

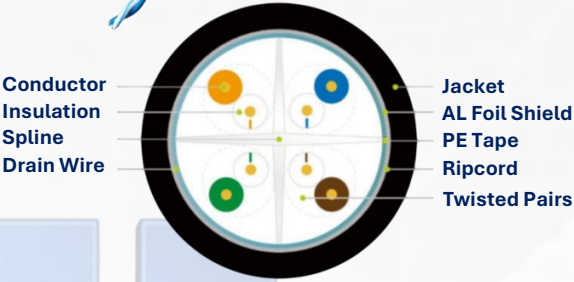
ETL CAT 6 SHIELDED F/UTP 24AWG PE OUTDOOR NETWORK CABLE

Applications

- High-speed outdoor distribution cabling for local area networks (LAN), ideal for perimeter security IP cameras and base stations.
- Interconnect lines for outdoor infrastructure, building-to-building bridging, and campus network deployments.
- Exposed physical routing suitable for outdoor aerial, direct conduit, or utility pole environments.

Physical Structure Specification

Item	Value
Conductor Material	CCA (Copper Clad Aluminium)
Conductor Diameter	0.50 mm ± 0.01 mm (24AWG)
Insulation Material	HDPE
Insulation Diameter	0.90 mm ± 0.03 mm
Pairing	4 Twisted Pairs
Pairing Color Code	P1: Blue-White/Blue
	P2: Orange-White/Orange
	P3: Green-White/Green
	P4: Brown-White/Brown
PET Tape	100% PET Film Wrapper
Drain Wire Diameter/Material	0.40 mm CCA
Shielding	AL Foil - 100% Shielding
Jacket Material	PE
Outer Diameter	6.0 mm ± 0.20 mm
Color	Black



Mechanical & Environmental Performance

Test Item	Specification Requirement
Tensile Strength	HDPE > 16.0 MPa
	PE > 10.0 MPa
Elongation at Break	HDPE > 300%
	PE > 350%
Min. Bending Radius	During installation ≥ 8×Outer Diameter
	After securing≥ 4×Outer Diameter
Temperature Range	Operating & Storage Temp: -40°C to 70°C
	Installation Temp: -10°C to 50°C
Weather Resistance	The PE outer sheath offers excellent water resistance and UV resistance (suitable for outdoor installation).

Electrical Performance @ 20°C

Electrical Parameter	Specification Requirement
DC Resistance	≤14.5 Ω/100m (Absolute maximum limit, based on 20°C)
DC Resistance Unbalance	≤5.0%
Characteristic Impedance	100±15Ω (1-250MHz)
Mutual Capacitance	≤5.6 nF/100m
Capacitance Unbalance	≤330pF/100m
Delay Skew	≤45ns/100m (1-250MHz)
NVP	67%-69%

High Frequency Transmission Data / 100m

MHz	Attenuation (dB/100m)≤	NEXT (dB)≥	RL (dB)≥	PS-NEXT (dB)≥
1	2	74.3	20	72.3
4	3.8	65.3	23	63.3
10	6	59.3	25	57.3
16	7.6	56.2	25	54.2
31.25	10.7	51.9	23.6	49.9
62.50	15.4	47.4	21.5	45.4
100	19.8	44.3	20.1	42.3
250	32.8	38.3	17.3	36.3