	-0.005																																																																																																																																								
Insulation	Material	FEP																																																																																																																																										
	Diameter	1.00±0.04mm																																																																																																																																										
Sheath	Thickness	0.45±0.05mm			<b>Technical Performance (100m):</b> <table border="1"> <thead> <tr> <th>Frequency (MHz)</th> <th>RL ≥dB</th> <th>ATT ≤dB</th> <th>NEXT ≥dB</th> <th>DELAY ≤ns</th> </tr> </thead> <tbody> <tr><td>1</td><td>20.0</td><td>2.1</td><td>74.3</td><td>570.0</td></tr> <tr><td>4.0</td><td>23.0</td><td>3.8</td><td>65.3</td><td>552.0</td></tr> <tr><td>8.0</td><td>24.5</td><td>5.3</td><td>60.8</td><td>546.7</td></tr> <tr><td>10.0</td><td>25.0</td><td>5.9</td><td>59.3</td><td>545.4</td></tr> <tr><td>16.0</td><td>25.0</td><td>7.5</td><td>56.2</td><td>543.0</td></tr> <tr><td>20.0</td><td>25.0</td><td>8.4</td><td>54.8</td><td>542.1</td></tr> <tr><td>25.0</td><td>24.3</td><td>9.4</td><td>53.3</td><td>541.2</td></tr> <tr><td>31.25</td><td>23.6</td><td>10.5</td><td>51.9</td><td>540.4</td></tr> <tr><td>62.5</td><td>21.5</td><td>15.0</td><td>47.4</td><td>538.6</td></tr> <tr><td>100</td><td>20.1</td><td>19.1</td><td>44.3</td><td>537.6</td></tr> <tr><td>200</td><td>18.0</td><td>27.6</td><td>39.8</td><td>536.5</td></tr> <tr><td>250</td><td>17.3</td><td>31.1</td><td>38.3</td><td>536.3</td></tr> <tr><td>*350</td><td>16.3</td><td>39.79</td><td>36.1</td><td>535.92</td></tr> <tr><td>*550</td><td>12.6</td><td>61.7</td><td>33.2</td><td>535.5</td></tr> </tbody> </table> <table border="1"> <thead> <tr> <th>Frequency (MHz)</th> <th>PSNEXT ≥dB</th> <th>ELFEXT ≥dB</th> <th>PSELFEXT ≥dB</th> </tr> </thead> <tbody> <tr><td>1</td><td>72.3</td><td>67.8</td><td>64.8</td></tr> <tr><td>4</td><td>63.3</td><td>55.8</td><td>52.8</td></tr> <tr><td>8</td><td>48.8</td><td>49.7</td><td>46.7</td></tr> <tr><td>10</td><td>57.3</td><td>47.8</td><td>44.8</td></tr> <tr><td>16</td><td>54.2</td><td>43.7</td><td>40.7</td></tr> <tr><td>20</td><td>52.8</td><td>41.8</td><td>38.8</td></tr> <tr><td>25</td><td>51.3</td><td>39.8</td><td>36.8</td></tr> <tr><td>31.25</td><td>49.9</td><td>37.9</td><td>34.9</td></tr> <tr><td>62.5</td><td>45.4</td><td>31.9</td><td>28.9</td></tr> <tr><td>100</td><td>42.3</td><td>27.8</td><td>24.8</td></tr> <tr><td>200</td><td>37.8</td><td>21.8</td><td>18.8</td></tr> <tr><td>250</td><td>36.3</td><td>19.8</td><td>16.8</td></tr> <tr><td>*350</td><td>34.1</td><td>16.9</td><td>13.9</td></tr> <tr><td>*550</td><td>31.2</td><td>13.2</td><td>10.1</td></tr> </tbody> </table>	Frequency (MHz)	RL ≥dB	ATT ≤dB	NEXT ≥dB	DELAY ≤ns	1	20.0	2.1	74.3	570.0	4.0	23.0	3.8	65.3	552.0	8.0	24.5	5.3	60.8	546.7	10.0	25.0	5.9	59.3	545.4	16.0	25.0	7.5	56.2	543.0	20.0	25.0	8.4	54.8	542.1	25.0	24.3	9.4	53.3	541.2	31.25	23.6	10.5	51.9	540.4	62.5	21.5	15.0	47.4	538.6	100	20.1	19.1	44.3	537.6	200	18.0	27.6	39.8	536.5	250	17.3	31.1	38.3	536.3	*350	16.3	39.79	36.1	535.92	*550	12.6	61.7	33.2	535.5	Frequency (MHz)	PSNEXT ≥dB	ELFEXT ≥dB	PSELFEXT ≥dB	1	72.3	67.8	64.8	4	63.3	55.8	52.8	8	48.8	49.7	46.7	10	57.3	47.8	44.8	16	54.2	43.7	40.7	20	52.8	41.8	38.8	25	51.3	39.8	36.8	31.25	49.9	37.9	34.9	62.5	45.4	31.9	28.9	100	42.3	27.8	24.8	200	37.8	21.8	18.8	250	36.3	19.8	16.8	*350	34.1	16.9	13.9	*550	31.2	13.2	10.1
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	Surface	Clean,Frap,Satiation																																																																																																																																										
	Material	CMP PVC(complies RoHS)																																																																																																																																										
	Color	According to the requires																																																																																																																																										
Surface Printing	Letter height	3.0±0.3mm																																																																																																																																										
	Color	Black																																																																																																																																										
	Print error & Space	≤±0.5%, 1m																																																																																																																																										
Core Color	1 White/Blue	2 White/Orange																																																																																																																																										
	3 White /Green	4 White/Brown																																																																																																																																										
Packing	Box 305m, 36 boxes each pallet																																																																																																																																											
Weight :	N.W 13.30KGS/ G.W16.60KGS																																																																																																																																											
Packing length	305±1.5m																																																																																																																																											
Rip-cord	Yes	Drain wire	No																																																																																																																																									
	Before Aging Tensile Strength (Mpa)		≥13.5																																																																																																																																									
Sheath Physical Properties	Elongation(%)		≥150																																																																																																																																									
	Aging Period (°C x hrs)	100°C x 24h x 7d																																																																																																																																										
	After Aging Tensile Strength(Mpa)		≥12.5																																																																																																																																									
	Elongation(%)		≥125																																																																																																																																									
	Cold bend(-20±2°C×4h) 8×Cable O.D , No visible cracks																																																																																																																																											
	Electrical Characteristics (20 °C)	1.0-250.0MHz Impedance (Ω)	100±15																																																																																																																																									
1.0-250.0MHz Delay Skew (ns/100m)		≤45																																																																																																																																										
Velocity of Propagation (%) (NVP)		72																																																																																																																																										
DC Resistance (Ω/100m) max		9.5																																																																																																																																										
DC Conductor Resistance Unbalance (%) max		5.0																																																																																																																																										

Note: 1. Remarks: \* are the reference values