

# Access to High Speed Ethernet Category 6A+ Cabling Solutions



# 10G Standard

2006, standard IEEE 802.3an is ratified to provide 10 Gbit/s connections over unshielded or shielded twisted pair cables, and specified transmission characteristics up to 500MHz.

This requires Category 6A or better balanced twisted pair cables comply with ISO 11801 amendment 2 or ANSI/TIA-568-C.2 to support 10GBASE-T up to distances of 100 m.

So far, 10G BASE-T Ethernet is the fastest LAN connection path over copper communication solutions.

### 10G Bandwidth

10GBASE-T system requires the cable works as full duplex mode, which means use 4 pairs for simultaneous transmission in both directions, and to support 100m data transmission, it must use Category 6A 500MHz at a minimum.

Premium Line Category 6A<sup>+</sup> 1000MHz communication cable, with the significant higher bandwidth to provide bigger quantity of "data path", definitely guarantees you stable and excellent practical 10G network and capable to support higher speed application.

For the future building data network upgrade, Premium Line 1000MHz cable is special design to assure the bandwidth to be compatible with the faster and faster network change and development. And it will be also make the system upgrade project easy and comfortable as only need to change the module of both side for the permanent links.

# "MADE IN GERMANY" Solution

As Europe now is leading edge of 10 G shielded solutions, Premium Line Systems GmbH combine strength of own experienced R&D team and special know-how market wise to provide a *MADE IN GERMANY* Category 6A<sup>+</sup> shielded solution. High quality assurance as always the German quality products perform!



# Premium Line CATEGORY 6A+ CABLING SOLUTIONS

Installation Cable

Category 6A<sup>+</sup> S/FTP 1000MHz

Patch Cord

Category 6A+ S/FTP Patch Cord

Keystone Jack

Category 6A<sup>+</sup> 180° Shielded Die-casting Keystone Jack

Modular German Outlet



# CATEGORY 6A+ CABLING SOLUTIONS

Insulation

Operation

Temperature Installation

Temperature Storage

Temperature

Tinned copper braiding

Mechanical & Environmental Characteristics

≥ 6D, without load

≥8D, with load

-20°C~+60°C

0°C~+50°C

-30°C~+60°C



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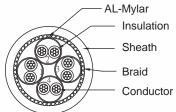


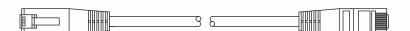
# **Patch Cord**

# Category 6A+ S/FTP Patch Cord

Premium Line Category 6A+ S/FTP patch cord is aimed to apply for high end project and Telecoms applications. Its "Class EA patch cord" level pass performance guarantees the complete Class EA 10G link according to latest ISO/IEC 11801 AMD:2 2010. And it's also Ideal jumpers for cross-connect/interconnect.







# Construction

Material / size	Bare Copper / 26 AWG		
Material	Foam-Skin PE		
Aluminum-Mylar	An aluminum foil Screen Around Each Pair		
Material	Tinned Copper		
Coverage	Nom. 48%		
Material	LSOH		
Diameter	5.7± 0.3 mm		
	Material Aluminum-Mylar Material Coverage Material		

# Category 6A+ S/FTP Patch Cord

Length	Grey	Green	Blue	Red	Yellow
0.5 m	188420055	188420056	188420054	188420053	188420058
1 m	188420105	188420106	188420104	188420103	188420108
2m	188420205	188420206	188420204	188420203	188420208
3 m	188420305	188420306	188420304	188420303	188420308
5 m	188420505	188420506	188420504	188420503	188420508
7 m	188420705	188420706	188420704	188420703	188420708
10 m	188421005	188421006	188421004	188421003	188421008

# **Installation Cable**

Category 6A+ S/FTP 1000MHz

## Standards:

- ◎ ISO/IEC 2nd Edition Amendment 1.2
- © CENELEC EN 50288-10-1, EN 50288-4-1
- ⊚ ISO/IEC 61156-5 2nd Edition
- ⊚ ISO/IEC 61156-6
- RoHS Compliant

## Application:

- 9 10G BASE-T Ethernet

- ⊚ 100BASE-TX Fast Ethernet
- 10BASE-T Ethernet
- Voice

Construction						
	Conductor	Material / size	Bare Copper / 23 AWG			
	Insulation	Material	Foam-Skin PE			
	Inner-Shield	Aluminum-Mylar	An Aluminum Foil Screen Around Each Pair			
	Braid	Material	Tinned Copper			
	Braid	Coverage	Nom. 48%			
	Chaath	Material	LSOH			
	Sheath	Diameter	7.4± 0.3 mm			

# Bending Radius

	Insulation	Material	Foam-Skin PE
Inner-Shield Aluminum-Mylar		An Aluminum Foil Screen Around Each Pair	
	Braid	Material	Tinned Copper
	Dialu	Coverage	Nom. 48%
	Chaath	Material	LSOH
	Sheath	Diameter	7.4± 0.3 mm

