



High quality, economical, CAT6a Ethernet data cable designed for portable use. Resilient yet flexible for repeated coiling. Four stranded, twisted pairs comprise an EIA/TIA568B2/IEC 61156-6 compliant cable with TPE outer jacket.

General Specifications

Conductors	24 AWG (0.25 mm ²) 7/32 stranded tinned copper. Nom. Diameter 0.0236" [0.6 mm]
Insulation	High Density Polyethylene, Nom. Wall Thickness 0.011" [0.28 mm], Nom. Diameter 0.046" [1.2 mm]
Pairs	Colour Coded singles twisted into pairs, Nom. Diameter 0.092" [2.3 mm]
	Colour Code: White/Blue X Blue; White/Orange X Orange; White/Green X Green; White/Brown X Brown
Assembly	4 Twisted pairs twisted together with a central spline and wrapped with a foam polypropylene tape to form a cable core. Nom. Diameter 0.228" [5.8 mm]
Shields	An overall shield of 38 AWG tinned copper braid (75% minimum coverage), shall be applied over the cable core. A second shield of aluminized polyester foil (Foil in, 100% coverage) shall be applied over the braid. Nom. Diameter 0.247" [6.3 mm]
Jacket	Thermoplastic Elastomer, Black, Nom. Wall Thickness 0.039" [1 mm] (Pressure) Overall Nom.Cable Diameter 0.325" +/- 0.010" [8.3 mm +/- 0.254 mm (By Pi Tape) Jacket Is Sunlight Resistant Jacket Is Weld Spatter Resistant Jacket Is Cutting/Machining Oil Resistant (Per Test Report #TR 08-0001) (6 Months @ 20°C) Tensile Strength Retention, 80% Nom. Elongation Retention, 100% Nom.
Marking	DATAPLEX WDPCAT6AT 4 PR 24AWG 500MHZ DATA CABLE CAT6/CAT6A SF/UTP C(UL) US CMX OUTDOOR – CM 75C SUN RES
Weight	48.5 lbs. / mft (72.2 KG/Km)
Flex Rating	≥ 1 million flexes, assuming bend radii of approximately 40 mm, flex rate 20 bends/min.
Flex Life (Pending)	(126 Cycles/Min, @ 20.C) 1 Million Cycle Test (10X Cable O.D., Minimum Radius) 10 Million Cycle Test (20X Cable O.D., Minimum Radius)
Torsion (Pending)	(1 Lb Load, 360°, 71 Cycles/Min, @ 20C) 3 Million Cycle Test
Temperature Rating	75°C Max. -20°C (Per UL 444 Cold Bend) -40°C Min. (Manufacturer's Recommended)
Compliance	RoHS Compliant Materials. U.S. Patent No. US 8,487,184 B2 POE Compliant (802.3Af) To 88 Metres When Installed Per Recommendations In TIA TSB-184 Cable Will Meet CAT 6a Channel Requirements To 88 Metre Length
Approvals	NEC (UL) Type CMX Outdoor-CM CEC C(UL) Type CMX Outdoor-CM

RoHS
Compliant

Worldwide Exclusive Distribution

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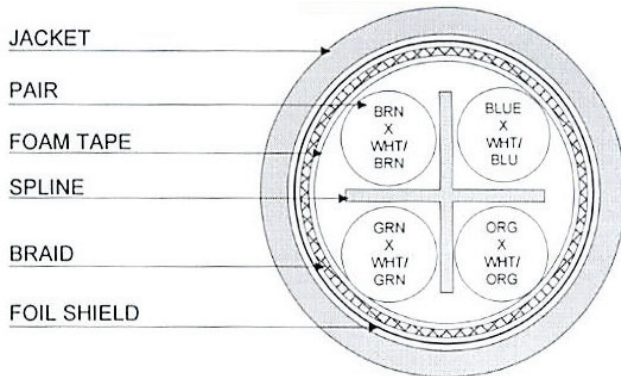
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Electrical Specifications		
Voltage Rating	300V Max.	
Velocity of Propagation	68%	
Impedance	1-100 MHz	100 +/-15 Ohm
	100 To 500 MHz	100 +/-20 Ohm
Dielectric Strength	1500V RMS Min.	
Capacitance, Mutual	13.5 pF/Ft. At 1 MHz Nom.	
Return Loss	1-10 MHz	20 + 6 LOG(F) dB Min.*
	10-20 MHz	26 dB Min.*
	20-100 MHz	26 - 5 LOG(F/20) dB Min.*
	100 ≤ f ≤ 500 MHz	25 - 8.6 LOG(F/20) dB Min.
PS NEXT	1 ≤ f ≤ 500 MHz, 42.3-15 LOG(F/100) dB Min.	
NEXT	1 ≤ f ≤ 500 MHz, 44.3 - 15 LOG(F/100) dB Min.	
PSACRF	1 ≤ f ≤ 500 MHz, 24.8 - 20 LOG(F/100) dB Min.	
ACRF	1 ≤ f ≤ 500 MHz, 27.8 - 20 LOG(F/100) dB Min.	
Insertion Loss	1 ≤ f ≤ 500 MHz, 1.2 (1.82 SQRT(F) + 0.0091(F) + 0.25/SQRT(F)) dB Max.	
Delay	1 ≤ f ≤ 500 MHz, 534 + 36/SQRT(F) dB Max.	
Delay Skew	1 ≤ f ≤ 500 MHz, <25 ns	
PS ANEXT Loss (6 Around 1)	1 ≤ f ≤ 500 MHz, 62.5-15 Log (F/100) Db Min 50-500 Mhz 67 Db Min 1 -50 Mhz	
PSAACRF	1 ≤ f ≤ 500 MHz, 38.2 - 20 LOG(F/100) dB Min.	
Coupling Attenuation	30 ≤ f ≤ 250 MHz, 100 - 20 LOG(F) (Max 60 DB) E3*	
DC Resistance	14.0 Ohm Max.	

*Per ODVA Volume 2 Ethernet/IP

Note: All testing is conducted on a 100M sample off the reel.

Dataplex CAT6a Ethernet cables meet attenuation specs up to 85m (275 ft).