

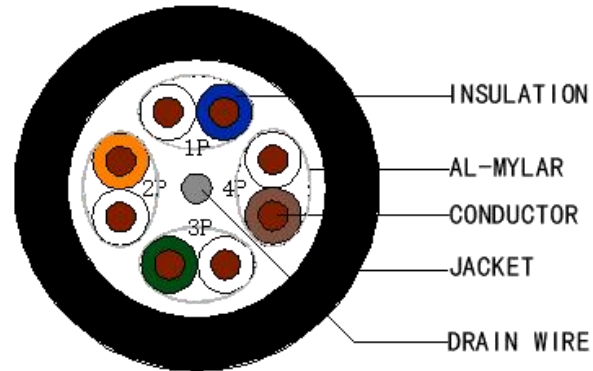
OPTERNET CABLES & WIRES

Category 6A Unscreened / Foiled Twisted Pair Cables (U/FTP CAT.6A)

Model number: CAT6APE23AWGUFTPBC56-5905B

Opternet cables are the best twisted-pair cables in the market for transmitting data over local area networks (LANs). As streaming videos and multimedia over LAN are gaining CAT 6A UFTP SERIES popularity, users demand faster data transmission and reduce waiting time. Opternet cables are ideal for simple, cost effective and high speed transmission performance. They support a higher signal- to-noise ratio, providing better reliability for current applications and higher data rates for future applications.

CAT6A cables reduce crosstalk and system noise. The superior insulation around the 23AWG copper wires at tributes to the increase performance. They cable transmit data at 1000Mbps (1Gigabit per second) with a frequency of 500MHz and suitable for 10BASE -T, 100BASETX fast ethernet and 1000BASE-T / 1000BASE-TX (10 GBase - T).



Construction

Conductor	Size	23AWG
	Material	Bare Copper
	Nom. O.D	0.56 ± 0.01mm
Insulation	Material	FOPE
	Nom. O.D	1.35 ± 0.1 mm
	Average Thickness	0.39 mm
	Color	1P. White & Blue / Blue
		2P. White & Green / Green
3P. White & Orange/ Orange		
4P. White &Brown / Brown		
Filler	Material construction	/
Central Element	O.D	/
Inside-Tape Wrap	Material	AL-MYLAR
Drain Wire	Material	Tinned-Copper
	Nom. O.D	1/0.40 ± 0.01mm
Outside Tape Wrap	Material	/
Braid Material	Material	/
	Nom. O.D	/
Jacket	Outer Sheath	PE
	Minimum Thickness	0.55± 0.05 mm
	Overall Diameter	7.40 ± 0.40 mm
	Color	Optional
Sheath Printing	Color	Black or White
	Marking	

Mechanical Characteristics

Mechanical Characters	Sheath Normal Temp Tensile Strength (Mpa)	≥14.0
	Sheath Normal Temp Elongation (%)	≥600
	Insulation Normal Temp Tensile Strength (Mpa)	≥10.0
	Insulation Normal Temp Elongation (%)	≥200
	Aging Condition (°C×Hrs)	100°C±2°C, 24h, 7d
	Sheath After Aging Tensile Strength (Mpa)	≥9.8
	Sheath After Aging Elongation (%)	≥420
	Temperature Rating (°C)	-20°C — + 75°C
	Cold Bend(- 20±2°C×4h)	8×Cable O.D., No visible cracks

Transfer Characteristics

Passed Fluke Permanent Link Test 90m

MHZ	RL ≥dB	ATT ≤dB	NEXT ≥dB	ACRF ≥dB	PS NEXT dB	PS ACRF dB
1	19.1	3.0	65.0	64.2	62.0	61.2
4	21.0	3.5	64.1	52.1	61.8	49.1
8	21.0	5.0	59.4	46.1	57.0	43.1
10	21.0	5.5	57.8	44.2	55.5	41.2
16	20.0	7.0	54.6	40.1	52.2	37.1
20	19.5	7.8	53.1	38.2	50.7	35.2
25	19.0	8.8	51.5	36.2	49.1	33.2
31.25	18.5	9.8	50.0	34.3	47.5	31.3
62.5	16.0	14.0	45.1	28.3	42.7	25.3
100	14.0	18.0	41.8	24.2	39.3	21.2
200	11.0	26.1	36.9	18.2	34.3	15.2
250	10.0	29.5	35.3	16.2	32.7	13.2
300	8.6	35.6	31.8	13.3	29.1	10.3
400	8.0	41.1	28.2	11.1	25.3	8.1
500	8.0	43.8	26.7	10.2	23.8	7.2

DATE	2026-03-04	EDITION	A	SPEC NO	TX-023A030411
CHECK		APPROVER		DESIGNER	LFZ