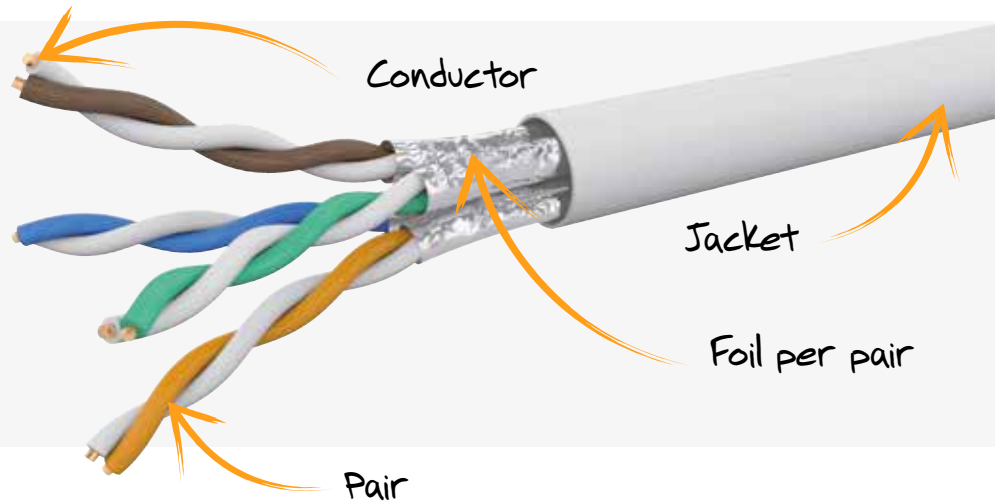




CATEGORY 6A CABLE U/FTP GGM C6AUF23HF

U/FTP LSZH

RAL9003



The GIGAMEDIA CAT6A cable is designed to meet and exceed the performance levels described in the published cabling standards ISO/ IEC 11801, ANSI/TIA 568.2-D, AS/NZS 3080 and AS/NZS 11801 series. The performance headroom provided makes it a reliable and safe choice to support all Class EA applications including 10 Gigabit Ethernet and 100 W remote d.c. powering while better dissipating heat inside bundles when powering over 4 pairs.

The cable consists of 4 pairs of solid insulated copper 23 AWG (0.57 mm) and is individually shielded for enhanced EMI immunity compared to UTP systems and is Low Smoke, Zero Halogen (LSZH) rated. It is designed for use in horizontal cabling situations and supplied in 305 m or 500 m lengths.

PHYSICAL SPECIFICATIONS

- ▶ Rated temperature: 60 °C
- ▶ Product standards certification: IEC 61156-5, ISO 11801
- ▶ Flammability test: IEC 60332-1-2
- ▶ LSZH: IEC 60754-2 & 61034-2
- ▶ Application: horizontal LAN wiring, PoE up to 90 W (IEEE 802.3bt)
- ▶ Reference standard: ANSI/TIA-568.2-D, ISO/IEC 11801, IEC61156-5, AS/NZS 11801.x : 2019

ELECTRICAL CHARACTERISTICS

- ▶ DC resistance: $\leq 9.38 \Omega / 100 \text{ m}$ at 20 °C
- ▶ Resistance unbalance: max. 2 %
- ▶ Nominal Velocity of Propagation (NVP): 78 %
- ▶ Max operating voltage : 72 V d.c
- ▶ Mutual capacitance: nom. 4.6 nf / 100 m at 1 kHz
- ▶ Capacitance unbalance: max. 160 pf / 100 m at 1 kHz

MECHANICAL SPECS

- ▶ Conductor: solid bare copper
- ▶ Gauge (AWG): 23 AWG
- ▶ Conductor: $\varnothing 0.55 \text{ mm}$
- ▶ Foam PE insulated conductors
- ▶ Jacket: LSZH – Flame retardant
- ▶ Jacket cold bend test: pass / no crack
- ▶ Outer diameter ($\pm 0.3 \text{ mm}$): 6.40 mm
- ▶ Bending radius (mm), installation: 4x O.D.
- ▶ Bending radius (mm), operation: 8x O.D.

| PART NUMBER | DESCRIPTION | COLOUR |
|--------------------------|---------------------------------------|--------|
| GGM C6AUF23HFWHT3 | Cable, Cat 6A U/FTP, 305 m LSZH 23AWG | White |
| GGM C6AUF23HFWHT5 | Cable, Cat 6A U/FTP, 500 m LSZH 23AWG | White |
| GGM C6AUF23HFBLT3 | Cable, Cat 6A U/FTP, 305 m LSZH 23AWG | Blue |
| GGM C6AUF23HFBLT5 | Cable, Cat 6A U/FTP, 500 m LSZH 23AWG | Blue |

CAT6A CABLE MINIMUM TRANSMISSION PERFORMANCE

| Frequency (MHz) | Impedance (Ω) | Attenuation max. (dB) | NEXT min. (dB) | PSNEXT min. (dB) | ELFEXT min. (dB) | PSELFEXT. min.(dB) | Frequency (MHz) | Return Loss min. (dB) | Propagation Delay max. (ns) | Delay Skew (ns) Max. |
|--------------------|------------------|--------------------------|-------------------|---------------------|---------------------|-----------------------|--------------------|--------------------------|--------------------------------|-------------------------|
| 4 | 100±15 | 3.8 | 66.3 | 63.3 | 56.0 | 53.0 | 4 | 23.0 | 552.0 | 45 |
| 10 | | 5.9 | 60.3 | 57.3 | 48.0 | 45.0 | 10 | 25.0 | 545.4 | |
| 16 | | 7.5 | 57.2 | 54.2 | 43.9 | 40.9 | 16 | 25.0 | 543.0 | |
| 20 | | 8.4 | 55.8 | 52.8 | 42.0 | 39.0 | 20 | 25.0 | 542.0 | |
| 31.25 | | 10.5 | 52.9 | 49.9 | 38.1 | 35.1 | 31.25 | 23.6 | 540.4 | |
| 62.5 | | 15.0 | 48.4 | 45.4 | 32.1 | 29.1 | 62.5 | 21.5 | 538.6 | |
| 100 | 100 ±22 | 19.1 | 45.3 | 42.3 | 28.0 | 25.0 | 100 | 20.1 | 537.6 | |
| 125 | | 21.5 | 43.8 | 40.8 | 26.1 | 23.1 | 125 | 19.4 | 537.2 | |
| 200 | | 27.6 | 40.8 | 37.8 | 22.0 | 19.0 | 200 | 18.0 | 536.5 | |
| 250 | 100 ±25 | 31.1 | 39.3 | 36.3 | 20.0 | 17.0 | 250 | 17.3 | 536.3 | |
| 500 | | 45.3 | 34.8 | 31.8 | 14.0 | 11.0 | 500 | 17.3 | 535.6 | |