

Publish Date: 22.07.2020 | Rev no: 30

PowerMAX500 Gray - Cat.6 U/UTP 23AWG Cable - LSZH - 305mtr

DINTEK's PowerMAX500™ Gray Cat.6 U/UTP 23AWG LSZH cable is the ideal solution when requiring a high performance twisted pair cabling for your network LAN communications. Utilizing LSZH jacketing and adhering to all fire rating standards including European Dca standards our LSZH PowerMAX500™ LSZH cable minimizes risk from the after-effects of an electrical fire like gas and smoke inhalation.

The DINTEK PowerMAX500™ Cat.6 solution is guaranteed to exceed ClassE channel specifications as set down in international standards. In addition our PowerMAX500™ Cable has been tested over 500Mhz and has shown performance testing results allowing 10Gbit Ethernet transmission up to a length of 70mtrs

Features

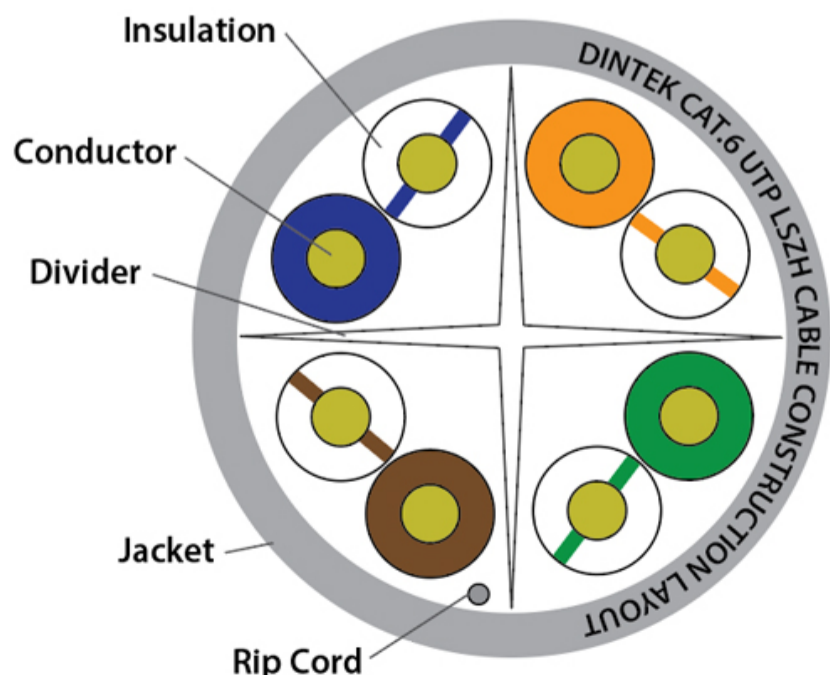
- Conductor sizes for PowerMAX500™ Cat.6 is set at 23AWG
- Gauge size of the conductor allows for less heat generation and less drop of voltage over distance
- Certified to handle PoE++ & 4PPoE - IEEE 802.3bt level 3 & 4
- Tested up to 500Mhz and shown to allow 10Gbit Ethernet transmission up to a length of 70mtrs

Standards Conformance

- 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
- EN 50575:2014 incl. amendment A1: 2016
- EN 60332-1-2:2004 incl. amendment A1: 2015
- EN60332-3 | EN61034-2 | EN 60754-1 & 2 | EN 13501-6:2014

Independent Verified Certifications

- ETL verified to ANSI/TIA-568.2-D Cat.6 - No. 102661868CRT-001b
- Delta cables for use in construction works
- Reaction to Fire Classification Dca - No. 2017-615A
- Technical report - DELTA-1601080, DANAK-19/17248
- EC cabling product ID: 6123



Applications

- 100BASE-T Ethernet (IEEE802.3) | 1000Mbps Gigabit Ethernet
- 155/622Mbps 1.2/2.4 Gbps ATM
- 550MHz Broadband Video | Voice; T1; ISDN |

Performance Statistics

Frequency Mhz	Insertion Loss dB/100mtrs	NEXT (dB)	Return Loss (dB)
1	2.1	75.0	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	15.5	48.4	21.5
100	19.9	45.3	20.1
200	29.1	40.8	18.0
250	33.0	39.3	17.3
300	31.8	46.0	23.4
400	36.5	43.0	21.9
500	41.8	42.0	20.6

* DINTEK PowerMAX500 Cables have been tested up to 500Mhz and have shown performance testing results allowing 10Gbit Ethernet transmission up to a length of 70mtrs

Ordering Information				
Product Number	Product Name	Jacket Type	Color	Length Qty
1101-04042	PowerMAX500 Cat.6 U/UTP 23AWG LSZH Gray Cable	LSZH	Gray	305m / Box
1101-04051	PowerMAX500 Cat.6 U/UTP 23AWG LSZH Purple Cable	LSZH	Purple	305m / Box

Technical Specifications

Construction

Conductor	
Material	Bare Copper
Wire Size	23AWG
Insulation	
Material	HDPE
Thickness	0.186mm
Diameter	0.973mm ± 0.05
Colors	Blue/White-Blue Orange/White-Orange Green/White-Green Brown/White-Brown
Unaged Elongation (%)	Min. 300%
Unaged Tensile Strength	2400 psi
Jacket	
Material	LSZH
Thickness	AVG 0.6mm
Diameter	6.1 ± 0.3mm
Color	Gray
Fire Rated Class	Fire Classification Dca

Physical Ranges

Insulation	
Min. Tension Strength	Before Aging : 2400 psi 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 : 1300 After Aging : 85% 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	AC 1.7 KV for 2Sec
Min. Bending Radius	50 mm
Max. Pulling Tension	25 lbs
Installation Temperature	-10°C to +60°C
Operating Temperature	-10°C to +60°C

Electrical

Conductor Resistance	Max. 9.5 Ω/100m at 20°C
DC Resistance Unbalance	Max. 4%
Pair-to-Ground Capacitance Unbalance	Max. 1600 pF/km
Dielectric Strength of Insulation	AC 1.7 KV for 2Sec
Insulation Resistance Test	Min. 5000 MΩ·Km
Mutual Capacitance	Max. 5600 pF/100m
Impedance 1~100MHz	100Ω ± 15%
Impedance 100-250MHz	100Ω ± 22%

DINTEK Electronic Limited

台北市中山區中山北路二段96號 嘉新第二大樓五樓N511
 N511, 5F, 2nd Bldg, No. 96, Sec. 2, Zhongshan N. Rd. Zhongshan Dist., Taipei City 10449, Taiwan
 P: +886-2-22997898 E-mail: sales@dintek.com.tw W: www.dintek.com.tw

1101-04042