

NETWORK CABLE CATALOG



FIBRAMERICA MINQING TANCOME TECHNOLOGY LTDA

Complete solutions for the intelligent development of fiber optic networks

Minqing Tancome Technology, under its trade name FIBRAMÉRICA, is one of the world's leading companies dedicated to the design, development, manufacture, distribution and marketing of advanced optical connectivity solutions. We work closely with the main players in the telecommunications market, such as operators, distributors and importers and installers all over the world, both as OEMs and under our own brand.

Its headquarters are located in Fuzhou, Fujian, China, with sales offices in Shanghai and Ningbo. It also has direct sales units in America, located in Brazil, where all commercial and technical support is provided in Spanish through its engineers and sector specialists. This expansion not only demonstrates its global vision, but also reflects its commitment to localized customer service, providing commercial and technical assistance in the same time zone and language as our customers.

On its path to excellence, FIBRAMÉRICA has adopted a continuous focus on improving processes, integrating emerging technologies and implementing effective communication strategies. Their dedication translates into competitive prices, efficient production times and comprehensive support, from the manufacturing process to product transportation.

Following the strictest international quality norms and standards, such as ISO9001, it guarantees that each of its products meets the quality and functionality expectations of the most demanding customers.

With a vision of the future, FIBRAMÉRICA focuses its efforts on developing and adapting new products, tailored to the specifics and needs of each project, from the initial design phase to final production.





NETWORK CABLE

Fibramérica supplies network cables for external and internal installation applications, manufactured in accordance with international standards and quality norms.

Data cables are currently an ideal transmission medium for broadband access networks. They offer several advantages, including low manufacturing costs, simple structure, good scalability and ease of network upgrading.

Our network cables are highly versatile and can be used in a wide range of applications. They are ideal for data centers, switches, servers and security monitoring. In addition, our network cables are designed for use in demanding environments such as locomotives, aerospace, wind energy and drag chains.

For applications that require high flexibility, such as robotics, our cables offer the durability and performance needed. Whether in a busy data center or a complex industrial application, our data cables guarantee reliable and efficient transmission.





Typical Cable Performance							
Frequency (MHz)	Attenuation (dB/100m at 20°C), Max.	Next (dB), Min	Power Sum (dB), Min.				
1	2.0*	80.0*	77.0*				
4	3.7*	80.0*	77.0*				
10	5.9*	80.0*	77.0*				
16	7.4*	80.0*	77.0*				
20	8.3*	80.0*	77.0*				
31.25	10.4*	80.0*	77.0*				
62.5	14.9*	75.5*	72.5*				
100	19.0*	72.4*	69.4*				
155	24.0*	69.5*	66.5*				
200	27.5*	67.9*	64.9*				
300	34.2*	65.2*	62.2*				
600	50.10*	60.7*	57.7*				

Electrical Performance				
Spark Test	1050 V ac			
Dielectric Strength	2500 V dc / 3 seconds			
Insulation Resistance Test	Min. 150 MΩ/Km			
Conductor Resistance	Max. 9.38 Ω/100m at 20°C			
Resistance Unbalance	Max. 2%			
Capacitance Unbalance	Max. 160 pF/100m			
Mutual Capacitance	Max. 5600 pF/100m			
Impedance 64k Hz	125Ω ± 20%			
1~250MHz	100Ω ± 15%			
300~600MHz	100Ω ± 25%			

Cat7 can transmit up to 40 Gb at 50 meters and even 100 Gb at 15 meters. The newer "Class F" cabling can support frequencies of up to 600 Mhz. Cat7 offers extensive shielding to reduce signal attenuation and is relatively stiff in comparison to previous generations of cabling. Both individual pairs are shielded, with an additional layer of shielding over the entire cable. The shielding needs to be grounded and Cat7 also requires special GigaGate45 (GG45) connectors to take full advantage of higher performance features.

Application

10GBASE-T Ethernet, 1000BASE-Tx Gigabit Ethernet, 10BASE-T, 100BASE-T Fast Etheret (IEEE 802.3), 100VG -AnyLAN (IEEE802.12), 155/622 MbpS ATM, 550 MHZ Broadband Video, Voice, T1.ISDN

Standard

All Proposed Category 7 requirements as per ANSI/TIA/EIA, ISO/IEC, and CENELEC EN Standards:

- ANSI/TIAV/EIA 568-B.2-10, draft
- ISO/IEC 11801 CLASS F, 2nd Edition
- CENELEC EN 50173-1
- CENELEC EN 50288-4-1, 2nd Edition
- CENELEC EN 50288-4-2
- Flame Retardancy is verified according to IEC 60332-1

Cable Data					
Conductor	Solid bare copper				
AWG	23				
Conductor Diameter (mm)	0.583 ±0.02				
Insulation	Foam - skin PE				
Insulation average thickness	0.419mm (Min at any point: 0.369mm)				
Jacket	PVC/LSZH				
Sheath average thickness	0.05mm (Min. at any point: 0.40mm)				
Sheath Diameter	7.4 ± 0.3mm				
Elongation	Min.100%				
Tensile strength	Min. 1.407kg/m²				
Aging at 100 for 168Hrs	Min. elongation retention: 50%				
	Min. tensile strength retention: 75%				
Colors	Blue-white/blue				
	Orange- white/orange				
	Green- white/Green				
	Brown- white/brown				



