

DATA SHEET

1103-06001

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PowerMAX+ Cat.6A F/UTP 23AWG PVC Cable

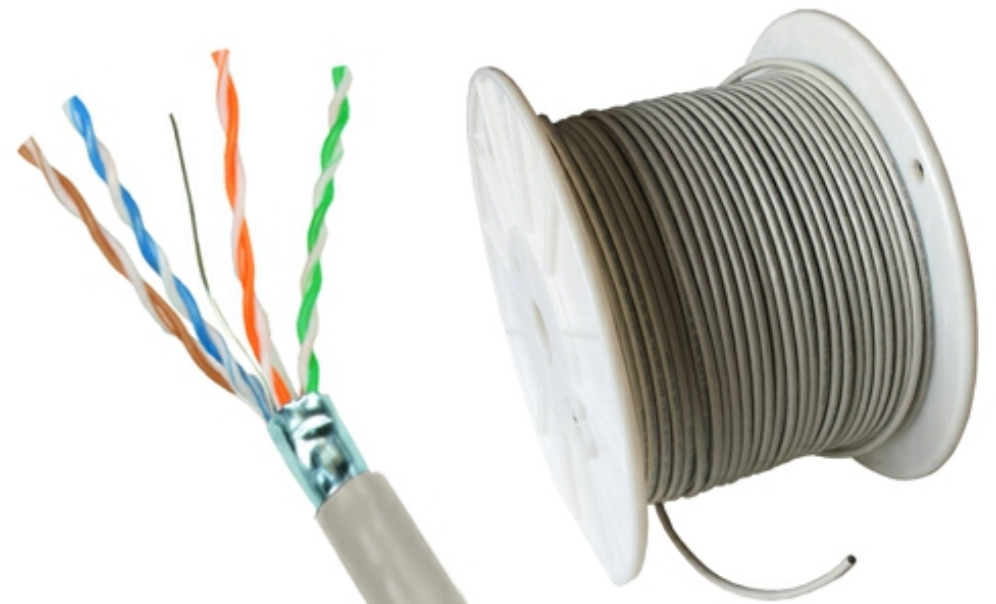
DINTEK PowerMAX+™ F/UTP cable is specifically designed to support high speed network applications such as 10-Gigabit Ethernet. The cable supports channel performance exceeding ANSI/TIA-568.2-D and ISO/IEC 11801 Class EA requirements. When combined with our screened Category 6A series connectivity, the result is a channel capable of supporting 10GBASE-T operation over 100-metre, In addition the screened construction ensures the elimination of alien crosstalk. The DINTEK PowerMAX+™ F/UTP cabling system supports emerging and converging IP applications like Voice Over IP (VoIP), IP video and future 10 gigabit applications.

Applications

- 10GBASE-T Ethernet
- 100BASE-TX Fast Ethernet
- 1000BASE-TX Gigabit Ethernet
- 1000BASE-T Gigabit Ethernet
- 10BASE-TX Ethernet
- ATM CB1G
- 155/622 Mbps ATM
- 100 Mbps TP-PMD
- 100VG-AnyLAN

