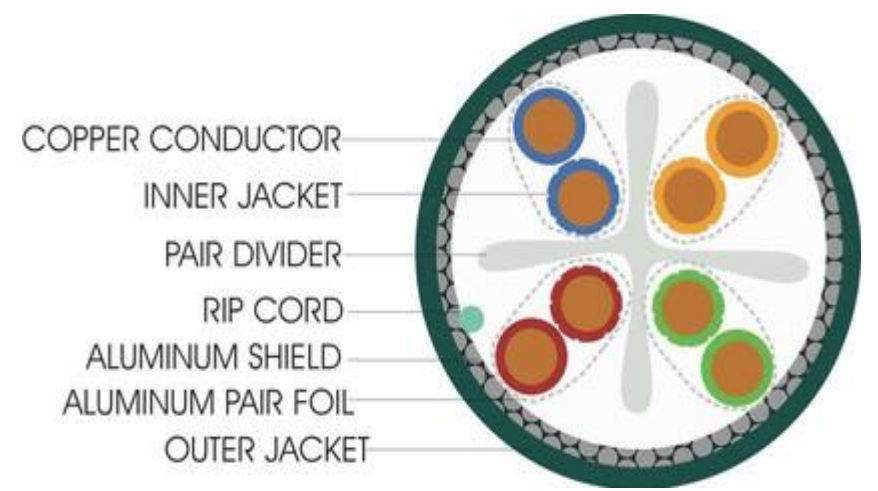




# OPTERNET CABLES & WIRES



## CAT 6A SF/UTP 23AWG OUTDOOR LAN CABLE

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 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).

## PHYSICAL AND MECHANICAL PROPERTIES

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Basic Conductor	Solid bare annealed copper
Conductor Size	23AWG/ 0.56
Insulation	Polyolefin
Number of Insulated Conductors	8, Twisted in 4 Pairs
Color Code of Pairs	Blue X White, Orange X White, Green X White. Brown X White/Brown
Individual Pair shield	Laminated aluminum foil (foil face outward) providing 100% coverage
Drain Wire	None
Overall Shield	Tin coated copper braid laid in close contact over the inner foils
Outer Jacket	LSZH Halogen free flame retardant or PVC compoun
Outer Jacket Color	Blue/Grey/Black
Standard Surface Marking	Includes Opternet Cable P/N, Cable Description, Meter Mark And Model Number
Pulling Force	50 N/mm <sup>2</sup> max
Short Term Bend Radius	8XOD (mm)
Storage Temperature	-20 TO +80C
Temperature Operating Range	-20 TO +60C
Installation Temperature Range	0 TO +50C
Flame Test	IEC 60332-1

## ELECTRICAL SPECIFICATIONS

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Characteristic Impedance	100±6 Ohm @1-500 MHz	Dielectric Strength	1500 Volt/1Minutes Min Rmx
DC Resistance	93 ohm/km max	Velocity of Propagation(NVP)	78 – 80%
Resistance Unbalance	2% max	Propagation Delay Skew	35 nS/100m max @ 1-300 MHz
Capacitance	4.5 pF/100m max @ 1KHz	Insulation Resistance	5000 MOhm.m.min @ 500Vdc
Cap. Unbalance(wired To Ground)	1500 pF m max @1KHz	Transfer Impedance	50 mOhm/m max @ 1 MHz. 100 mOhm/m max @ 10 MHz. 200 mOhm/m max @ 30MHz. 1000 mOhm/m max @ 100MHz.
Voltage Rating	72 Vdc max.		