Typical Cable Performance									
			Pair t	Pair to Pair Power Sum					
Freq. Ins. Loss	Ins. Loss	RL(dB)	NEXT	ELFEX	NEXT	ELFEX	ANEXT	AELFEX	Po. Delay
(MHZ)	Max.	iviin.	(dB/1	.00m)		(dB/100m)			
			Min.	Min.	Min.	Min.	Min.	Min.	
1	2.1	20.0	76.3	71.8	74.3	69.8	75	75	570
4	3.8	23.0	67.3	59.8	65.3	57.8	66.2	66.2	543
10	6.0	25.0	61.3	51.8	59.3	49.8	58.2	58.2	538
16	7.6	25.0	58.2	47.7	56.2	45.7	54.1	54.1	536
20	8.5	25.0	56.8	45.8	54.8	43.8	52.2	52.2	536
31.25	10.8	23.6	53.9	41.9	51.9	39.9	48.3	48.3	535
62.5	15.5	21.5	49.4	35.9	47.4	33.9	42.3	42.3	535
100	19.9	20.1	46.3	31.8	44.3	29.8	38.2	38.2	534
155	25.3	18.8	43.4	28.0	41.4	26.0	34.4	34.4	534
200	29.2	18.0	41.8	25.8	39.8	23.8	32.2	32.2	534
250	33.0	17.3	40.3	23.8	38.3	21.8	30.2	30.2	534
300	36.6	16.8	39.1	22.3	37.1	20.3	28.7	28.7	534
350	40.0	16.3	38.1	20.9	36.1	18.9	27.3	27.3	534
400	43.2	15.9	37.3	19.8	35.3	17.8	26.2	26.2	534
450	46.3	15.5	36.5	18.7	34.5	16.7	25.1	25.1	534
500	49.2	15.2	35.8	17.8	33.8	15.8	24.2	24.2	534

- Cat6A cable provides the market with a cost effective, high-bandwidth and high performance cabling. As next generation cable, it is capable of meeting the demanding requirements for 10 gigabit Ethernet(10GBASE-T)
- This break through cable technology has been specifically designed to reduce "alien-crosstalk" and its effect on 10GBASE-T networks. Alien crosstalk is the coupling interference that comes from nearby cables or other electrical devices. Alien crosstalk has been defined by IEEE as the dominant noise source that will affect10GBASE-T performance.
- This cable is designed for applications up to 500 MHz and provides transmission performance meeting Category6A specifications and is a good choice for supporting applications requiring high bandwidth: such as datacenters, server farms, storage area networks, and campus backbones.

Application

- IEEE 802.3:10GBase-T, 1000Base-T(Gigabit Ethernet)100Base-TX(Fast Ethernet), 10Base-T
- 2.4/1.2 Gbps ATM
- 4/16 Mbps Token Ring
- ANSIX3.263:100 Mbps
- 3D imaging, Broadband & Baseband analog video
- Digital Video

Characteristics

- Conductor resistance (Ω/100m @ 20°C): 6.85
- DC resistance unbalance (%): 5
- Mutual Capacitance (pF/m): 58
- Pair-to-ground capacitance unbalance(pF/100m): 33
- Delay skew (ns/100m): 25
- Insertion Loss (dB/100m): 1.82*√f+ 0.091 * f +0.25/Vf
- Input Impedance (Ω): 100±10,15,22%

Benefits

- Capable of supporting 10GBASE-T networks & handling the next generation network applications
- Power sum characterization gives highest performance using existing applications
- Provides additional bandwidth required for future applications capable of handling multimedia, broadband and base band video signals

Standard

- Category 6A
- TIA/EIA-568-B.2-10&ISO/IEC11801



Typical Cable Performance							
Frequency (MHz)	Attenuation (dB/100m at 20°C), Max.	Next (dB), Min	Power Sum (dB), Min.				
0.772	-	67	64				
1.0	-	65	62				
4.0	6.4	56	53				
8.0	8.9	51	48				
10.0	9.9	50	47				
16.0	12.3	47	44				
20.0	13.8	45	42				
25.0	16.0	44	41				
31.25	17.1	42	39				
62.5	25.6	38	35				
100.0	100MHz	33.0	32				
125.0	37.4	34	31				

Electrical Performance				
Spark Test	1050 V ac			
Dielectric Strength	2500 V dc / 3 seconds			
Insulation Resistance Test	Min. 150 MΩ/Km			
Conductor Resistance	Max. 6.8 Ω/100m at 20°C			
Resistance Unbalance	Max. 2%			
Capacitance Unbalance	Max. 330 pF/100m			
Mutual Capacitance	Max. 5600 pF/100m			
Impedance 64k Hz	64k Hz 125Ω±20%			
	1~250MHz 100Ω±15%			

Cat 6 cable is a 4 twisted pair sheathed copper wire cable that can support data transfer rates of up to 1 gigabits (1,000 megabits). This higher bandwidth allows for quick transferral of large files in an office network.

