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## PowerMAX500 4P Cat.6 U/UTP 23AWG PVC Cable - Gray

DINTEK PowerMAX500™ unshielded Cat.6 / Class E U/UTP PVC cable is guaranteed to exceed Cat.6 specifications as set down in ANSI/TIA and ISO/IEC standards. Our PowerMAX500™ solution comprises unshielded Cat.6 component compliant patch panels, keystones, and patch cords.

When combined with DINTEK's unshielded Cat.6 / Class E U/UTP PVC cable, an end-to-end channel exists that maximizes data throughput and provides headroom for future technologies operating to, and beyond 1 Gigabit Ethernet.



### Features & Applications

- Horizontal and backbone cable
- 1000BASE-TX Gigabit Ethernet / 1000BASE-T Gigabit Ethernet
- 100BASE-TX Fast Ethernet / 10BASE-TX Ethernet
- 100 Mbps TP-PMD / 100VG-AnyLAN
- Broadband Video / Voice / T1 / ISDN
- 10 Gigabit (500Mhz) Transmission up to length of 70Mtrs

### Features

- Capable of handling the latest versions of Power over Ethernet
- Conductor sizes for PowerMAX500™ Cat.6 set at 23AWG
- PVC jacketed 4 pair telecommunications cable
- Successful transmission at 500Mhz up to a length of 70Mtrs
- EZI-Pull 305Mtr Box for trouble free installation

### Standards Conformance

- Performance - ANSI/TIA 568.2-D Cat.6 / ISO/IEC 11801
- Structural - EN 13501-6:2014 | IEC 61156-5 | EN 50288-6-1
- PoE capability - IEEE 802.3bt level 3 & 4 (PoE++ & 4PPoE)
- Environmental - Conforms to RoHS and REACH Directives
- Flame testing - EN 60332-1-2

### Performance Statistics

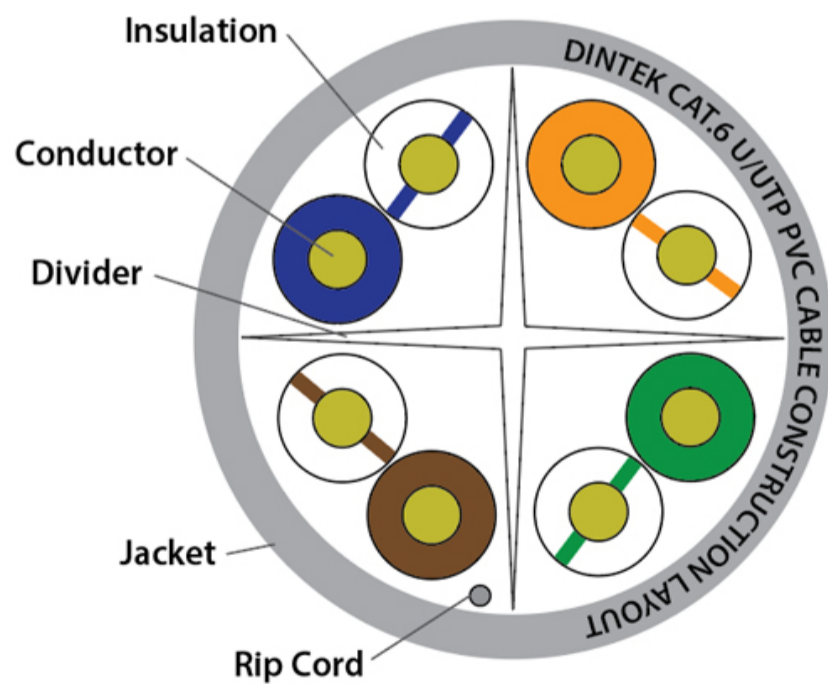
Frequency Mhz	Insertion Loss dB/100mtrs	NEXT (dB)	Return Loss (dB)
1	2.0	75.3	20.0
4	3.8	66.3	23.0
10	6.0	60.3	25.0
16	7.6	57.2	25.0
20	8.5	55.8	25.0
31.25	10.7	52.9	23.6
62.5	15.4	48.4	21.5
100	19.8	45.3	20.1
200	29.0	40.8	18.0
250	39.3	39.3	17.3

Meets and **exceeds** values above based on 100 meters (328 ft.) at 20°C as per ANSI/TIA-568-D.2 for Cat.6 / ISO/IEC 11801 Class E / EN 50173.

DINTEK PowerMAX500™ Cat.6 / Class E cables have additionally been tested up to 500Mhz and have shown performance results that allow for successful transmission of 10 Gigabit Ethernet up to 70Mtrs.

### Independent Verified Certifications

- ETL Certification according to ANSI / TIA-568.2-D Cat.6
- UL Cable Fire Rating - CM as per UL 444



### Ordering Information

Product Number	Product Name	Jacket Rating	Color	Length Qty
1101-04032	PowerMAX500 4P Cat.6 U/UTP 23AWG PVC Cable	CM	Gray	305Mtr Box

## Technical Specifications

### Construction

#### Conductor

<b>Material</b>	Pure Annealed Copper
<b>Wire Size</b>	23AWG
<b>Strand Type</b>	Solid Core
<b>No. Of Pairs</b>	4P

#### Insulation

<b>Material</b>	Polyethylene
<b>Thickness</b>	0.210mm ± 0.02mm
<b>Diameter</b>	0.970mm ± 0.30mm
<b>Colors</b>	Blue/White   Orange/White   Green/White   Brown/White
<b>Pair Foil Wrap</b>	None

#### Jacket

<b>Material</b>	PVC
<b>Thickness</b>	0.5 mm ± 0.05mm
<b>Diameter</b>	6.2mm ± 0.5mm
<b>Color</b>	Gray
<b>Jacket Rating</b>	CM
<b>Foil Shield</b>	None
<b>Braided Shield</b>	None

### Physical Ranges

#### Jacket

<b>Cold Bend Test</b>	-20 ± 2°C x 4hrs no crack
<b>Min. Bending Radius</b>	Min. 8 x Cable Diameter
<b>Max. Pulling Tension</b>	100N
<b>Installation Temperature</b>	0°C to +50°C
<b>Operating Temperature</b>	-20°C to +60°C

### Electrical

<b>Conductor Resistance</b>	Max. 9.5 Ω/100m at 20°C
<b>DC Resistance Unbalance</b>	Max. 5% at 20°C
<b>Pair-to-Ground Capacitance Unbalance</b>	Max. 330 pF/100m at 1 kHz
<b>Dielectric Strength of Insulation</b>	DC 1 KV for 1 Min
<b>Insulation Resistance Test (500V)</b>	Min. 5000 MΩ/Km at 20°C
<b>Mutual Capacitance</b>	Max. 5.6 nF/100m at 1 kHz
<b>Impedance 1~100MHz</b>	100Ω ± 15%
<b>Impedance 100~250MHz</b>	100Ω ± 22%
<b>Nominal Velocity Of Propagation</b>	67%

## DINTEK Electronic Limited

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