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PowerMAX+ Cat.6A U/UTP 23AWG CMP Plenum Cable

DINTEK PowerMAX+™ CAT.6A CMP Plenum rated U/UTP is a quality cable which is manufactured to be installed in Plenum spaces and to minimize alien cross talk and increase performance.

While not a problem at the lower frequencies of Cat 5e and Cat 6 cabling, the higher frequency signals of CAT.6A makes Alien Cross Talk the limiting noise source for these systems. DINTEK cables are designed to minimize this crosstalk.

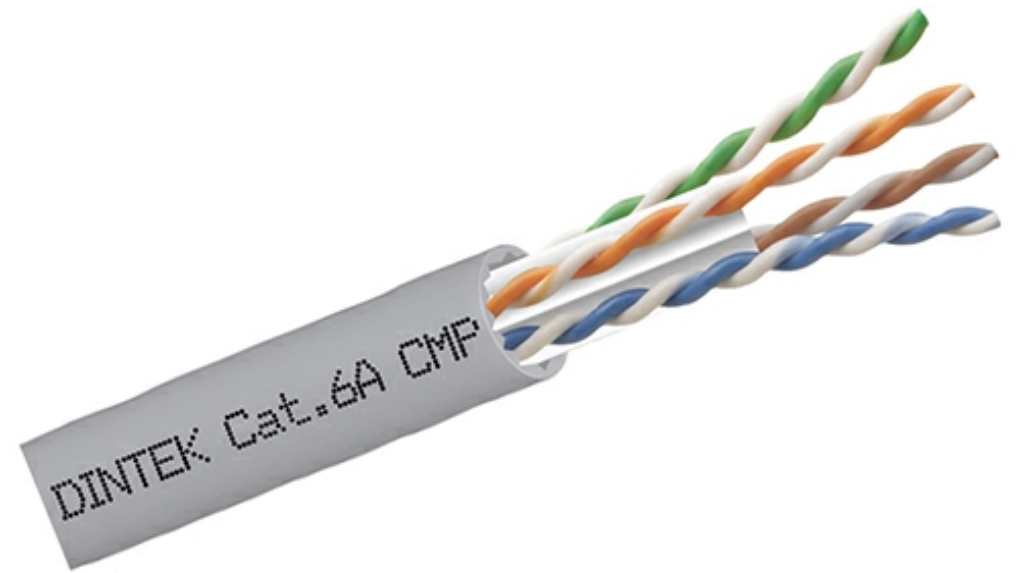
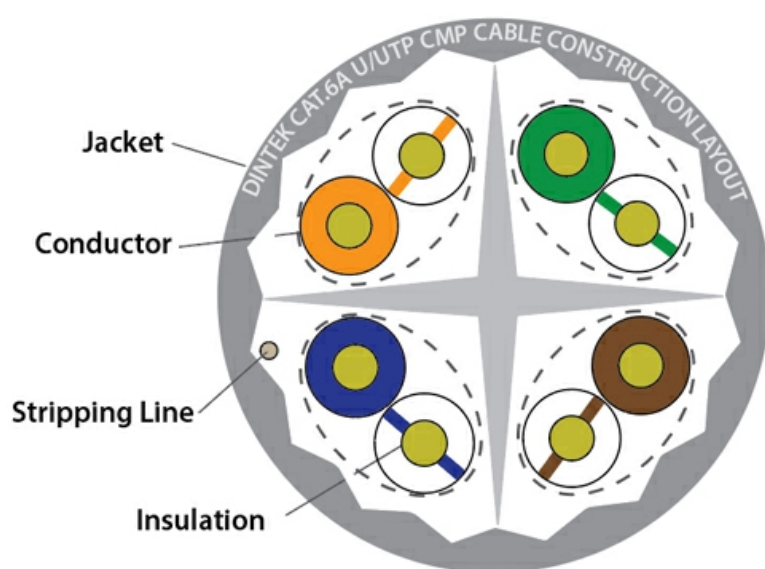
Applications

- 10GBASE-T Ethernet
- 100BASE-TX Fast Ethernet
- 1000BASE-TX Gigabit Ethernet
- 1000BASE-T Gigabit Ethernet
- 10BASE-TX Ethernet
- ATM CB1G
- 155/622 Mbps ATM
- 100 Mbps TP-PMD
- 100VG-AnyLAN

Standards Conformance

- ISO/IEC61156-5 2nd edition
- All Category 6A Requirements as Per ANSI/TIA, and UL Standards.
- ANSI/TIA-568-C.2 Cat.6A
- UL444
- Complies with RoHS and REACH Directives.

Independently Verified Certifications



Performance Statistics

Frequency Mhz	Insertion Loss dB / 100mtrs	NEXT (dB)	PSNEXT (dB) min
1	2.1 *	74.3 *	72.3 *
10	5.9 *	59.3 *	57.3 *
100	19.1 *	44.3 *	42.3 *
200	27.6 *	39.8 *	37.8 *
250	31.1 *	38.3 *	36.3 *
300	34.3 *	37.1 *	35.1 *
400	40.1 *	35.3 *	33.3 *
500	45.3 *	33.8 *	31.8 *

The asterisked (*) value are for information only. The minimum Next coupling loss for any pair combination at room temperature is to be greater than the value determined using the formula: $NEXT \geq 31 - 50 \log_{10}(f \text{ MHz}/330) \text{ dB}$

Ordering Information

Product Number	Product Name	Jacket Type	Color	Length Qty
1101-06001	PowerMAX+ Cat.6A U/UTP 23AWG CMP Plenum Cable	CMP	Gray	1000 ft / Reel

Technical Specifications

Construction		
Conductor		
Material	Pure Annealed Copper	
Wire Size	23AWG	
Insulation		
Material	FEP	
Thickness	Nominal: 0.223 mm	
Diameter	Nominal: 1.028 mm	
Colors	Blue/White-Blue Orange/White-Orange Green/White-Green Brown/White-Brown	
Unaged Elongation (%)	Min. 200%	
Unaged Tensile Strength	Min. 1.754 Kgf/mm ²	
Central Element	FRPE	
Jacket		
Material	Flame Retardant PVC	
Thickness	Nominal: 0.65mm	
Diameter	Nominal: 7.5 mm	
Color	Gray Standard - Assorted upon request	
Physical Ranges		
Insulation		
Min. Tension Strength	Before Aging	Min. 1.754 Kgf/mm ²
	After Aging	75% (at 100°C for 168hrs)
Min Elongation (%)	Before Aging	300% at (100°C x 168hrs)
	After Aging	75% (at 100°C for 168hrs)
Jacket		
Min. Tension Strength	Before Aging	Min. 1.407 Kgf/mm ²
	After Aging	85% (100°C X 168hrs)
Min Elongation (%)	Before Aging	Min. 100%
	After Aging	50% (100°C X 168hrs)
Dielectric Strength	2500 V dc / 2 seconds	
Min. Bending Radius	30mm	
Max. Pulling Tension	8-10kg (25lbs)	
Installation Temperature	-10°C to +60°C	
Operating Temperature	-10°C to +60°C	
Electrical		
Conductor Resistance	Max. 9.38 Ω/100m at 20°C	
DC Resistance Unbalance	2% max	
Pair-to-Ground Capacitance Unbalance	Max. 160 pF/100m	
Dielectric Strength of Insulation	2500 V dc / 2 seconds	
Insulation Resistance Test	Min. 5000 MΩ/m	
Mutual Capacitance	Max. 5600 pF/100m	
Impedance 1~100MHz	100Ω ± 15%	
Impedance 101~500MHz	100Ω ± 22%	

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