Application

- 10BASE-T, 100BASE-T Fast Ethernet (IEEE 802.3)
- 100 VG -anyLAN (IEEE802.12),155/622 Mbps ATM
- 550 MHz broadband video
- 1000BASE-T Gigabit Ethernet

Standard

All proposed category 6 requirements as per ANSI/TIA/EIA, ISO/IEC, and CENELEC EN Standards, ANSI/TIA/EIA568-B.2-1 CAT.6:

- ISO/IEC 11801 class E, 2nd edition
- IEC61156-6
- CENELEC EN 50173-1
- CENELEC EN50288-5-1.CENELEC EN 50288-5-2
- Flame Retardancy is verified according to IEC 60332-1

Cable Data					
Conductor	Solid bare copper				
AWG	23				
Conductor Diameter (mm)	0.583 ±0.02				
Insulation	Foam - skin PE				
Insulation average thickness	0.419mm (Min at any point: 0.369mm)				
Jacket	PVC/LSZH				
Sheath average thickness	0.05mm (Min. at any point: 0.40mm)				
Sheath Diameter	7.4 ± 0.3mm				
Elongation	Min.100%				
Tensile strength	Min. 1.407kg/m²				
Aging at 100 for 168Hrs Min. elongation retention: 50%					
	Min. tensile strength retention: 75%				
Colors	Blue-white/blue				
	Orange- white/orange				
	Green- white/Green				
	Brown- white/brown				

Cat6 FTP Lan Cable Mod. FAB-C6-F



Electrical Performance					
1.0-100.0 MHz Impendance (ohms)	100±15				
100.0-250.0 MHz Impendance (ohms)	100±22				
Impendance Delay screw (ns/100m)	<45				
Pair to Ground Capacitance Unbalance (PF/100m)	330 (MAX)				
Conductor DC resistance 20% (ohms/km)	<73.2				
Resistance Unbalance (%)	5				
Test object	Jacket				
Test Material	PVC				
Before Tensile strength (Mpa)	≥13.8				
Aging Elongation (%)	≥100				
Aging condition (C xhrs)	100×240				
After Tensile strength (Mpa)	≥85% of unaged				
Aging Elongation (%)	≥50% of naged				
Cold bend (-20±2°C×4 hrs)	No crock				

Typical Cable Performance									
			Pair to Pair		Power Sum				
Freq.	Ins. Loss	RL(dB)	NEXT	ELFEX	NEXT	ELFEX	ANEXT	AELFEX	Po. Delay
(MHz)	(dB/100m) Max.	Min.	(dB/1	.00m)		(dB/100m)			
			Min.	Min.	Min.	Min.	Min.	Min.	
0.772	19.4	1.8	76.0	74.0	74.0	70.0	67.0	575.0	570
1.0	20.0	2.0	74.3	72.0	72.3	67.8	64.8	570.0	543
4.0	23.0	3.8	65.5	61.0	63.3	55.8	52.8	552.0	538
8.0	24.5	5.3	60.8	55.0	58.8	49.7	46.7	546.7	536
10.0	25.0	6.0	59.3	53.0	57.3	47.8	44.8	545.4	536
16.0	25.0	7.6	56.2	49.0	54.2	43.7	40.7	543.0	535
20.0	25.0	8.5	54.8	46.0	52.8	41.8	38.8	542.0	535
25.0	24.3	9.5	53.3	44.0	51.3	39.8	36.8	541.2	534
31.25	23.6	10.7	51.9	41.0	49.9	37.9	34.9	540.4	534
62.5	21.5	15.4	47.4	32.0	45.4	31.9	28.9	538.6	534
100.0	20.1	19.8	44.3	24.5	42.3	27.8	24.8	537.6	534
200.0	18.0	29.0	39.8	10.8	37.8	21.8	18.8	536.5	534
250.0	17.3	32.8	38.3	5.5	36.3	19.8	16.8	536.3	534

Description

Cat 6 cable is a 4 twisted pair sheathed copper wire cable that can support data transfer rates of up to 1 gigabits (1,000 megabits). This higher bandwidth allows for quick transferral of large files in an office network.

Application

- POTS.T1&T1 fractional
- ISDN basic & primary Rate
- 4/16Mbps Token Ring(IEEE802.5)
- 10BAST-T(IEEE 802.3)100MbpaTP-PMD
- 52/155Mbps ATM (ATM Forum)
- 100BAST-T4 (Ethernet)
- 100 VG-AnyLAN (IEEE802.12)
- 100 BAST-T (Fast Ethernet)
- 1 Gbps Ethernet (IEEE 802.3)

Standard

All proposed category 6 requirements as per ANSI/TIA/EIAISO/EC, and CENELEC EN Standards, ANSI/TIA/EIA568-B.2-1 CAT.6:

- ISO/IEC 11801 class E, 2nd edition
- IEC 61156-6
- CENELEC EN 50173-1
- CENELEC EN 50288-5-1, CENELEC EN 50288-5-2
- Flame Retardancy is verified according to IEC 60332-1

