

# CAT6 ECCS OUTDOOR ARMORED INSTALLATION CABLE

Zyxel category 6 ECCS Outdoor Armoured Cable consist of 8 Copper Conductors, 2 conductors twisted together to form a pair. 4 Pairs are laid up together and separated by special type of Cross Separator. Armouring is done over inner sheath with Electrolytic Corrugated Coated Steel Tape.

## **Application**

#### **Wireless Wi-FI Networks**

Data interface rates have increased from 1G Base-T to even 10G Base due to significant rise in the need for WiFi connectivity.

#### **Local Area Network**

Last mile connectivity is is still feasible solution for business even in FTTB environment.

#### **Surveillance & PoE Application**

Requirement for cabling systems have become more stringent due to emergence of Power over Ethernet (PoE) technology.

# **Specifications**

Physical Characteristics			
Application	Cat6 Outdoor Application wherever the high-speed data transfer is required to full fil the device requirement.		
Standards	ISO/IEC 11801 2nd ed.; IEC 61156-5 2nd ed.		
Fire Rating	IEC 60332-1; IEC 60754-2; IEC 61034;		
Conductor	Solid Bare Electrolytic Copper Ø 0.505 mm ± 0.02 mm		
Insulation	Ø 0.990 mm ± 0.05 mm		
Twisting	Total 4 Pairs. 2 cores per pair.		
Foil Shielding	None		
Braiding	None		
Inner Sheath	PVC Grey		
Outer Sheath	PE with UV Properties		
Armour	ECCS Steel Tape		
Pair Colors	Blue – Blue/White Orange – Orange/White Brown – Brown/White Green – Green/White		
Protection	Armored for protection from harsh weather and rodents		

Generic Data	
Description & Length	Armored Cable Cat 6 / 305 Mtr
Cable Type	ECCS – Armored
Conductor Diameter mm	0.505 ± 0.02 mm.
Core Diameter mm	0.990± 0.05 mm.
Shielding	None
Nominal Outer Diameter (mm)	10.0 ± 0.7 mm.
Conductor Gauge	24 AWG
Pair Separator	PE Cross – Member (+) Separator

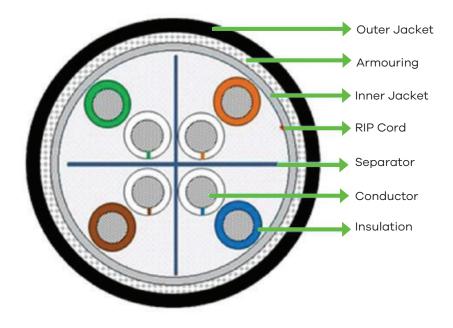
Electrical Specifications (20 ± 3 °C)			
Telecommunication Standards	ANSI/TIA-568-C.2 Category 6 and ISO 11801 Class E		
Operating Frequency – Min Max.	250 Mhz		
Nominal Velocity of Propagation (NVP)	69%		
Operating Voltage – Max.	90V		
PoE Compliance	IEEE802.3af and IEEE 802.3at		
Maximum Temperature Rating	Storage -20°C to +60°C. At the installation time: -20°C to 75°C. Operational Temperature: -20°C to 60°C		
Max. Resistance Unbalance	≤ 5%		
Max. Conductor Resistance	95.8 Ω/km		
Max. Mutual Capacitance	5.6 nF/100 m max.		
Capacitance Unbalance (pair to ground)	330 pF/100 m max		
Nominal Characteristic Impedance	(100 ± 15) Ω / 100 MHz		
Delay Skew	≤ 45 ns/100m		
Bending Radius	≤ 20 X Cable Dia		
Packaging	305 Mtr Packed in Wooden Drum		

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# **High Frequency Electrical Parameters**

Frequency Mhz	ATT (dB/100m) max.	NEXT (dB) min	PS.NEXT (dB) min.	ACRF (dB@100 m) min.	PS.ACRF (dB@ 100 m) min	Return Loss (dB/100m)
1	2.3	65	62	63.3	60.3	19
4	4.2	63	60.5	51.2	48.2	19
8	5.8	58.2	55.6	45.2	42.2	19
10	6.5	56.6	54	43.3	40.3	19
16	8.2	53.2	50.6	39.2	36.2	18
20	9.2	51.6	49	37.2	34.2	17.5
25	10.2	50	47.3	35.3	32.3	17
100	20.9	39.9	37.1	23.3	20.3	12
200	30.1	34.8	31.9	17.2	14.2	9
250	33.9	33.1	30.2	15.3	12.3	8
300	37.4	31.7	28.8	13.7	10.7	7.2
400	43.7	28.7	25.8	11.2	8.2	6
500	49.3	26.1	23.2	9.3	6.3	6

## **Construction Of Cable**



### **Product**

Model

ZY60CCG4F0135-ES

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