# Electrical Performance

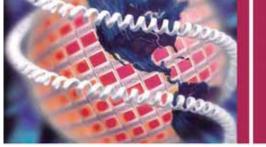
Freq	Insertic	on Loss	NE	XT	PS N	EXT	AC	R-F	PS A	CR-F	Returr	n Loss
(MHz)	(d	B)	(dB/1	00m)	(dl	B)	(d	B)	(dB)		(dB)	
	Nor.	Тур.	Nor.	Тур.	Nor.	Тур.	Nor.	Тур.	Nor.	Тур.	Nor.	Тур.
1.0	2.1	1.7	74.3	100.0	72.3	97.0	67.8	90.0	64.8	87.0	20.0	30.0
4.0	3.8	3.4	65.3	100.0	63.3	97.0	55.8	90.0	52.8	87.0	23.0	33.0
10.0	5.9	5.0	59.3	100.0	57.3	97.0	47.8	90.0	44.8	87.0	25.0	35.0
16.0	7.5	6.4	56.2	100.0	54.2	97.0	43.7	90.0	40.7	87.0	25.0	35.0
20.0	8.4	7.1	54.8	100.0	52.8	97.0	41.8	90.0	38.8	87.0	25.0	35.0
31.25	10.5	9.0	51.9	100.0	49.9	97.0	37.9	90.0	34.9	87.0	23.6	33.6
62.5	15.0	13.0	47.4	100.0	45.4	97.0	31.9	85.0	28.9	82.0	21.5	31.5
100.0	19.1	16.8	44.3	98.0	42.3	95.0	27.8	81.0	24.8	78.0	20.1	30.1
200.0	27.6	23.9	39.8	93.0	37.8	90.0	21.8	77.0	18.8	74.0	18.0	28.0
250.0	31.1	28.5	39.3	92.1	36.3	89.1	19.8	76.0	16.8	73.0	17.3	27.3
300.0	34.3	29.2	37.1	91.0	35.1	88.0	18.3	71.0	15.3	68.0	16.8	27.3
400.0	40.1	33.4	35.3	89.1	33.3	86.1	15.8	68.1	12.8	65.1	15.9	27.3
550.0	47.6	37.2	33.2	87.3	31.2	84.3	13.0	66.2	10.0	63.1	14.9	27.3
600.0	50.0	42.6	32.7	86.1	30.7	83.1	12.3	60.0	9.3	57.0	14.6	27.3
800.0	58.7	48.2	30.8	83.1	28.8	80.1	9.8	52.1	6.8	49.1	13.7	27.3
900.0	62.7	53.8	30.0	82.0	28.0	79.0	8.8	48.0	5.8	45.0	13.4	25.0
1000.0	66.6	57.5	29.3	81.0	27.3	78.0	7.8	46.0	4.8	43.0	13.1	24.0

204442220

# Category 6A+ S/FTP 1000MHz Installation Cable

PART NO.	DESCRIPTION	PACKING SIZE
204442220	Premium Line Category 64  S/ETP Installation Cable 500m real LSOH 1000 MHz	45(O D) v 20 8(H) cm

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# CATEGORY 6A+ CABLING SOLUTIONS

108524010



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# **Modular German Outlet**

Premium Line shutter type modular outlet is in standard German style, finished in 80×80 size. Available to provide RAL9010 and RAL1013 color for option. And also the compatible back box with same color is on your request.





## Modular German Outlet

PART NO.	DESCRIPTION	PACKING SIZE
123212090	2-Port 45° Modular Outlet for Keystone with Shutter, 80x80 mm, RAL 9010	47.5x38.5x26 cm
123212080	2-Port 45° Modular Outlet for Keystone with Shutter, 80×80 mm, RAL 1013	47.5×38.5×26 cm
112003090	Wall Mounted Back Box 80×80×40 mm, Color RAL 9010	43×31×29 cm
112003080	Wall Mounted Back Box 80×80×40 mm, Color RAL 1013	43×31×29 cm

**Keystone Jack**Category 6A+ 180° Shielded Die-casting Keystone Jack

To fully support Class E<sub>∆</sub> link for 10G applications, Premium Line Cat.6A<sup>+</sup> keystone jack achieves reembedded performance definition according to ISO/IEC 11801 AMD:2 2010. The module is in tooless design for quick operation and also upgrades its construction for easy-install. And T568A&B wiring methods are both available.

- ® Real ISO/IEC 11801 compliant module
- ® All condition excellent performance to support your LAN access
- ® Easy and quickly installation, reliable contact & connectivity
- Standard Rj45 socket with springs for loop grounding noise transferring
- ® Nickel plated over zinc alloy fully shield housing, reliable mechanical structure
- ® Finish product in compact design, standard size fits with worldwide style outlets
- Be compatible with Premium Line distinct modular patch panel for datacenter or cross connect use

# **Physical Characteristics**

Jack Phosphor bronze, 50µ inch gold plating over

nickel in contact area

IDC 100µ inch nickel plated over phosphor bronze Shielded Cover 50~60µ inch nickel plated over zinc alloy

# **Electrical Characteristics**

Dielectric Strength 1000V RMS for 1min 1.5Amp Max. Current Rating Insulation Resistance 10MΩ Min. Contact Resistance 2mΩ per contact

Temperature Range -10°C to 60°C

Humidity 10%~90%; non condensing

## **Applications**

- ⊚ 10GBASE-T Ethernet
- ® 1000BASE-Tx Gigabit Ethernet
- ® 1000BASE-T Gigabit Ethernet
- ⊚ 100BASE-Tx Fast Ethernet.
- ⊚ 10BASE-T Ethernet.
- ® Voice, Video and other applications.

All the products are verified to the electrical characteristics required in the directive.

Category 6A	160 Shleided Die-Casting Keystone Jack	
PART NO.	DESCRIPTION	PACKING SIZE
108524010	Premium Line Category 64 <sup>+</sup> 180° Shielded Die-casting Keystone, lack	53 8v35 2v27cm

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