Cable Data					
Conductor	Solid bare copper				
AWG	23				
Conductor Diameter (mm)	0.57				
Insulation	PE				
Insulation average thickness(±0.03mm)	0.24				
Min point thickness	0.24				
Insulation Dia(±0.03mm)	1.00				
Twisting lay length(mm)	30 undemeath				
Cabling lay length(mm)	200 undemeath				
Jacket	PVC/LSZH				
Average thickness	0.5				
Min point thickness	0.4				
Outer Dia(±1.0mm)	6.6				
Rip cord	YES				
Weight Nom(kg/km)	60				
Colors	Blue-white/blue				
	Orange- white/orange				
	Green- white/Green				
	Brown- white/brown				



Electrical Performance					
1.0-100.0 MHz Impendance(ohms)	100±15				
100.0-250.0 MHz Impendance(ohms)	100±22				
Impendance Delay screw(ns/100m)	<45				
Pair to Ground CapacitanceUnbalance(PF/100m)	330 (MAX)				
Conductor DC resistance20%(ohms/km)	<73.2				
Resistance Unbalance(%)	5				
Test object	Jacket				
Test Material	PVC				
Before Tensile strength(Mpa)	≥13.8				
Aging Elongation ((%)	≥100				
Aging condition(C xhrs)	100×240				
After Tensile strength(Mpa)	≥85% of unaged				
Aging Elongation(%)	≥50% of naged				
Cold bend(-20±2°C×4 hrs)	No crock				

Typical Cable Performance							
Frequency (MHz)	Attenuation (dB/100m at 20°C), Max.	Next (dB), Min	Power Sum (dB), Min.				
0.772	-	67	64				
1.0	-	65	62				
4.0	6.4	56	53				
8.0	8.9	51	48				
10.0	9.9	50	47				
16.0	12.3	47	44				
20.0	13.8	45	42				
25.0	16.0	44	41				
31.25	17.1	42	39				
62.5	25.6	38	35				
100.0	100MHz	33.0	32				
125.0	37.4	34	31				

Cat 6 cable is a 4 twisted pair sheathed copper wire cable that can support data transfer rates of up to 1 gigabits (1,000 megabits). This higher bandwidth allows for quick transferral of large files in an office network.

Application

- POTS.T1&T1 fractional
- ISDN basic & primary Rate
- 4/16 Mbps TokenRing (IEEE802.5).
- 10BAST-T (IEEE802.3)
- 100MbpaTP-PMD
- 52/155MbpS ATM (ATMForum)
- 100BAST-T4 (fast Ethernet)
- 100 VG-AnyLAN (IEEE802.12)
- 100 BAST-T (Fast Ethernet)

Standard

All proposed category 6 requirements as per ANSI/TIA/EIAISO/EC, and CENELEC EN Standards, ANSI/TIA/EIA568-B.2-1 CAT.6:

- ISO/IEC 11801 class E, 2nd edition
- IEC 61156-6
- CENELEC EN 50173-1
- CENELEC EN 50288-5-1, CENELEC EN 50288-5-2
- Flame Retardancy is verified according to IEC 60332-1

Cable Data				
Conductor	Solid bare copper			
AWG	23			
Conductor Diameter (mm)	0.56			
Insulation	PE			
Average thickness(±0.03mm)	0.22			
Min point thickness	0.18			
Insulation Dia(±0.03mm)	1.02			
Twisting lay length(mm)	30 undemeath			
Cabling lay length(mm)	200 undemeath			
Jacket	PVC/LSZH			
Average thickness	0.5			
Min point thickness	0.43			
Outer Dia(±1.0mm)	6.6			
Rip cord	YES			
Weight Nom(kg/km)	42			
Colors	Blue-white/blue			
	Orange- white/orange			
	Green- white/Green			
	Brown- white/brown			



Electrical Performance(100MHz)				
Spark Test	850 V ac			
Dielectric Strength	2500 V dc / 3 seconds			
Insulation Resistance Test	Min. 150 MΩ/Km			
Conductor Resistance	Max. 9.38 Ω/100m at 20°C			
Resistance Unbalance	Max. 5%			
Capacitance Unbalance	Max. 330 pF/100m			
Mutual Capacitance	Max. 5600 pF/100m			
Impedance 1722kHz	102Ω ± 15%			
1~250MHz	100Ω ± 15%			

Typical Cable Performance								
		Pair to Pair		Power Sum				
Freq.	RL(dB)	NEXT	ELFEX	NEXT	ELFEX	ANEXT	AELFEX	Po. Delay
(MHz)	Min.	(dB/1	.00m)		(dB/1	.00m)		(ns/100)
		Min.	Min.	Min.	Min.	Min.	Min.	
0.772	9.4	1.08	76.0	74.0	74.0	70	67	575.0
1.0	20.3	2.0	74.3	72.0	72.3	67.8	64.8	570.0
4.0	23.0	3.8	65.5	61.0	63.3	55.8	52.8	552.0
8.0	24.05	5.3	60.8	55.0	58.8	49.7	46.7	546.0
10.0	25.0	6.0	59.3	53.0	57.3	47.8	44.8	545.4
16.0	25.0	7.6	56.2	49.0	54.2	43.7	40.7	543.0
20.0	25.0	8.5	54.8	46.0	52.8	41.8	38.8	542.0
25.0	24.3	9.5	53.3	44.0	51.3	39.8	36.8	541.0
31.25	23.6	10.7	51.9	41.0	49.9	37.9	34.9	540.0
62.5	21.5	15.4	47.4	32.0	45.4	31.9	28.9	538.6
100.0	20.1	19.8	44.3	24.5	42.3	27.8	24.8	537.6
200.0	18.0	29.0	39.8	10.8	37.8	21.8	18.8	536.5
250.0	17.3	32.8	38.3	5.5	36.3	19.8	16.8	536.3

