



## Category 7 Cables

### □ Applications:

155MbpsATM, 622MbpsATM, 1000Base-T, 10GBase-T

### □ Standards:

IEC61156-5 CAT7, EN 50288-4-1

### □ Product Construction Matrix:

	U/FTP	S/FTP
Conductor	22/23AWG Solid Plain Copper	22/23AWG Solid Plain Copper
Insulation	PE	PE
Screen	Individual Aluminum Tape Screen	Individual Aluminum Tape Screen & Overall Copper Wire Braid
Drain Wire	7/0.2 mm	Nil
Jacket	PE/PVC/LSF/LSZH/LSFROH	PE/PVC/LSF/LSZH/LSFROH

Remark: PE- Polyethylene; PVC- Polyvinyl Chloride; LSF- Low Smoke & Fume; LSZH- Low Smoke Zero Halogen; LSFROH-Low Smoke Flame Retardant Zero Halogen (to IEC60332-3C); PVC can be classified as CMX, CM, CMR and CMP

### □ Working Frequency:

1-600MHz

### □ Technical Parameters:

- ☆ Characteristic Impedance:  $100 \pm 15\Omega$  (1-250MHz);  $100 \pm 22\Omega$  (100-500Mhz)
- ☆ Nominal Velocity of Propagation (NVP): 79%
- ☆ Maximum Mutual Capacitance: 5.6nF/100m
- ☆ Maximum DC Resistance: 5.9 $\Omega$ /100m (22AWG); 7.5 $\Omega$ /100m (23AWG)
- ☆ Maximum Resistance Unbalance: 5%
- ☆ Maximum Propagation Delay Skew: 30ns/100m (1-125MHz)
- ☆ Maximum Propagation Delay: 536 ns/100m@100MHz
- ☆ Minimum Bending radius: 10 x Overall Diameter
- ☆ Voltage Rating: 60V rms
- ☆ Maximum Pulling load: 80N
- ☆ Working Temperature: -20°C ~ +60°C
- ☆ Storage Temperature: -5°C ~ +50°C
- ☆ Flame Retardancy: UL 1581 (CM Jacket); UL 1666 (CMR Jacket ); UL 910 (CMP Jacket); IEC 60332-1 (FRPVC & LSZH Jacket); IEC 60332-1 and IEC 60332-3C (LSFROH Jacket)

### □ Product Categories:

Construction	Conductor Diameter (mm)	Diameter Over Insulation (mm)	Pairs	Screen	Overall Diameter (mm)	Jacket
S/FTP	0.57/0.64	1.02	4	Individual Aluminum Tape Screen & Overall Copper Wire Braid	8.4/9.1	PVC/LSZH
S/FTP	0.57/0.64	1.02	4	Individual Aluminum Tape Screen & Overall Copper Wire Braid	8.4/9.1	LSFROH
U/FTP	0.57/0.64	1.02	4	Individual Aluminum Tape Screen	7.5/8.5	PVC/LSZH
U/FTP	0.57/0.64	1.02	4	Individual Aluminum Tape Screen	7.5/8.5	LSFROH

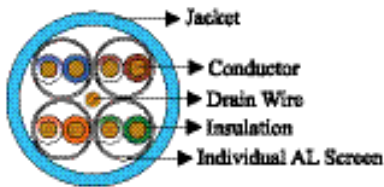


### □ Product Highlights:

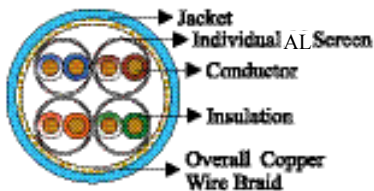
- ☆ Provide excellent bandwidth beyond 600 MHz.
- ☆ Support 10 Gigabit Ethernet application.
- ☆ Meet the strict flame retardancy and environmental requirements in Europe and US.
- ☆ Different jacket materials available for choice.

### □ Transmission Properties:

FREQ (MHz)	NEXT (dB/100m) Minimum Value/ Typical Value/ Standard Value	IL (dB/100m)	RL (dB/100m) Minimum Value/ Typical Value/ Standard Value	ACR (dB/100m) Minimum Value/ Typical Value/ Standard Value	PP ELFEXT (dB/100m) Minimum Value/ Typical Value/ Standard Value	PSNEXT (dB/100m) Minimum Value/ Typical Value/ Standard Value	PSACR (dB/100m) Minimum Value/ Typical Value/ Standard Value	PSELFEXT (dB/100m) Minimum Value/ Typical Value/ Standard Value
1	90.0/100.0/80.0	2.0	20.0/23.0/20.0	88.0/98.0/78.0	85.0/90.0/80.0	87.0/97.0/77.0	85.0/95.0/75.0	82.0/87.0/77.0
4	90.0/100.0/80.0	3.6	23.0/26.0/23.0	86.4/96.0/76.4	85.0/90.0/80.0	87.0/97.0/77.0	83.4/93.0/73.4	82.0/87.0/77.0
10	90.0/100.0/80.0	5.7	25.0/28.0/25.0	84.3/94.0/74.3	79.0/90.0/74.0	87.0/97.0/77.0	81.3/91.0/71.3	76.0/87.0/71.0
16	90.0/100.0/80.0	7.2	25.0/28.0/25.0	83.3/92.0/72.8	74.9/90.0/69.9	87.0/97.0/77.0	80.3/89.0/69.8	71.9/87.0/66.9
20	90.0/100.0/80.0	8.1	25.0/28.0/25.0	82.5/91.0/71.9	73.0/90.0/68.0	87.0/97.0/77.0	79.5/88.0/68.9	70.0/87.0/65.0
31.25	90.0/100.0/80.0	10.1	23.6/26.0/23.6	80.0/90.0/69.9	69.1/90.0/64.1	87.0/97.0/77.0	77.0/87.0/66.9	66.1/87.0/61.1
62.5	90.0/100.0/75.5	14.5	21.5/24.0/21.5	76.0/85.0/61.0	63.1/85.0/58.1	80.0/97.0/72.5	73.0/82.0/58.0	60.1/82.0/55.1
100	90.0/100.0/72.4	18.5	20.1/23.0/20.1	72.5/75.0/53.9	59.0/80.0/54.0	87.0/97.0/69.4	69.5/72.0/50.9	56.0/77.0/51.0
200	90.0/100.0/67.9	26.8	18.0/23.0/18.0	65.0/70.0/41.1	53.0/75.0/78.0	87.0/97.0/64.9	62.0/67.0/38.1	50.0/72.0/45.0
250	95.0/90.0/66.5	30.2	17.3/23.0/17.3	50.0/58.0/36.3	51.0/70.0/46.0	92.0/87.0/63.5	47.0/55.0/33.3	48.0/67.0/43.0
300	95.0/90.0/65.3	33.3	17.3/23.0/17.3	59.0/55.0/32.0	49.5/66.0/44.5	92.0/87.0/63.3	56.0/52.0/29.0	46.5/63.0/41.5
600	80.0/90.0/60.8	48.9	17.3/20.0/17.3	32.0/50.0/11.9	43.4/60.0/38.4	77.0/87.0/57.8	29.0/47.0/8.9	40.4/57.0/35.4



Cat7 U/FTP



Cat7 S/FTP