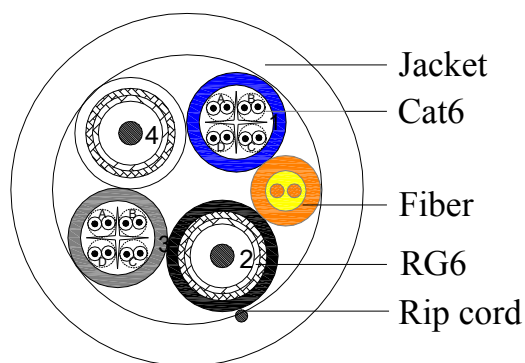


PRODUCT SPECIFICATIONS

PART#: HNC-12		DESCRIPTION: 2x CAT6 550 MHz 23 AWG UTP + 2x RG6/U QUAD SHIELD COAX BC + 2x 62.5/125 OM1 MULTI MODE FIBER- (BUNDLED) - PVC JKT- 500 FT SPOOL- BLUE			
Edition	A	Established Date	2012/12/14	Rev Date	02/27/2014
Approval	Richard	Checked	John	Finish	Simon



**Standard:**

UL 444 , ANSI/TIA-568-C.2 & ISO/IEC 11801

**Application:**

Bundle Cable(2CAT6+2RG6+1FIBER)

**Construction Characters:**

<b>Conductor(CAT6)</b>	Material	Solid Bare Copper
	Size	23AWG X 4P
	Construction	1/0.57±0.005mm
<b>Insulation</b>	Material	HDPE
	Min. Thickness	0.200mm
	AVG. Thickness	0.220mm
	Diameter	1.01±0.01mm
	Colors	Blue-White/Blue Orange-White/Orange Green-White/Green Brown-White/Brown
<b>Filler</b>	Filler	PVC
<b>Jacket</b>	Material	PVC
	AVG. Thickness	0.60mm
	Min. Thickness	0.54mm
	Diameter	6.20±0.10mm
	Colors	Grey & Blue
	Rip Cord	Nylon
<b>Conductor(RG6)</b>	Material	Solid Bare Copper
	Size	18AWG X 1C
	Construction	1/1.02±0.01mm

<b>Insulation</b>	Material	FPE
	Min. Thickness	1.60mm
	AVG. Thickness	1.79mm
	Diameter	4.60±0.10mm

	Colors	Natural
<b>Shield</b>	Bonded AL-Foil	Yes
	Braiding-1(0.12±0.004AL Wire)	Coverage>60%
	Double AL-Foil	Yes
	Braiding-2(0.12±0.004AL Wire)	Coverage>40%
<b>Jacket</b>	Material	PVC
	AVG. Thickness	0.84mm
	Min. Thickness	0.75mm
	Diameter	7.40±0.10mm
	Colors	Black & White
<b>Conductor(Fiber)</b>	2 Cores	Ultra Pure Silica Glass
	Core Dia.	62.5±3µm
	Clad Dia.	125±2µm
	Cladding Non-Circularity (%)	<2.0
	Core/Clad Concentricity Error	<=3.0µm
<b>Insulation</b>	Primary Coating Material	UV Curable Acrylate
	Primary Coating Dia.	245±5µm
	Secondary Buffer Material	PVC
	Secondary Buffer Dia.	0.90±0.05mm
	Colors	Blue & White
<b>Filler</b>	Strength Member	Aramid Yarn
<b>Jacket</b>	Material	PVC
	AVG. Thickness	0.70mm
	Min. Thickness	0.63mm
	Diameter	3.50±0.10mm
	Colors	Orange
<b>Assembly</b>	2RG6/U+2CAT6+1FIBER	17.30±0.20mm
<b>Jacket</b>	Material	PVC
	AVG. Thickness	0.75mm
	Min. Thickness	0.70mm
	Diameter	18.80±0.20mm
	Colors	Per request
	Rip Cord	Nylon

### Electrical & Physical Characters(CAT6)

rating	75°C 30V		
Conductor Resistance	Max 72.2ohm/km at 20°C		
Dielectric Strength	Min AC1.5KV		
Spark Test	5.0KV		
AC Leakage Current Through overall Jacket	AC 1500V ≤10mA		
insulation	Unaged	Tensile Strength	16.5 Mpa
		Elongation	500%
	Aged	Tensile Strength	14.2 Mpa(100°C 168h)
		Elongation	250%(100°C 168h)
Jacket	Unaged	Tensile Strength	13.8 Mpa
		Elongation	150%
	Aged	Tensile Strength	11.7 Mpa(100°C 168h)
		Elongation	80%(100°C 168h)
Cold Bend Test	-20°C 4hours No Cracking		

DC Resistance Unbalance	Max 5%
Pair-to-Ground Capacitance Unbalance	Max 3300pF/km
Characteristic Impedance	1~500MHZ 100±15OHM
Propagation Delay	500MHZ Max 536ns/100m
Delay Skew	1~500MHZ Max 40ns/100m