Cat 5e supports data transfer rates of 1,000 Mbps or one gigabit per second. Therefore, Cat 5e cables are sometimes called Gigabit Ethernet cables. Cat 5e cables operate on the same 100 MHz frequency as Cat 5 and have the same maximum length of 100 meters.

Application

- 1000BASE-T Gigabit Ethernet
- 10BASE-T, 100BASE-T Fast Ethernet (IEEE 802.3)
- 100 VG -AnyLAN (IEEE802.12), 155/622 Mbps ATM
- Voice, T1.ISDN1 GbpsEthemet (IEEE 802.3)

Standard

All Category 5e Requirements as Per ANSI/TIA/EIAISO/IEC, and CENELEC EN Standards:

- ANSI/TIA/EIA 568-B.2 CAT.5e
- 2nd Edition ISO/IEC 11801 Class D
- CENELEC EN 50173-1
- IEC 61156-5,CENELEC EN 50288-2-1 Horizontal Cable
- Flame Retardancy is Verified According to IEC 60332-1

Cable Data				
Conductor	Solid bare copper			
AWG	24			
Conductor Diameter (mm)	0.52			
Insulation	Foam - skin PE			
Average thickness(±0.03mm)	0.269 mm			
Min point thickness	0.4mm			
Insulation Dia(±0.03mm)	0.91mm			
Jacket	PVC/LSZH			
Average thickness	0.5			
Min point thickness	0.46			
Outer Dia(±1.0mm)	5.1			
Rip cord	YES			
Weight Nom(kg/km)	32			
Colors	Blue-white/blue			
	Orange- white/orange			
	Green- white/Green			
	Brown- white/brown			



Electrical Performance (100MHz)					
1.0-100.0 MHz Impendance(ohms)	100±15				
1.0-100.0 MHz Impendance Delay screw (ns/100m)	<45				
Pair to Ground Capacitance Unbalance (PF/100m)	330 (MAX)				
Conductor DC resistance 20% (ohms/km)	<93.8				
Resistance Unbalance (%)	5				
Test object	Jacket				
Test Material	PVC				
Before Tensile strength (Mpa)	≥13.8				
Aging Elongation (%)	≥100				
Aging condition (C xhrs)	100×240				
After Tensile strength (Mpa)	≥85% of unaged				
Aging Elongation (%)	≥50% of naged				
Cold bend (-20±2°C×4 hrs)	No crock				

Typical Cable Performance								
		Pair to Pair		Power Sum				
Freq.	RL(dB)	NEXT	ELFEX	NEXT	ELFEX	ANEXT	AELFEX	Po. Delay
(MHz)	Min.	(dB/1	.00m)		(dB/1	.00m)		(ns/100)
		Min.	Min.	Min.	Min.	Min.	Min.	
0.772	9.4	1.08	76.0	74.0	74.0	70	67	575.0
1.0	20.3	2.0	74.3	72.0	72.3	67.8	64.8	570.0
4.0	23.0	3.8	65.5	61.0	63.3	55.8	52.8	552.0
8.0	24.05	5.3	60.8	55.0	58.8	49.7	46.7	546.0
10.0	25.0	6.0	59.3	53.0	57.3	47.8	44.8	545.4
16.0	25.0	7.6	56.2	49.0	54.2	43.7	40.7	543.0
20.0	25.0	8.5	54.8	46.0	52.8	41.8	38.8	542.0
25.0	24.3	9.5	53.3	44.0	51.3	39.8	36.8	541.0
31.25	23.6	10.7	51.9	41.0	49.9	37.9	34.9	540.0
62.5	21.5	15.4	47.4	32.0	45.4	31.9	28.9	538.6
100.0	20.1	19.8	44.3	24.5	42.3	27.8	24.8	537.6
200.0	18.0	29.0	39.8	10.8	37.8	21.8	18.8	536.5
250.0	17.3	32.8	38.3	5.5	36.3	19.8	16.8	536.3

Cat 5e supports data transfer rates of 1,000 Mbps or one gigabit per second. Therefore, Cat 5e cables are sometimes called Gigabit Ethernet cables. Cat 5e cables operate on the same 100 MHz frequency as Cat 5 and have the same maximum length of 100 meters.

Application

• This 4-pair Category5e cable is tested for power Sum NEXT, ELFEXT, Delay Skew. Propagation Delay and any other criteria as specified in the emerging standard Applications can include Voice, ISDN, ATM155 and 622Mbps, 100Mbps TPDDI, Fast and Gigabit Ethernet, Shielding protects against EMI/RFI interference.

