

DATA SHEET

1101-04441

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PowerMAX500 Cat.6 U/UTP 23AWG PVC Cable - Gray

The DINTEK PowerMAX500™ Category 6 solution is guaranteed to exceed Class E channel specifications as set down in International standards. Our PowerMAX500™ solution comprises Category 6 component compliant patch panels, keystone and patch cords. When combined with DINTEK's Category 6 UTP cable, an end-to-end channel exists that maximises 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

- ACMA Approved to AS/CA S008
- ISO/IEC11801 2nd edition CLASS E
- ANSI/TIA-568-2.D standard
- CENELEC EN 50173-1, CENELEC
- PoE++ & 4PPoE - IEEE 802.3bt level 3 & 4
- Flame Rated: CM

Independently Verified Certifications

- ETL Verified to ANSI/TIA-568-2.D Category 6
- ACMA Approved to AS/CA S008

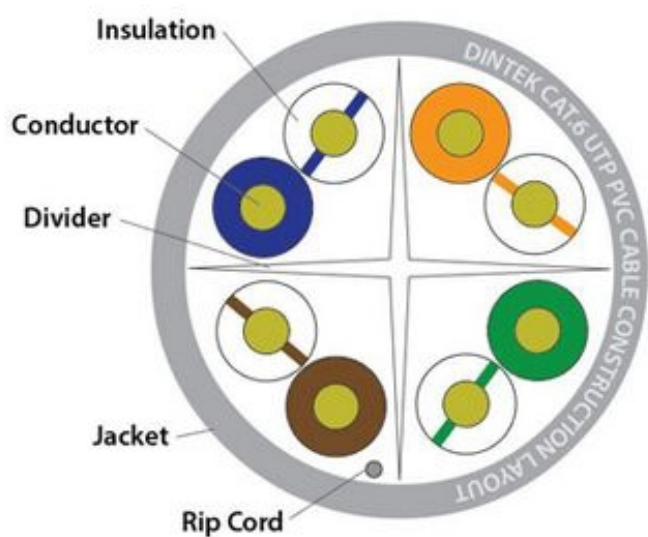


Cable Features

- Conductor sizes for Cat.6 are set at 23AWG.
- By keeping the gauge size of the conductor larger, there is less heat generation caused and less drop of voltage over distance.
- Capable of handling the latest ver. of power over Ethernet
- Cable has been tested over 500Mhz and has shown performance testing results allowing 10Gbit Ethernet transmission up to a length of 70mtrs

Performance Statistics

Frequency Mhz	Insertion Loss dB / 100mtrs	NEXT (dB)	Return Loss (dB)
1	1.8	78.0	37.8
4	3.0	76.0	36.5
10	5.2	70.0	31.0
16	6.8	68.0	31.0
20	7.6	64.0	31.0
31.25	9.3	62.5	30.0
62.5	13.2	60.0	30.0
100	18.1	57.0	29.0
200	26.1	52.5	27.0
250	28.9	50.0	25.1
300	31.8	46.0	23.4
400	36.5	43.0	21.9
500	41.8	42.0	20.6



Ordering Information

Product Number	Product Name	Jacket Type	Color	Length Qty
1101-04441	PowerMAX500 Cat.6 U/UTP 23AWG PVC Cable - Gray	PVC	Gray	305m/Box
1101-04442	PowerMAX500 Cat.6 U/UTP 23AWG PVC Cable - Blue	PVC	Blue	305m/Box
1101-04006CH	PowerMAX500 Cat.6 U/UTP 23AWG PVC Cable - Green	PVC	Green	305m/Box
1101-04008CH	PowerMAX500 Cat.6 U/UTP 23AWG PVC Cable - Red	PVC	Red	305m/Box
1101-04010CH	PowerMAX500 Cat.6 U/UTP 23AWG PVC Cable - Yellow	PVC	Yellow	305m/Box

Technical Specifications

Construction

Conductor

Material	Bare Copper
Wire Size	23AWG

Insulation

Material	PE
Thickness	Nominal: 1.011 mm
Colors	Blue/White-Blue Orange/White-Orange Green/White-Green Brown/White-Brown
Unaged Elongation (%)	Min. 300%
Unaged Tensile Strength	Min. 1.683 Kgf/mm ²

Jacket

Material	Flame Retardant PVC
Thickness	0.5±0.02 mm
Diameter	6.0±0.2 mm
Color	Gray (Assorted upon request)
	CM

Physical Ranges

Insulation

Min. Tension Strength	Before Aging	Min. 1.683 Kgf/mm ²
	After Aging	75% before aging (100°C X 48hrs)
Min Elongation (%)	Before Aging	300%
	After Aging	75% before aging (100°C X 48hrs)

Jacket

Min. Tension Strength	Before Aging	Min. 1.407 Kgf/mm ²
	After Aging	75% before aging (100°C X 168hrs)
Min Elongation (%)	Before Aging	Min. 100%
	After Aging	50% before aging (100°C X 168hrs)
Cold Bend Test		-20 ± 2°C x 4hrs no. crack
Dielectric Strength		2500 V dc / 2 seconds
Min. Bending Radius		50mm
Max. Pulling Tension		25 lbs
Installation Temperature		0°C to +50°C
Operating Temperature		-20°C to +70°C

Electrical

Conductor Resistance	Max. 7.32 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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