**Marking:**

STRUCTURED CABLE PRODUCTS --- P/N CAT6 --- CAT6E ENHANCED 550 MHz 4 PR 23 AWG UTP  
 VERIFIED TO ANSI/TIA-568-C.2 CMR FT4 75C -- (UL) OR C(UL) E198134 CE EU RoHS EC ZONE/DEVICE  
 A B C D E 0 1 2 3 4 5 6 7 8 9 XXXXFEET

**Performance**

ITEM	Attention Max (dB/100m)	NEXT Min (dB)	PS NEXT Min (dB)	RL Min (dB)	ELFEXT Min (dB)	PS ELFEXT Min (dB)	ACR Min (dB)
1	2.1	74.3	72.3	20.0	67.8	64.8	72.2
4	3.8	65.3	63.3	23.0	55.8	52.8	61.5
8	5.3	60.8	58.8	24.5	49.7	46.7	55.5
10	5.9	59.3	57.3	25.0	47.8	44.8	53.4
16	7.5	56.2	54.2	25.0	43.7	40.7	48.7
20	8.4	54.8	52.8	25.0	41.8	38.8	46.4
25	9.4	53.3	51.3	24.3	39.8	36.8	43.9
31.25	10.5	51.9	49.9	23.6	37.9	34.9	41.4
62.5	15.0	47.4	45.4	21.5	31.9	28.9	32.4
100	19.1	44.3	42.3	20.1	27.8	24.8	25.2
200	27.6	39.8	37.8	18.0	21.8	18.8	12.2
250	31.1	38.3	36.3	17.3	19.8	16.8	7.2
300	34.3	37.1	35.1	16.8	18.3	15.3	2.8
400	40.1	35.3	33.3	15.9	15.8	12.8	---
500	45.3	33.8	31.8	15.2	13.8	10.8	---

**Electrical & Physical Characters(RG6)**

rating	75°C 30V		
Conductor Resistance	Max 22.2ohm/km at 20°C		
Dielectric Strength	Min AC2.0KV		
Spark Test	5.0KV		
Jacket	Unaged	Tensile Strength	13.8 Mpa
		Elongation	150%
	Aged	Tensile Strength	11.7 Mpa(100°C 168h)
		Elongation	80%(100°C 168h)
Cold Bend Test	-20°C 4hours No Cracking		

**Marking:**

STRUCTURED CABLE PRODUCTS --- P/N RG6/UQ --- RG6/U QUAD SHIELD 3.0GHz COAXIAL CABLE 18  
 AWG BC CMR FT4 75C -- (UL) OR C(UL) E198134 CE EU RoHS EC ZONE/DEVICE A B C D E 0 1  
 2 3 4 5 6 7 8 9 xxxxFEET

**Performance**

ITEM	Attention Max (dB/100m)
Frequency	
10	2.62

50	4.26
100	5.41
200	10.16
400	13.51
700	20.59
1000	21.25
1200	21.64
1500	30.49
2000	32.00
2200	32.10
2500	33.21
3000	47.90

### Electrical & Physical Characters(FIBER)

Max. Attenuation (dB/km)		<=3.5(At 850nm Wavelength)	
		<=1.5(At 1300nm Wavelength)	
Min. Modal Bandwidth (MHz.km)		>=200 (At 850nm Wavelength)	
		>=500 (At 1300nm Wavelength)	
Jacket	Unaged	Tensile Strength	13.8 Mpa
		Elongation	150%
	Aged	Tensile Strength	11.7 Mpa(100°C 168h)
		Elongation	80%(100°C 168h)
Cold Bend Test		-20°C 4hours No Cracking	
<b>Marking:</b> STRUCTURED CABLE PRODUCTS --- P/N FBR-2MM-OM1 --- OFNR DUPLEX MULTIMODE OPTICAL CABLE 62.5/125 OM1 FT4 75C -- (UL) OR C(UL) E198134 CE EU RoHS EC ZONE/DEVICE A B C D E 0 1 2 3 4 5 6 7 8 9 xxxxFEET			

<b>Marking:</b> STRUCTURED CABLE PRODUCTS --- P/N HNC-12 --- 2x CAT6 ENHANCED 550 MHz 23AWG UTP + 2x RG6/U QUAD SHIELD 18 AWG SWEEP TESTED 3.0GHz HDTV + 2x 62.5 / 125 OM1 MM FIBER CMR FT4 75C -- (UL) OR c(UL) E198134 CE EU RoHS EC ZONE/DEVICE A B C D E 0 1 2 3 4 5 6 7 8 9 XXXXFEET			
<b>Packaging:</b>			
Approx. Weight(kg)	Approx. Dimension(mm)	package	Packages per Pallet
48.65	560X380X270X15	500 ft/Spool	12/8