Standard

All Category 5e Requirements as Per ANSI/TIA/EIAISO/IEC, and CENELEC EN Standards:

- ANSI/TIA/EIA 568-B.2 CAT.5e
- 2nd Edition ISO/IEC 11801 Class D
- CENELEC EN 50173-1
- IEC 61156-5,CENELEC EN 50288-2-1 Horizontal Cable
- Flame Retardancy is Verified According to IEC 60332-1

Cable Data				
Conductor	Solid bare copper			
AWG	24			
Conductor Diameter (mm)	0.52			
Insulation	PE			
Average thickness(±0.03mm)	0.25			
Min point thickness	0.22			
Insulation Dia(±0.03mm)	1.0			
Twisting lay length(mm)	30 undemeath			
Cabling lay length(mm)	200 undemeath			
Jacket	PVC/LSZH			
Average thickness	0.5			
Min point thickness	0.46			
Outer Dia(±1.0mm)	5.1			
Rip cord	YES			
Weight Nom(kg/km)	43			
Colors	Blue-white/blue			
	Orange- white/orange			
	Green- white/Green			
	Brown- white/brown			



Electrical Performance (100MHz)					
1.0-100.0 MHz Impendance (ohms)	100±15				
1.0-100.0 MHz Impendance Delay screw (ns/100m)	<45				
Pair to Ground Capacitance Unbalance (PF/100m)	330 (MAX)				
Conductor DC resistance 20% (ohms/km)	<93.8				
Resistance Unbalance (%)	5				
Test object	Jacket				
Test Material	PVC				
Before Tensile strength (Mpa)	≥13.8				
Aging Elongation (%)	≥100				
Aging condition (C xhrs)	100×240				
After Tensile strength (Mpa)	≥85% of unaged				
Aging Elongation (%)	≥50% of naged				
Cold bend (-20±2°C×4 hrs)	No crock				

Typical Cable Performance								
Freq. (MHz)	RL(dB)	Atten. (dB/100m)	NEXT (dB)	ACR (dB)	PSNEXT (dB)	ELEFXT (dB/100m)	PSELEXT (dB/100m)	Delay (ns/100)
0.772	19.4	1.8	67	65	64	66	63	575.0
1.0	20.0	2.0	65.3	63.0	62.3	63.8	60.8	570.0
4.0	23.0	4.1	96.3	52.0	53.3	21.7	48.7	552.0
8.0	24.5	5.8	91.8	46.0	48.8	45.7	42.7	546.7
10.0	25.0	6.5	50.3	44.0	47.3	43.8	40.8	545.4
16.0	25.0	8.2	47.3	39.0	44.3	39.7	36.7	543.0
20.0	25.0	9.3	45.8	37.0	42.8	37.7	34.7	542.0
25.0	24.3	10.4	44.3	34.0	41.3	35.8	32.8	541.02
31.25	23.6	11.7	42.9	31.0	39.9	33.9	30.9	540.4
62.5	21.5	17	38.4	21.0	35.4	27.8	24.8	536.6
100.0	20.1	22	35.3	13.0	32.3	23.8	20.8	537.6

Cat 5e supports data transfer rates of 1,000 Mbps or one gigabit per second. Therefore, Cat 5e cables are sometimes called Gigabit Ethernet cables. Cat 5e cables operate on the same 100 MHz frequency as Cat 5 and have the same maximum length of 100 meters.

Application

• This 4-pair Category5e cable is tested for power Sum NEXT, ELFEXT, Delay Skew. Propagation Delay and any other criteria as specified in the emerging standard Applications can include Vocie, ISDN, ATM155 and 622Mbps, 100Mbps TPDDI, Fast and Gigabit Ethernet, Shielding protects against EMI/RFI interference.

Standard

All Category 5e Requirements as Per ANSI/TIA/EIAISO/IEC, and CENELEC EN Standards:

- ANSI/TIA/EIA 568-B.2 CAT.5e
- 2nd Edition ISO/IEC 11801 Class D
- CENELEC EN 50173-1
- IEC 61156-5,CENELEC EN 50288-2-1 Horizontal Cable
- Flame Retardancy is Verified According to IEC 60332-1

Cable Data				
Conductor	Solid bare copper			
AWG	24			
Conductor Diameter (mm)	0.5			
Insulation	PE			
Average thickness(±0.03mm)	0.2			
Min point thickness	0.17			
Insulation Dia(±0.03mm)	0.91			
Twisting lay length(mm)	30 undemeath			
Cabling lay length(mm)	200 undemeath			
Jacket	PVC/LSZH			
Average thickness	0.5			
Min point thickness	0.43			
Outer Dia(±1.0mm)	5.1			
Rip cord	YES			
Weight Nom(kg/km)	32			
Colors	Blue-white/blue			
	Orange- white/orange			
	Green- white/Green			
	Brown- white/brown			



