U/FTP Cat.6A 4PR 23AWG LSZH, Conductor Material: Copper, Outersheath Color: Green 6018

Description

LAN Copper Cables, also known as Ethernet cables or twisted pair cables, are a fundamental component of local area networks (LANs). They provide the physical medium for transmitting data signals between devices within a network infrastructure and they can be:
- Unshielded Twisted Pair (UTP): UTP cables are the most common type of LAN cables. They consist of pairs of insulated copper wires twisted together, providing reliable data transmission for short to medium distances.
- Shielded Twisted Pair (STP): STP cables feature an additional metallic shield around the twisted pairs, providing better protection against electromagnetic interference (EMI) and crosstalk. They are ideal for environments with high levels of interference.
- Foiled Twisted Pair (FTP): FTP cables have an overall foil shield that encases all twisted pairs, offering effective EMI protection.

LAN Copper Cables are categorized based on their performance specifications, as defined by the Electronic Industries Association/Telecommunications Industry Association (EIA/TIA):
- Category 5e (Cat5e): Suitable for speeds up to 1 Gbps (Gigabit per second) over distances of up to 100 meters.
- Category 6 (Cat6): Capable of supporting speeds up to 10 Gbps over distances of up to 55 meters.
- Category 6a (Cat6a): Designed for higher-speed applications, supporting speeds up to 10 Gbps over distances of up to 100 meters.
- Category 7 (Cat7): Designed for future-proofing, supporting speeds up to 10 Gbps over distances of up to 100 meters, with improved shielding and reduced crosstalk.

Standards

EN 50288-3-1
EN 50173
ISO/IEC 11801
IEC/EN 60754-1/2
IEC/EN 61034-2
IEC 60332-1
IEC 61156-6
EIA/TIA 568A

Construction

Conductor core: 24 AWG copper soft wire
Insulation: HDPE polyethylene, colored marking of insulation
Outersheath: PVC

Technical Characteristics

Number of Conductors	8
Cable Overall Diameter	7 mm
Cable Weight	42 kg/km
Conductor Material	Copper
Conductor Cross-Section	0.24 mm^2
Conductor Class	CL-1
Conductor Type	RE
Insulation Material	HDPE
Outersheath Material	LSZH
Outersheath Color	Green 6018
Max. Permissible Installation Temperature	-20 >< +50 °C
Operating Temperature	-40 >< +60 °C
Rate Tensile Strength (RTS)	100 N
Crush	1000 N/10cm
Conductor Resistance	Max. 75 Ω/km
Resistance unbalance	Max. 2 %
Insulation Resistance	≥ 5000 MΩ/km
Nominal Velocity of Propagation	≥ 66 %
Signal Propagation Delay	Max. 537 ns/100m
Test Voltage	1000 V
Minimum Bending Radius (Installing)	8xD
Minimum Bending Radius (Operating)	4xD
Packing	Wooden Drum, Plywood Drum, Coil, Rolls, Box
Delivery Lengths	To be confirmed by offer
Delivery Length Tolerance	±5 %