

Category 8 Cables Stranded Conductor

□ Applications:

10Base-T, 100Base-T, 1000Base-T, 10GBase-T, 40GBase-T

□ Standards:

ISO / IEC 11801, EN50173, IEC 61156-5; IEC 61156-9

□ Product Construction:

	U/FTP	S/FTP
Conductor	26/28/30/32AWG Stranded Plain Copper	26/28/30/32AWG Stranded Plain Copper
Insulation	Foam-Skin PE	Foam-Skin PE
Screen	Individual Aluminum Tape Screen	Individual Aluminum Tape Screen & Copper Wire Braid
Drain Wire	7/0.1 mm	Nil
Jacket	PE/PVC/LSF/LSZH/LSFROH	PE/PVC/LSF/LSZH/LSFROH

Outer nylon braid for option

□ Working Frequency:

1-2000MHz

□ Technical Parameters:

- ☆ Characteristic Impedance: $100 \pm 5\Omega$ (100MHz)
- ☆ Nominal Velocity of Propagation (NVP): 73%
- ☆ Maximum Mutual Capacitance: 4.3nF/100m at 800Hz
- ☆ Maximum Capacitance Unbalance: 120pF/100m
- ☆ Maximum DC Resistance: $13\Omega/100m$
- ☆ Maximum Resistance Unbalance: 1%
- ☆ Maximum Propagation Delay Skew: 20ns/100m
- ☆ Minimum Bending radius: 4 x O.D. for installation; 8 x O.D. for installed
- ☆ Maximum Pulling load: 340N
- ☆ Working Temperature: $-20^{\circ}\text{C} \sim +60^{\circ}\text{C}$
- ☆ Storage Temperature: $0^{\circ}\text{C} \sim +50^{\circ}\text{C}$
- ☆ Flame Retardancy:
 - UL 1581 (CM Jacket); UL 1666 (CMR Jacket);
 - UL 910 (CMP Jacket); IEC 60332-1 (FRPVC & LSZH Jacket);
 - IEC 60332-1 & IEC 60332-3C (LSFROH Jacket)

□ Product Categories:

U/FTP Round

Construction	Conductor No./Strand Dia. (mm)	Diameter Over Insulation (mm)	Pairs	Screen	Approx. O.D. (mm)	Jacket
U/FTP 26AWG	7/0.16	0.88	4	Individual Aluminum Tape Screen	5.8	PVC/LSZH/LSFROH
U/FTP 28AWG	7/0.13	0.79	4	Individual Aluminum Tape Screen	5.4	PVC/LSZH/LSFROH
U/FTP 30AWG	7/0.10	0.70	4	Individual Aluminum Tape Screen	5.0	PVC/LSZH/LSFROH
U/FTP 32AWG	7/0.08	0.64	4	Individual Aluminum Tape Screen	4.7	PVC/LSZH/LSFROH



U/FTP Flat

Construction	Conductor No./Strand Dia. (mm)	Diameter Over Insulation (mm)	Pairs	Screen	Approx. O.D. (mm)	Jacket
S/FTP 26AWG	7/0.16	0.88	4	Individual Aluminum Tape Screen & Overall Copper Wire Braid	3.0*9.0	PVC/LSZH/LSFROH
S/FTP 26AWG Nylon Braid	7/0.16	0.88	4	Individual Aluminum Tape Screen & Overall Copper Wire Braid	3.5*9.6	PVC/LSZH/LSFROH
S/FTP 30AWG	7/0.10	0.70	4	Individual Aluminum Tape Screen & Overall Copper Wire Braid	2.4*7.4	PVC/LSZH/LSFROH
S/FTP 30AWG Nylon Braid	7/0.10	0.70	4	Individual Aluminum Tape Screen & Overall Copper Wire Braid	2.8*8.2	PVC/LSZH/LSFROH

S/FTP Round

Construction	Conductor No./Strand Dia. (mm)	Diameter Over Insulation (mm)	Pairs	Screen	Approx. O.D. (mm)	Jacket
S/FTP 26AWG	7/0.16	0.88	4	Individual Aluminum Tape Screen & Overall Copper Wire Braid	6.3	PVC/LSZH/LSFROH
S/FTP 28AWG	7/0.13	0.79	4	Individual Aluminum Tape Screen & Overall Copper Wire Braid	5.9	PVC/LSZH/LSFROH
S/FTP 30AWG	7/0.10	0.70	4	Individual Aluminum Tape Screen & Overall Copper Wire Braid	5.4	PVC/LSZH/LSFROH
S/FTP 32AWG	7/0.08	0.64	4	Individual Aluminum Tape Screen & Overall Copper Wire Braid	4.8	PVC/LSZH/LSFROH

□ Product Highlights:

- ☆ Provide excellent NEXT and attenuation performance beyond 2000 MHz.
- ☆ Support 25/40 Gigabit Ethernet application.
- ☆ Meet the strict flame retardancy and environmental requirements in Europe and US.
- ☆ Different jacket materials available for choice.
- ☆ Special purpose cables can be offered according to customer request.
- ☆ Different jacket color options available for choice.

□ S/FTP Cat 8 Transmission Properties:

F (MHz)	Attenuation (dB/100m)	NEXT (dB)	ACR (dB/100m)	Return loss (dB)	PS-NEXT (dB)	PS-ACR (dB/100m)	ACR-F (dB/100m)	PS-ACR-F (dB/100m)
1	1,8	102	100	29	99	97	100	97
4	3,0	102	99	33	99	96	98	95
10	4,9	102	97	32	99	94	97	94
16	6,3	102	96	32	99	93	97	84
20	7,0	102	95	31	99	92	96	93
31.25	8,9	100	91	31	97	88	95	92
62.50	12,5	100	87	30	97	84	94	91
100	16,1	100	84	27	97	81	90	87
155	18,0	99	81	26	96	78	88	85
200	19,1	98	79	24	95	76	84	81
250	24,2	97	73	22	94	70	83	80
300	28,2	97	71	22	94	68	81	78
600	48,0	96	48	22	93	45	80	77
1000	55,8	89	33	20	86	30	75	72
1200	58,6	86	27	20	83	24	73	70
1500	67,5	83	15	19	80	12	66	63
1600	68,4	79	11	18	76	8	65	62
2000	78,1	75	-3	18	72	-6	59	56