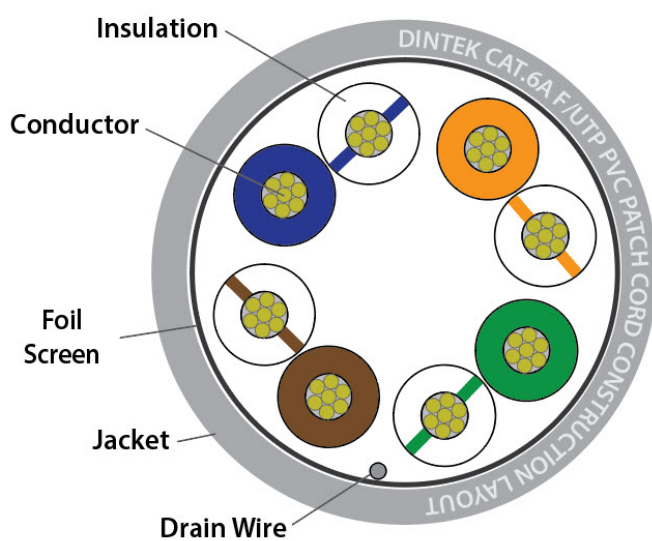
Standards Conformance

- CENELEC EN 50173-1, CENELEC EN 50288-10-1
- ISO/IEC 2nd Edition 11801 Class EA
- IEC 3rd Edition 61935-1, IEC 2nd edition 61156-5
- All proposed Category 6A Requirements as Per ANSI/TIA,
- ISO/IEC, and CENELEC EN Standard ANSI/TIA-568-2.D Cat.6A
- Flame Retardancy is verified according to IEC 60332-1-2
- Implemented ROHS Compliance for the Requirement of European Union Issued Directive 2002/95/EC



Performance Statistics

Frequency Mhz	Insertion Loss dB / 100mtrs	NEXT (dB)	Return Loss (dB)
1	2.1	75.3	20.0
4	3.8	66.3	23.0
10	5.9	60.3	25.0
16	7.5	57.2	25.0
20	8.4	55.8	25.0
31.25	10.5	52.9	23.6
62.5	15	48.4	21.5
100	19.1	45.3	20.1
200	27.6	40.8	18.0
250	31.1	39.3	17.3



Ordering Information

Product Number	Product Name	Jacket Type	Color	Length Qty
1103-06001	PowerMAX+ Cat.6A F/UTP 23AWG PVC Cable	PVC	Gray	305m/Reel
1103-06002	PowerMAX+ Cat.6A S/FTP 23AWG LSZH Cable	LSZH	Gray	305m/Reel

Technical Specifications

Construction		
Conductor		
Material	Pure Annealed Copper	
Wire Size	23AWG	
Insulation		
Material	Foam-Skin PE	
Thickness	Nominal:0.419	
Colors	Blue/White-Blue Orange/White-Orange Green/White-Green Brown/White-Brown	
Unaged Elongation (%)	Min.100%	
Unaged Tensile Strength	0.816 Kgf/mm ²	
Jacket		
Material	PVC	
Thickness	0.5 mm	
Diameter	7.4 mm	
Color	Gray	
Screen Material	Aluminum-Mylar tape and tinned copper braid	
Physical Ranges		
Insulation		
Min. Tension Strength	Before Aging	0.816 Kgf/mm ²
	After Aging	
Min Elongation (%)	Before Aging	Min.100%
	After Aging	
Jacket		
Min. Tension Strength	Before Aging	min 1.407Kg/mm ²
	After Aging	75%(PVC) at 100°C for 168Hrs
Min Elongation (%)	Before Aging	100%
	After Aging	50% at 100°C for 168Hrs
Cold Bend Test	-20 ± 20C X 4hrs no. crack	
Dielectric Strength	1500 V dc/ 2 seconds	
Min. Bending Radius	40mm	
Max. Pulling Tension	8-10kg (25lbs)	
Installation Temperature	-10°C to +60°C	
Operating Temperature	-10°C to +60°C	
Electrical		
Conductor Resistance	Max.9.38Ω/100m at 200C	
DC Resistance Unbalance	2% MAX	
Pair-to-Ground Capacitance Unbalance	160 pF/100m	
Dielectric Strength of Insulation	AC 1.7 KV for 2 s	
Insulation Resistance Test	Min. 5000MΩ/Km	
Mutual Capacitance	5.6nF/100m	
Impedance	1~500MHz:100Ω 15%	

DINTEK Electronic Limited

5F., No.8, Ln. 97, Wugong Rd.
Xinzhuang Dist., New Taipei City 242
Taiwan (R.O.C.)

P: Office: +886-2-22997898 E-mail: sales@dintek.com.tw W: www.dintek.com.tw

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