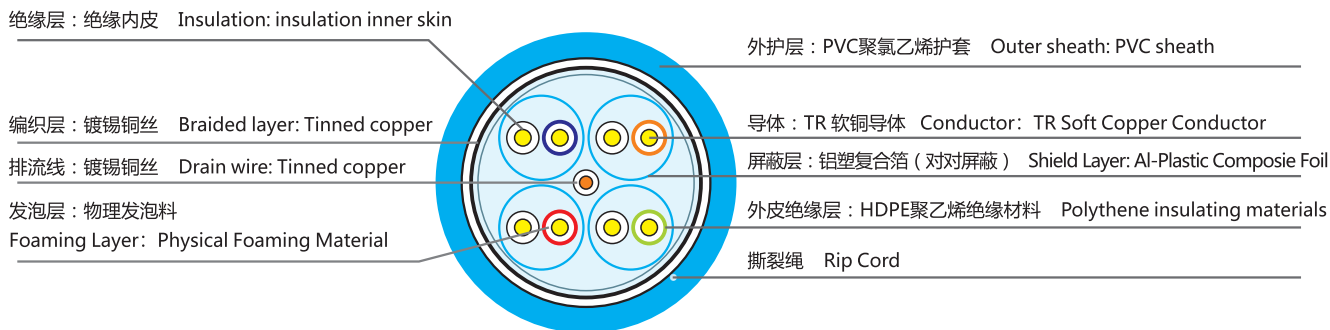


# Cat.7 与Cat.7a 数据缆

## Cat.7 and Cat.7a Data Cable



### 产品结构示意图 Cross-sectional view



### 产品特点 Characteristics

- 支持1000BASE-T/TX, 10G-BASE-T等多种协议应用  
Support 1000BASE-T/TX, 10G-BASE-T and other Protocols Application
- 同时提供CATV、模拟音频、高速数据通信信道  
Provide CATV, Audio, and High Speed Data Communication Channel simultaneously
- 无线对间串音，安全性高  
No Crosstalk between Wire-pair
- 电磁兼容性好  
High EMC
- 灵活的、具有综合成本优势的数据中心布线应用  
Flexible Data Center Cabling Application with Comprehensive Cost Advantage

### 技术特性和参数 Technical specifications

数字缆的电气性能 Electrical Performance of Digital Cable				
序号 No.	检验项目 Testing Items	单位 Unit	标准要求 Standard	
1	单根导线直流电阻+20°C(最大值) Single conductor DCR +20°C (MAX)	Ω/100m	α ≤9.50	
2	线对直流电阻不平衡+20°C (最大值) Conductor pair DCR unbalance +20°C (MAX)	线对内两导体间 between conductors of pairs	≤2.0	
		线对与线对间 Between pairs	≤4.0	
3	介电强度(DC,1min或2s) Dielectric Strength (DC, 1 min or 2s)		1 min	2s
		导线间 Between conductors	1.0	2.5
		导线与屏蔽间 Between conductor and screen	2.5	6.3
4	绝缘电阻 (最小值) +20°C C 100~00V nsulation Resistance(Minimum)+20°C DC 100~500V	每根导线与其余线芯或每根导线与其余芯线接屏蔽后的绝缘电阻 The insulation resistance of each wire is connected with the other wire core or each wire and the other shielded wire	MΩ·km	≥5000
5	线对对地电容不平衡, 最大值(0.8kHz或1kHz) pairs capacitance unbalance MAX(0.8kHz或1kHz)	pF/100m	≤160	

