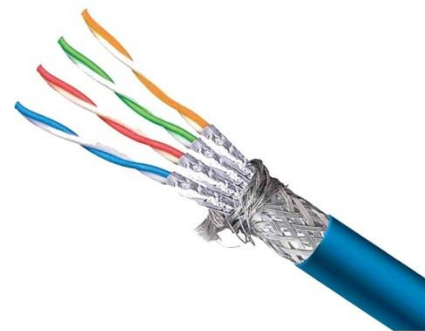


## Introduction

As infrastructures become denser and more complex, the value of structured cabling is magnified. Structured cabling makes it easier for the network to grow and change, using a modular design that supports new equipment and applications. The variety of infrastructure cables and accessories are based on Cat7; however, structured cabling is more than just that. It's a comprehensive system of cables and related hardware that provides a flexible, future-ready infrastructure for data communications. Category 7 is an Ethernet cable standard that is often called Cat7. The standard supports the transmission of large amounts of data at high speeds of up to 600MHz. This augmented rating is twice that of regular Cat7 cable. Cat7 cables are comprised of pairs of twisted copper wire. The Category 7 technology supports ten gigabit Ethernet and has improved alien crosstalk specifications over its predecessor.



## Application

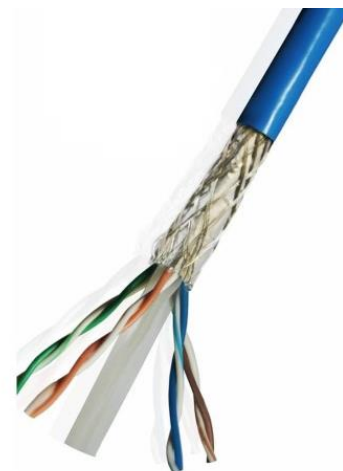
Businesses use Ethernet cabling in office buildings, data centers and users, primary considerations determine ethernet cable to use for your business. Ethernet cables can be classified into different types according to different specifications, shielded cables in terms of shielding types, and solid copper and stranded copper cable in terms of the copper conductor in pairs. With regards to cable jacket rating, there are CM, CMR, and CMP cables. Choices of cables vary from different application scenarios.

- Ethernet Networking
- Computer Networking Project
- Audio & Data Transmission
- Digital Networking
- Broadband Networking Communication

## Operation Features

The Category 7 Shielded Foiled SF/UTP has 0.57mm diameter solid copper conductors, twisted into 4 pairs of wires. We offer a depot of various high-quality, high-speed options for solid-conductor, Cat7 SF/UTP cables used in many backbones cabling solutions.

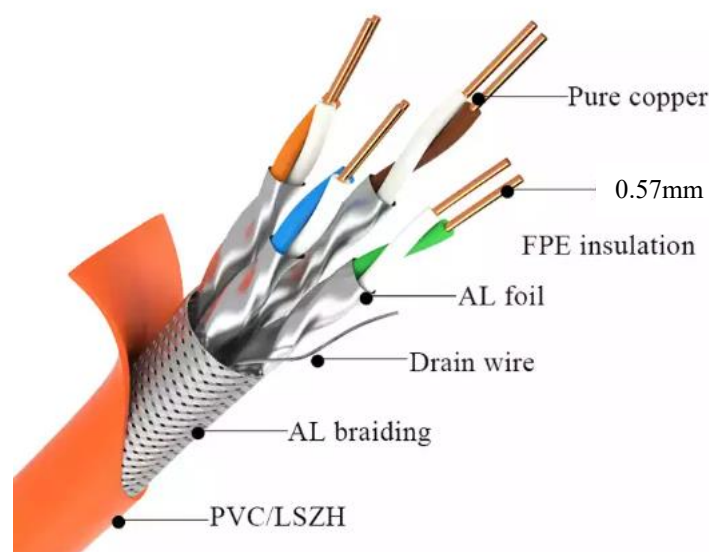
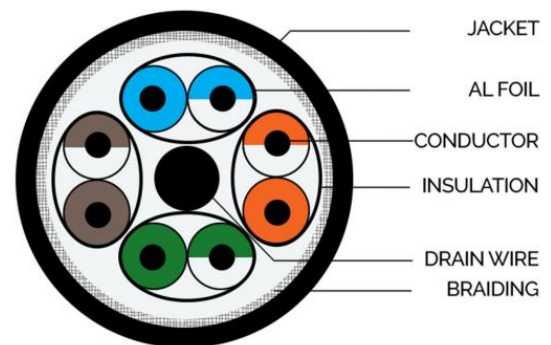
- SF/UTP CAT7 ethernet cable SF/UTP cat7 4 pairs Shielded Foiled copper twist wire
- Standards UL444/CSA-C22.2 No 214, Type CM EIA/TIA-568A and EIA/TIA-568B.2, Horizontal cable, also available in CMR "Riser Rated" and CMP "Plenum Rated"



