

ETL CAT 6A SHIELDED F/UTP 23AWG PE OUTDOOR NETWORK CABLE

Applications

- **Direct Burial & Underground Conduit Routing:** Specifically engineered with water-blocking gel for environments prone to moisture, flooding, or direct underground burial.
- **High-Bandwidth Outdoor Infrastructure:** Ideal for 10 Gigabit campus backbone bridging, heavy data industrial routing, and high-definition outdoor IP surveillance networks.
- **Harsh Wet Environment Deployment:** Optimized for outdoor utility ducts, manholes, and locations where prolonged exposure to water or moisture is anticipated.

Features

- **Optimal Gauge Structure:** Features 23 AWG solid conductors (0.57mm±) providing excellent electrical integrity, stable high-frequency delivery, and enhanced tensile strength.
- **Advanced Water-Blocking Protection:** Packed with specialized petroleum-based jelly (gel-filled compound) that prevents water ingress and moisture migration along the cable core.
- **High-Frequency 10G Capability:** Built to support full 10-Gigabit Ethernet data rates up to 100 meters, ensuring zero signal degradation at extended high frequencies.
- **Rugged Outdoor Sheathing:** Outfitted with a highly durable, heavy-duty UV-resistant Black PE jacket that shields the interior assembly from mechanical damage and sunlight degradation.



Cable Parameters

Parameter	Specification	Notes / Compliance
PoE Compatibility	Standard PoE / PoE+ / PoE++ (IEEE 802.3af/at/bt)	Suitable for high-power outdoor PTZ cameras and multi-band wireless APs
Maximum PoE Wattage	Up to 60W - 90W	Optimized for superior heat dissipation in outdoor gel-filled environments
TIA 568-C.2 Cat6A Link	Compliant	Meets transmission protocols for Category 6A
Maximum Application Speed	1000Mbps (1GBASE-T)	Supports ultra-high-speed 10 Gigabit Ethernet networks
Nominal Velocity of Propagation (NVP)	65% – 68%	Standard propagation speed for CCA cores
Maximum Operating Voltage	300V	Safe rating for standard network equipment infrastructure
1.0 - 250MHz Impedance (Ω)	100 ± 15	Industry standard differential impedance at extended frequencies
Maximum Operating Frequency	500MHz	Standard Cat6A high-performance frequency bandwidth
1.0 - 250MHz Delay Skew (ns/100m)	≤ 45	Ensures highly accurate signal arrival timing across all twisted pairs
Pair-to-Ground Capacitance Unbalance	≤ 3300 pF/km	Minimizes external signal interference and noise
Max. Conductor DC Resistance 20°C	≤ 135 Ω/km	Accurate physical metric for solid 23 AWG conductors