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6	转移阻抗最大值 Transfer impedance MAX		mΩ/m	
	频率 1MHz (7、7A类) Frequency 1MHz (Cat 7/7A)			≤50
	频率 10MHz (7、7A类) Frequency 10MHz (Cat 7/7A)			≤100
	频率 30MHz (7、7A类) Frequency 30MHz (Cat 7/7A)			≤300
	频率 100MHz (7、7A类) Frequency 100MHz (Cat 7/7A)			≤1000
7	耦合衰减, 最小值(此项目适针对屏蔽线缆) Coupling attenuation, Minimum (this item is applied to screened cable)			
	7类 Cat 7	30MHz ~ 100MHz		≥55
		100MHz ~ 600MHz		≥55-20×lg(f/100)
	7A类 Cat 7A	30MHz ~ 100MHz		≥55
100MHz ~ 1000MHz			≥55-20×lg(f/100)	
8	绝缘芯线断、混线 Insulating conductor broken, mixed up			应无断混线 No broken, no mixed up
9	屏蔽连续性 Shield continuity			在电气性能上连续 Continue in electrical performance

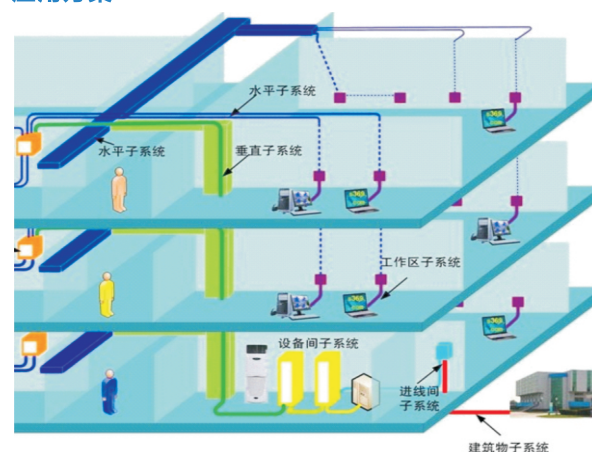
频率 Frequency (MHz)	衰减 (最大值) Attenuation (MAX)		近端串音衰减 (最小值) Near-end Crosstalk Attenuation (MIN)		等电平远端串音衰减 (最小值) Equal Level Far-end Crosstalk Attenuation (MIN)	
	7类 Cat 7	7A类 Cat 7A	7类 Cat 7	7A类 Cat 7A	7类 Cat 7	7A类 Cat 7A
4.00	3.7	3.7	78.0	78.0	78.0	78.0
8.00	5.2	5.2	78.0	78.0	77.2	77.2
10.00	5.9	5.8	78.0	78.0	75.3	75.3
16.00	7.4	7.3	78.0	78.0	71.2	71.2
20.00	8.3	8.2	78.0	78.0	69.3	69.3
25.00	9.3	9.2	78.0	78.0	67.3	67.3
31.25	10.4	10.3	78.0	78.0	65.4	65.4
62.50	14.9	14.6	75.5	78.0	59.4	59.4
100.00	19.0	18.5	72.4	75.4	55.3	55.3
200.00	27.5	26.5	67.9	70.9	49.3	49.3
250.00	31.0	29.7	66.4	69.4	47.3	47.3
300.00	34.2	32.7	65.2	68.2	45.8	45.8
400.00	40.0	38.0	63.4	66.4	43.3	43.3
500.00	45.3	42.8	61.9	64.9	41.3	41.3
600.00	50.1	47.1	60.7	63.7	39.7	39.7
1000.00		61.9		60.4		35.3

型号规格 Specification	导体直径 (mm) Conductor diameter (mm)	绝缘外径 (mm) Insulation outside diameter (mm)	成缆外径 (mm) Cabling outside diameter (mm)	电缆最大外径 (mm) Cable Max outside diameter (mm)
CAT 7	0.575±0.003	1.35±0.01	6.8±0.2	≤9
CAT 7A	0.575±0.003	1.35±0.01	6.8±0.2	≤9

- 7/7A类网络电缆简明的产品结构尺寸参数的介绍  
Brief introduction of production structure and dimension parameter for Cat 7/7A network cable



### 应用方案 Solution



- Cat.7 与Cat.7a数据缆可以广泛的使用在综合布线系统中。  
Cat 7 and 7A cables can be widely used in comprehensive cabling system.