



Cat8 Riser Cable

Dual Shield Twisted Pair (S/FTP)
| Solid Bare Copper | 500FT

tscables.com
(301) 836-1195

Our Category 8.1 40G (S/FTP) high performance data communications cable is ideal for a large data driven network installation. This cable is designed for short runs indoor up to 30 Meters in length. Our Category 8.1 cable has 4 pairs of 23AWG solid bare copper conductors, individually shielded pairs with an overall TC braiding. This cable has a CMR Riser fire rating and supplied on a 500ft & 1000ft wooden spool, which is marked in descending order so you always know how much cable is left.

Applications

- 25/40GBASE-T
- Rackcenters Topologies Supported:
- Top-of-Rack (ToR)
- End-of-Row (EoR)
- Middle-of-Row (MoR)

Compliance

- CAT8 Version 8.1
- ISO/IEC 11801;IEC61156, YD/T1019
- TIA/EIA-568-C.2-1 Category 8.1
- RoHS Compliance For The Requirement Of European Union Issued Directive 2002/95/EC

Physical Characteristics

- Conductor Size: 23 AWG
- Conductor Material: Solid Bare Copper
- Insulation Material: Foam Polyethylene
- Insulation Diameter: 1.37 mm
- Number Of Conductors: 8 Conductors / 4 Pairs
- Inner Pair Shielding: AL/Mylar
- Outer Shield Material: TC Braiding
- TC Braiding Coverage: 60%
- Outer Jacket Diameter: 7.8mm
- Outer Jacket Rip Cord: No
- Outer Jacket Material: PVC

CAT 8



Technical Diagram

Available Jacket Colors

- Blue SKU: TS-SFRBC/8-BL 500ft Length
- White SKU: TS-SFRBC/8-WH 500ft Length



Cable Features

- Meets Or Exceeds CAT 8.1 T568-C.2-1 Standards
- Outer Jacket is CMR Fire Rated
- Easy To Use Wooden Spool
- Extra Headroom Provides Room For Growth
- Low Attenuation And Power-Sum Crosstalk

Construction Facts

- Cable Has High Density Polyethylene Insulation
- AL Shielding Is Used To Help Eliminate Interference

Cable Put-Ups:

Cable is supplied in 500ft and 1000ft increments on a wooden spool.

CAT 8.1 40Gig Solid Bulk Cable Electrical Specifications

Frequency MHz (Maximum)	ATT dB/30 m (98.4 ft.) (Maximum)	ACRF dB/30 m (98.4 ft.) (Maximum)	PSACRF dB/30 m (98.4 ft.) (Maximum)	NEXT dB/30 m (98.4 ft.) (Minimum)	PS-NEXT dB/30 m (98.4 ft.) (Minimum)	ELFEXT dB/30 m (98.4 ft.) (Minimum)	PS-ELFEXT dB/30 m (98.4 ft.) (Minimum)	Return Loss dB (Minimum)
1.0	3.0	65.0	62.0	65.0	62.0	N/A	N/A	19.0
4.0	3.0	59.9	56.9	63.8	60.5	N/A	N/A	19.0
8.0	3.0	53.9	50.9	58.9	55.6	N/A	N/A	19.0
10.0	3.0	52.0	49.0	57.3	54.0	N/A	N/A	19.0
16.0	3.0	47.9	44.9	53.9	50.6	N/A	N/A	18.0
20.0	3.0	45.9	42.9	52.3	49.0	N/A	N/A	17.5
25	3.2	44.0	41.0	50.7	47.3	N/A	N/A	17.0
31.25	3.6	42.1	39.1	49.1	45.7	N/A	N/A	16.5
62.5	5.1	36.0	33.0	44.0	40.6	N/A	N/A	16.0
100	6.5	32.0	29.0	40.5	37.1	N/A	N/A	16.0
200	9.3	25.9	22.9	35.3	31.9	N/A	N/A	14.3
250	10.4	24.0	21.0	33.6	30.2	N/A	N/A	13.4
300	11.5	22.4	19.4	32.3	28.8	N/A	N/A	12.7
400	13.3	19.9	16.9	30.1	26.6	N/A	N/A	11.6
500	15.0	18.0	15.0	27.9	24.8	N/A	N/A	10.7





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Frequency MHz (Maximum)	ATT dB/30 m (98.4 ft.) (Maximum)	ACRF dB/30 m (98.4 ft.) (Maximum)	DELAY ns/30 m (98.4 ft.) (Minimum)	NEXT dB/30 m (98.4 ft.) (Minimum)	PS-NEXT dB/30 m (98.4 ft.) (Minimum)	ELFEXT dB/30 m (98.4 ft.) (Minimum)	PS-ELFEXT dB/30 m (98.4 ft.) (Minimum)	Return Loss dB (Minimum)
600	16.5	16.4	13.4	25.7	22.7	N/A	N/A	10.0
1000	22.0	12.0	9.0	19.3	16.5	N/A	N/A	8.0
1500	27.7	8.4	5.4	13.9	11.2	N/A	N/A	8.0
2000	32.7	5.9	2.9	9.8	7.3	N/A	N/A	8.0

Pair Color Code Chart

- Pair 1 — White/Blue Stripe & Blue
- Pair 2 — White/Orange Stripe & Orange
- Pair 3 — White/Green Stripe & Green
- Pair 4 — White/Brown Stripe & Brown

Mechanical Characteristics

- Installation Temperature Range: 0°C-60°C
- Operating Temperature Range: -20°C-75°C
- Storage Temperature Range: -20°C-75°C
- Bulk Cable Weight:
 - 28 lbs./ 500FT
 - 54 lbs./ 1000FT
- Max. Recommended Pulling Tension: 400N
- Min. Bend Radius/Minor Axis: 10xOD
- Min. Bend/Installation: 8xOD
- Test Object: Jacket
- Before Tensile Strength: ≥ 10.0 Mpa
 - Aging Elongation: $\geq 125\%$
 - Aging Condition: 100°C x 24hrs x 7Days
- After Tensile Strength: ≥ 8.0
 - Aging Elongation: $\geq 100\%$
 - Cold Bend: No Visible Cracks (-20°±2°x4h)

Electrical Characteristics

- Unbalanced to Ground Capacitance Max: 99 (pF/30m)
- Nominal Velocity of Propagation: 78%
- Maximum Delay: N/A
- Maximum Delay Skew: N/A
- Maximum Conductor DC Resistance: 67.9 (20°C ohmm/km)
- Maximum Operating Voltage - UL: N/A
- Maximum DCR Unbalanced: 5% (@ 20°C)
- Attenuation (Maximum)
 - 16.5dB/30m (98.4 ft.) @ 600MHz
 - 32.7dB/30m (98.4 ft.) @ 2000MHz
- NEXT (Minimum)
 - 25.7dB/30m (98.4 ft.) @ 600MHz
 - 9.8dB/30m (98.4 ft.) @ 2000MHz
- Return Loss (Minimum)
 - 10.0dB/30m (98.4 ft.) @ 600MHz
 - 8.0dB/30m (98.4 ft.) @ 2000MHz

