DATA SHEET

1101-04501

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PowerMAX Cat.6 U/UTP 23AWG CMP Plenum Gray

The DINTEK PowerMAX™ Plenum Rated Category 6 cable is guaranteed to exceed ClassE channel specifications as set down in International standards. Our PowerMAX™ solution comprises Cat.6 **component** compliant patch panels, keystones and patch cords. When combined with DINTEK's Category 6 Plenum Rated 23AWG UTP cable, an end-to-end channel exists that maximizes data throughput and provides headroom for all future technologies operating beyond one Gigabit.

Applications

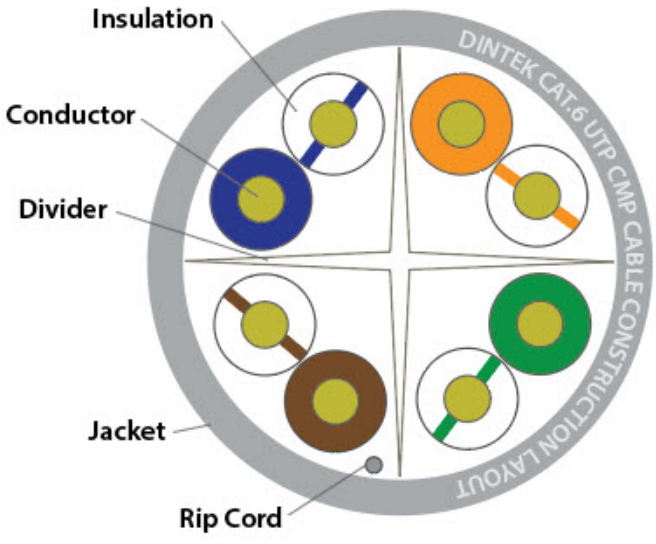
- Voice; ISDN
- 100BASE-T Ethernet (IEEE802.3)
- 155/622Mbps 1.2/2.4 Gbps ATM
- 1000Mbps Gigabit Ethernet
- 550MHz Broadband Video

Standards Conformance

- ISO/IEC11801 2nd edition CLASS E
- ANSI/TIA-568-2.D standard
- CENELEC EN 50173-1,CENELEC
- Flame Retardancy is verified according to NFPA 262.
- UL listed type CMP for Plenum.
- Complies with RoHS-6 and REACH Directives.

Independently Verified Certifications

- Verified to ANSI/TIA-568-2.D Category 6



Cable Features

- Conductor size is set at 23AWG.
- Exceeds current ANSI/TIA and ISO Standards for performance.
- Capable of handling the latest ver. of power over Ethernet 802.3bt
- UL listed type CMP for Plenum.

Performance Statistics

Frequency Mhz	Insertion Loss dB / 100mtrs	NEXT (dB)	PSNEXT (dB)
1 Mhz	1.9*	65.0*	62.0*
4 Mhz	3.5*	64.1*	61.8*
10 Mhz	5.5*	57.8*	55.5*
16 Mhz	7.0*	54.6*	52.2*
20 Mhz	7.9*	53.1*	50.7*
31.25 Mhz	10.0*	50.0*	47.5*
62.5 Mhz	14.4*	45.1*	42.7*
100 Mhz	18.6*	41.8*	49.3*
200 Mhz	27.4*	36.9*	34.3*
250 Mhz	31.1*	35.3*	32.7*

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(f MHZ)≧ NEXT(0.772)-15LOG10(f MHZ/0.772)dB

Ordering Information

Product Number	Product Name	Jacket Type	Color	Length Qty
1101-04501	PowerMAX Cat.6 U/UTP 23AWG CMP Plenum Gray	CMP	Gray	305m/Box

Technical Specifications

Construction		
Conductor		
Material		Bare Copper
Wire Size		23 AWG
Insulation		
Material		FEP
Thickness		Nominal: 0.228 mm
Diameter		Nominal: 1.021 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/mm²
Jacket		
Material		Flame Retardant PVC
Thickness		0.5 mm
Diameter		6.0 mm
Color		Gray (Other assorted upon request)
		CMP - Plenum
Physical Ranges		
Insulation		
Min. Tension Strength		
	Before Aging	Min. 1.754 Kgf/mm²
Min Elongation (%)		
	Before Aging	200%
Jacket		
Min. Tension Strength		
	Before Aging	Min. 1.407 Kgf/mm²
	After Aging	Retention 85% after aging (100°C X 168hrs)
Min Elongation (%)		
	Before Aging	Min. 100%
	After Aging	50% after aging (100°C X 168hrs)
Min. Bending Radius		25mm
Max. Pulling Tension		25 lbs
Installation Temperature		0°C to +50°C
Operating Temperature		-20°C to +70°C
Electrical		
Conductor Resistance		Max. 9.38 Ω/100m at 20 °C
DC Resistance Unbalance		Max. 2%
Pair-to-Ground Capacitance Unbalance		Max. 160 pF/100m
Dielectric Strength of Insulation		2500 V dc / 2 seconds
Insulation Resistance Test		Min. 5000 MΩ·Km
Mutual Capacitance		Max. 5600 pF/100m
Impedance 1~100MHz		100Ω ± 15%
Impedance 100~250MHz		100Ω ± 22%

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