Cable Data				
Conductor	Solid bare copper			
AWG	24			
Conductor Diameter (mm)	0.5			
Insulation	PE			
Average thickness(±0.03mm)	0.2			
Min point thickness	0.17			
Insulation Dia(±0.03mm)	0.91			
Twisting lay length(mm)	30 undemeath			
Cabling lay length(mm)	200 undemeath			
Jacket	PVC(Inside)+LD+PE(Outside)			
Average thickness	0.5			
Min point thickness	0.43			
Outer Dia(±1.0mm)	5.1			
Rip cord	YES			
Weight Nom(kg/km)	32			
Colors	Blue-white/blue			
	Orange- white/orange			
	Green- white/Green			
	Brown- white/brown			

Typical Cable Performance							
Freq. (MHz)	RL(dB)	Atten. (dB/100m)	NEXT (dB)	PSELEXT (dB/100m)			
0.722	20.0	1.8	67.0	64.0			
1.0	20.0	2.0	65.3	62.0			
4.0	23.0	4.1	56.3	53.3			
8.0	24.5	5.8	51.8	48.8			
10.0	25.0	6.5	50.3	47.3			
16.0	25.0	8.2	47.3	44.3			
20.0	25.0	9.3	45.8	42.8			
25.0	24.3	10.4	44.3	41.3			
31.25	23.3	11.7	42.9	39.9			
62.5	20.7	17.0	38.4	35.4			
100.0	19.0	22.0	35.3	32.3			

Cat 5e supports data transfer rates of 1,000 Mbps or one gigabit per second. Therefore, Cat 5e cables are sometimes called Gigabit Ethernet cables. Cat 5e cables operate on the same 100 MHz frequency as Cat 5 and have the same maximum length of 100 meters.

Application

• This 4-pair Category5e cable is tested for power Sum NEXT, ELFEXT, Delay Skew. Propagation Delay and any other criteria as specified in the emerging standard Applications can include Voice, ISDN, ATM155 and 622Mbps, 100Mbps TPDDI, Fast and Gigabit Ethernet, Shielding protects against EMI/RFI interference.

Standard

All Category 5e Requirements as Per ANSI/TIA/EIAISO/IEC, and CENELEC EN Standards:

- ANSI/TIA/EIA 568-B.2 CAT.5e
- 2nd Edition ISO/IEC 11801 Class D
- CENELEC EN 50173-1
- IEC 61156-5, CENELEC EN 50288-2-1 Horizontal Cable
- Flame Retardancy is Verified According to IEC 60332-1

Electrical Performance(100 MHz)

- Low Frequency
- Dielectric Strength: 2.5kVdc-2 second
- DC Loop Resistance: Max 19ohm/100m
- Resistance Unbalance: Max 2%
- Insulation Resistance: Min 500 Mohm-km @100-500Vt
- Capacitance Unbalance (pair to ground): Max1600pF/100m







Cat 5e supports data transfer rates of 1,000 Mbps or one gigabit per second. Therefore, Cat 5e cables are sometimes called Gigabit Ethernet cables. Cat 5e cables operate on the same 100 MHz frequency as Cat 5 and have the same maximum length of 100 meters.

Application

- Standard Length: 305m per Box
- Application: this 2-pair Category 3 cable
- Application can include: POST, Ti and T1 Fractional ISDN basic Rate.
- 4/16 Mbps Token ring.10 Base-t (IEE 802.3)
- 100Base-T4 (fast Ethernet)

Electrical Performance				
1.0-16.0 MHz Impendance(ohms)	16±15			
Pair to Ground Capacitance Unbalance(PF/100m)	330 (MAX)			
Conductor DC resistance 20%(ohms/km)	<93.8			
Resistance Unbalance(%)	5			
Test object	Jacket			
Test Material	PVC			
Before Tensile strength(Mpa)	≥13.8			
Aging condition(C xhrs)	100×240			
After Tensile strength(Mpa)	≥85% of unaged			
Aging Elongation(%)	≥50% of naged			
Cold bend(-20±2°C×4 hrs)	No crock			

Typical Cable Performance						
Freq. (MHz)	SRL(dB)	Atten. (dB/100m)	NEXT (dB)			
0.722	12.0	2.2	43.0			
1.0	12.0	2.6	41.0			
4.0	12.0	5.6	32.0			
8.0	12.0	8.5	28.0			
10.0	12.0	9.7	26.0			
16.0	10.0	13.1	23.0			

Cable Data				
Conductor	Solid bare copper			
AWG	24			
Conductor Diameter (mm)	0.5			
Insulation	PE			
Average thickness(±0.03mm)	0.18			
Min point thickness	0.15			
Insulation Dia(±0.03mm)	0.91			
Twisting lay length(mm)	80 undemeath			
Cabling lay length(mm)	500 undemeath			
Jacket	PVC			
Average thickness	0.8			
Min point thickness	0.7			
Outer Dia(±1.0mm)	12.5			
Rip cord	YES			
Weight Nom(kg/km)	32			
Colors	Blue-white/blue			
	Orange- white/orange			
	Green- white/Green			
	Brown- white/brown			



