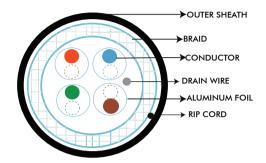


## CAT 6A S/FTP 23 AWG OUTDOOR CABLE PE





#### **DESCRIPTION**

Datacom OSP Shielded is a robust category cable designed to provide an extension of the LAN beyond the premises or in situations. where the NEC code requires an OSP-rated cable when it is in contact with earth, whether in a conduit or not Datacom Cat 6A S/FTP outdoor cable stands for shielded foiled twisted pair. Inside the CAT6A S/FTP cable, each pair of cables is twisted and wrapped with metal foil. All cables are then collectively wrapped by a strong, yet flexible braid screen. It consists of 8 Copper Conductors, and 2 conductors twisted together to form a pair. 4 Pairs are laid up together. S/FTP cables provide superior crosstalk and EMI performance. Crosstalk is when the signal in one twisted pair interferes with the signal in another twisted pair.

#### **APPLICATION**

- Indoor/Outdoor Outdoor Ethernet Application.
- CAT 6A: 10BASE-T through 10GBASE-T Ethernet;
- CAT 6/5e: 10BASE-T through 1000BASE-T Ethernet
- Power over Ethernet (PoE) IEEE 802.3bt Type 1 to 4

### **DESIGN CONSIDERATIONS**

- Use with Datacom Cat 6A shielded connectors.
- Cat 6A shielded patch panels, and Cat 6A shielded patch cords to support 10 Gigabit Ethernet performance.

#### STANDARDS COMPLIANCE

- ISO/IEC11801
- TIA/-568-D.2
- YD/T1019
- ROHS COMPLIANT

#### **FEATURES**

- Assures ample overhead for reliable transmission in an OSP-rated cable allowing extension of the premises LAN.
- Prevents water ingress between shield and inner cable preventing damage to equipment.
- OSP-grade black polyethylene jacket ensures the Outside plant rated cable for years of reliable performance.
- The outer jacket is OSP-grade black, polyethylene for superior sunlight and abrasion resistance.
  This shielded design is suitable for the following deployments:Duct, underground conduit, Tower lashed aerial or open trench.



# **CAT 6A S/FTP 23 AWG OUTDOOR CABLE PE**

TECHNICAL SPECIFICATIONS					
Mechanical Properties					
Bending Radius	8 X Outer Diameter				
Pulling Tension, maximum	110 N				
Electrical Properties (-20° C ± 5° C)					
Conductor Resistance (Ω/km)	93.8 (Max.)				
Mutual Capacitance (nF/100M)	5.6 (Max.)				
Resistance Unbalance (%)	2 (Max.)				
Characteristic impedance ( $\Omega$ )	100 ± 15				
Nominal velocity of propagation	76 %				
Worst Delay Skew	≤45				
Environmental specifications					
Operation Temperature	-20 ° to +75 °C				
Installation Temperature	-10 ° to +50 °C				
Packing information					
Packing Length	305±1.0 Meter				
Packing Weight (K.G)	Net weight 12 kg				

CONSTRUCTION				
Category	CAT 6A PE-S/FTP			
Conductor	Solid Bare Copper	23 AWG 0.560 ± +0.005		
Insulation	Skin–foam–skin PE			
Insulation diameter	1.330 mm ± 0.05mm			
Twisting	4 twisted pairs, 2 single conductors paired Twisted pair color code:			
	1: White Blue/Blue 2: Orange White/Orange			
	3: White Green/Green 4: Brown White/Brown			
Cable lay-up	4 Pairs with different pitches			
Outer diameter	7.6 ± 0.5 mm			
Outer jacket Materials	LDPE (complies with RoHS) – Black			
Jacket Thickness	0.55 ± 0.05 mm			
Inner Screening Material	Aluminum foil			
Drain wire & Ripcord	Yes			
Outer Screening Material	Aluminum-Magnesium alloy 0.12mm			
Acid Gas Test Method	IEC60754-2			
Flame Test Method	IEC60332-1			
Smoke Test Method	IEC61034-2			
Remote Powering	≤100W			

TRANSMISSION CHARACTERISTICS								
Freq. (MHz)	Return Loss ≥ dB	NEXT ≤dB	ATT ≤dB	DELAY ≤ns	PSNEXT ≤dB	ELFEXT ≥dB	PSELFEXT ≥ dB	
1	20	74.3		570	72.3	67.8	64.8	
4	23	65.3	3.8	552	63.3	55.8	52.8	
8	24.5	60.8	5.3	546.7	48.8	49.7	46.7	
10	25	59.3	5.9	545.4	57.3	47.8	44.8	
16	25	56.2	7.5	543.0	54.2	43.7	40.7	
20	25	54.8	8.4	542.1	52.8	41.8	38.8	
25	24.3	53.3	9.4	541.2	41.3	39.8	36.8	
31.25	23.6	51.9	10.5	540.4	49.9	37.9	34.9	
62.5	21.5	47.4	15.0	538.6	45.4	31.9	28.9	
100	20.1	44.3	19.1	537.6	42.3	27.8	24.8	
200	18.0	39.8	27.6	536.5	37.8	21.8	18.8	
250	17.3	38.3	31.1	536.3	36.3	19.8	16.8	
300	16.8	37.1	34.3	536.1	35.1	18.3	15.3	
500	15.2	33.8	45.3	535.6	31.8	13.8	10.8	

### **ORDERING INFORMATION**

Description Part No.

Datacom Cat 6A S/FTP 10G 4 Pair 23 AWG Cable UV Stabilized Outdoor Rated-PE 305m/Box Black

DC-CBL-C6ASF-PE