- Conductor 23AWG solid soft circle twisted bare copper wire
- Jacket PVC or LSZH
- Application 10BASE-T Ethernet IEEE802.3, 100BASE-T Ethernet IEEE802.3, 1000BASE-T Ethernet IEEE802.3, 10GBASE-T Ethernet IEEE802.3, 155 Mbit ATM and 1.2 Gbit ATM
- Rating Temperature: 60°C
- 100% component test to guarantee the quality
- Installations with Lanwave's cable and connectivity are qualified for a 25 years full system technology warranty
- Standard length of cable is 305 meters (1000ft)

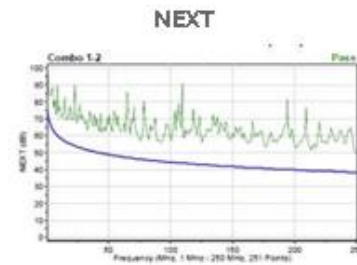
## Mechanical Performance Test compliance

- Standards Specifications:
  - ✓ Tested to 600 MHz and with guaranteed performance to 600 MHz
  - ✓ TIA/EIA-568-C.2, TIA/EIA-568.2-D
  - ✓ ISO/IEC 11801 Class F, IEC 611565
  - ✓ EN50173-1:2011, EN 50288
  - ✓ UL Listed and
  - ✓ RoHS
- Types: CM, CMR or CMP
- Bandwidth: Standard 600 MHz
- Conductor Diameter:  $0.57 \pm 0.02$
- Outer Cable Diameter:  $8.0\text{mm} \pm 0.2\text{ mm}$
- Conductors: Solid Bare Copper
- Outer Jacket: PVC or LSZH
- Standard Color of Sheath: Blue RAL 5015, other colors are available.



## Electrical Performance

Frequency (MHz)	Attenuation (dB/100m)		NEXT (in dB)		ACR (in dB)		PS-NEXT (in dB)		ACR-F (in dB)		PS-ACR-F (in dB)		Return Loss (in dB)	
	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.
1.00	4.0	1.8	75.0	100.0	71.0	98.2	72.0	98.0	75.0	98.0	75.0	96.0	20.0	23.0
4.00	4.0	3.5	75.0	100.0	71.0	96.5	72.0	98.0	75.0	98.0	75.0	96.0	23.0	26.0
10.00	5.9	5.5	75.0	100.0	69.1	94.5	72.0	98.0	75.0	98.0	72.3	96.0	25.0	28.0
16.00	7.4	6.8	75.0	100.0	67.6	93.2	72.0	98.0	71.2	96.0	68.2	94.0	25.0	28.0
20.00	8.3	7.7	75.0	100.0	66.7	92.3	72.0	98.0	69.3	94.0	66.3	92.0	25.0	28.0
31.25	10.4	9.6	75.0	100.0	64.6	90.4	72.0	98.0	65.4	90.0	62.4	88.0	23.6	26.0
62.50	14.9	14.0	75.0	100.0	60.1	86.0	72.0	98.0	59.4	84.0	56.4	82.0	21.5	25.0
100.00	19.0	17.7	72.4	100.0	53.4	82.3	69.4	98.0	55.3	75.0	52.3	73.0	20.1	24.0
155.00	24.0	22.8	69.5	96.0	45.6	73.2	66.5	93.0	51.5	70.0	48.5	68.0	18.8	23.0
250.00	31.0	29.0	66.4	94.0	35.5	65.0	63.4	91.0	47.3	66.0	44.3	64.0	17.3	22.0
300.00	34.2	32.1	65.2	92.0	31.1	59.9	62.2	88.0	45.8	54.0	42.8	52.0	17.3	20.0
600.00	50.1	45.5	60.7	90.0	10.6	44.5	57.7	86.0	39.7	54.0	36.7	52.0	17.3	20.0



## Ordering Information

Product Code	Description
LN-SFUC7x-4P-AWG23-xx	Category 7 Shielded Foiled SF/UTP Cable 4 Pair, 23 AWG

**\* Note:**

x= For the Cable Jacket Types such as “L for LSZH, P for PVC”  
 xx= For the Cable Jacket Color such as “BL for Blue, GY for Gray, WH for White”

**Notice:** The data in this document are only reference and will be changed without any notice.  
 This specification is intended as a guide only.