Along with the Market requirements, the users' satisfaction of the products is not only on its test performance but gradually turns to unit price and aesthetics of the product. Furthermore, because of the price of international non ferrous metal growing up so much in recent years, the cost for all copper products rise continually. At last, manufactures have to increase the EXW price for the patchcord substantially. And then the flat patch cord was born under the nowadays market pressure. Flat network patchcord is good-looking and easy to carry. Besides, the sortingway of the flat cable reduce the transmission of internal crosstalk greatly. And it has solved the problem that it is difficult to eliminate the crosstalk for round patch cord. The most important is that it applied the 32 AWG copper conductor, but it can fully meet the various transmission standards. Compared with the previous 24AWG conductorrequirements, flat cable has saved most of the copper. No matter in terms of the cost or environmental protection, flatpatch cord has made a big progress. At present, flat patch cable of CATSE /CAT6 / CA-T6A and UTP/FTP with different color and length are available in our factory. And all of these cables can meet various industries and international standards.

Electronical Performance

- Impedance: 100ohms+15%, MHz to 600MHz
- Transport delay: 536ns/100m max. @ 250MHz
- Delay offset: 45ns max
- Conductor resistance: 66.58 ohms max/km
- Capacitance: 5.6NF max/100m
- DC Resistance: = 7.550
- Pressure: 300 volts AC DC
- Bend radius: 5mm
- Operating temperature: -20°C to 60 °c range
- Storage temperature: -20°C to 80°C between
- Conductor: 32AWG bare copper
- Jacket: PVC/LSZH

Application

- 100BASE-T (IEEE802.3) and 1000BASE-T (IEEE 802.3) network
- Connect with RJ45 8P8C connector
- Strong anti-jamming ability
- With injection moulding boot protection, Durable
- Slimmer diameters, saves occupied space
- Light weight, easy to bend, easy to install
- Independent and flexible and fit for the structured cabling solution



Description

Our Category 6A cords are manufactured and 100% tested to the strictest component level performance requirements as specified in ANSI/TIA-568-C.2. Assembledin a controlled environment using advanced manufacturing techniques to insure consistent performance these patch-cords provide exceptional headroom when mated with our Category 6A connecting hardware. Every pair is separately shielded a' \in " pairs in metal foil (PIMF). The twisted pairs are covered with a braided screen (S/FTP) which guarantees outstanding shielding properties.

Features

- Screening by individual foil per pair and by overall braid for best EMC performance
- Superior cable flexibility from stranded corese
- Boot maintains correct bend radius to ensure maximum
- Connector RJ45, 50µ inch gold plating
- RoHS compliant

Application

- 10GBASE-T Ethernet
- 100BASE-TX Fast Ethernet
- 1000BASE-TX/1000BASE-T Gigabit Ethernet
- 10BASE-TX Ethernet

Structured Cabling Products



Description

Our CAT6 cables will handle bandwidth intensive applications up to 550 Mhz and beyond. Constructed with high-quality cable and a shortened body plug, the molded, snag-free boot prevent sun wanted cable snags during installation and provides strain-relief. The Snagless Patch Cables are available in a variety of colors to easily color-code your network installation.

Features

- Stranded, 24-AWG copper wire, RJ-45 connectors, 4-pair, T568B, PVC or LSZH jacket, straight-pinned.
- Improved attenuation provides cleaner data and video transmissions.
- For 1000BASE-T, 100BASE-TX, 155-Mbps ATM, and other high-speed applications.
- Designed For: Network Adapters, Hubs, Switches, Routers, DSL/Cable Modems, Patch Panels.
- Standard: Category 5 & Category 6 TIA/EIA- 568-B-2.1draft 9
- Certificated comply with CE & RoHS



Cat6A Keystone Jack



Cat3 Keystone Jack



Cat5e/Cat6 FTP Keystone Jack





Description

The new die-casting provides Category 6A system performance and user friendly installation features. A shielded is available to maximum protection from EMI/RFI interference, the compact size provides high-density connectivity in the work area and telecommunication room.

Features

Available in Cat6A,T568A/B wiring schemes, meet or exceed TIA/EIA Cat6A requirements; 180 degree keystone jack, Shielding protects against EMI/RFI interference! Compact jack design, 8 positions and 8 conductors, Contact: Phosphor bronze, phosphor bronze with 30µ" goldplate; Accept 22-26 AWG solid with a insulation diameter of 0.4-0.6 mm; Easy to be terminated, extremely low attenuation loss and high return loss. Certification: RoHS &CE.





Cat6 UTP Keystone Jack

Cat5e UTP Keystone Jack











UK Style





	US Style	
5		
5	 	

Description

-

There are UK & US style wall face plate are available. Both of them are made from high-impact ABS plastic, making for years of aurable use. Each delivers high speed of for all your high-speed applications to the desktop. Perfectly blends into the decor of your home or office. Protects and hides your network connections. Accepts all keystone inserts, standard 110 type IDC termination makes installation fast and easy.

Features

- UK & US style
- 1 port, 2 port, 3 port & 4 port face plate
- Designed for Cat5E or Cat6 performance and meet EIA/TIA specifications
- Fit for RJ45 keystone jack outlet plate
- Packing includes the modular face plate and two mounting screws for installation
- Material: PC or ABS
- Color: White or lvory



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