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

DINTEK PowerMAX500™ unshielded Cat.6 / Class E U/UTP LSZH 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 LSZH cable, an end-to-end channel exists that maximizes data throughput and provides headroom for future technologies operating to, and beyond Gigabit Ethernet.



### 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
- 10Gbit (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
- LSZH jacketed 4 pair telecommunications cable
- Successful transmission at 500Mhz up to a length of 70Mtrs
- EZI-Pull 305Mtr Box for trouble free installation

### Standards Compliance

- 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 | EN61034-2 | EN 60754-1/2

### Performance Statistics

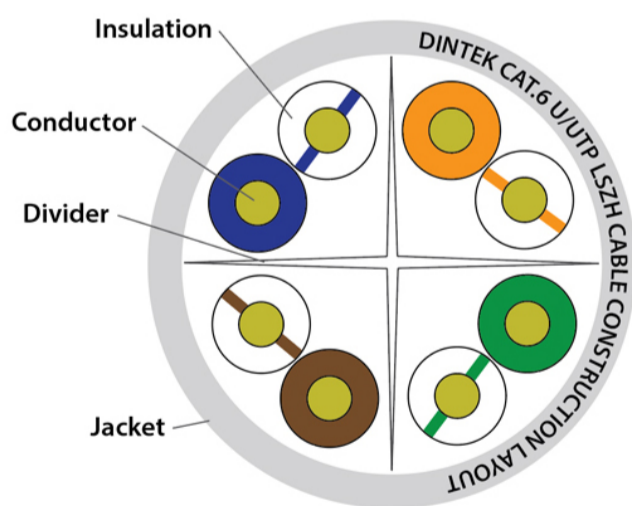
Frequency (Mhz)	Insertion Loss (dB/100mtrs)	NEXT (dB)	Return Loss (dB)
1	2.0	74.3	20.0
4	3.8	65.3	23.0
10	6.0	59.3	25.0
16	7.6	56.3	25.0
20	8.5	54.8	25.0
31.25	10.7	51.9	23.6
62.5	15.4	47.4	21.5
100	19.8	44.3	20.1
125	22.4	42.8	19.4
200	29.0	39.8	18.0
250	32.8	38.3	17.3

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 10Gbit Ethernet up to 70Mtrs.

### Independent Certification

- ETL Certification according to ANSI / TIA-568.2-D Cat.6
- CPR Reaction To Fire Classification - Dca,s2,d2,a1 as per EN 50399



### Ordering Information

Product Number	Product Name	CPR Class	Color	Length Qty	Qty / Pallet
1101-04046	PowerMAX500 4P Cat.6 U/UTP 23AWG LSZH Dca Cable	Dca,s2,d2,a1	Gray	305Mtr Box	24 or 36
1101-04049	PowerMAX500 4P Cat.6 U/UTP 23AWG LSZH Dca Cable	Dca,s2,d2,a1	Blue	305Mtr Box	24 or 36
1101-04060	PowerMAX500 4P Cat.6 U/UTP 23AWG LSZH Dca Cable	Dca,s2,d2,a1	Yellow	305Mtr Box	24 or 36

## 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>	0.21mm ± 0.01mm
<b>Diameter</b>	0.98mm ± 0.05mm
<b>Colors</b>	Blue/White   Orange/White   Green/White   Brown/White
<b>Pair Foil Wrap</b>	None

#### Jacket

<b>Material</b>	LSZH
<b>Thickness</b>	0.425 mm ± 0.025mm
<b>Diameter</b>	5.70mm ± 0.3mm
<b>Color</b>	Gray
<b>CPR Reaction To Fire Classification</b>	Dca,s2,d2,a1
<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. 4 x Cable Diameter
<b>Max. Pulling Tension</b>	110N
<b>Installation Temperature</b>	0°C to +50°C
<b>Operating Temperature</b>	-20°C to +60°C

### Electrical

<b>Conductor Resistance</b>	Max. 9.38 Ω/100m at 20°C
<b>DC Resistance Unbalance</b>	Max. 2% at 20°C
<b>Pair-to-Ground Capacitance Unbalance</b>	Max. 1600 pF/km at 1 kHz
<b>Dielectric Strength of Insulation</b>	DC 1.0 KV for 1 min
<b>Insulation Resistance Test (500V)</b>	Min. 5000 MΩ/Km at 20°C
<b>Mutual Capacitance</b>	Max. 5600 pF/100m at 1 kHz
<b>Impedance 1 ~ 250Mhz</b>	100Ω ± 5%
<b>Nominal Velocity Of Propagation</b>	67%

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