

VENTION IBL

VENTION Cat6 RJ45 Ethernet Extension Cable User Manual

Model: IBL

1. INTRODUCTION

This manual provides essential information for the proper use and maintenance of your VENTION Cat6 RJ45 Ethernet Extension Cable. This cable is designed to extend the reach of your existing Ethernet network, ensuring stable and high-speed data transmission.

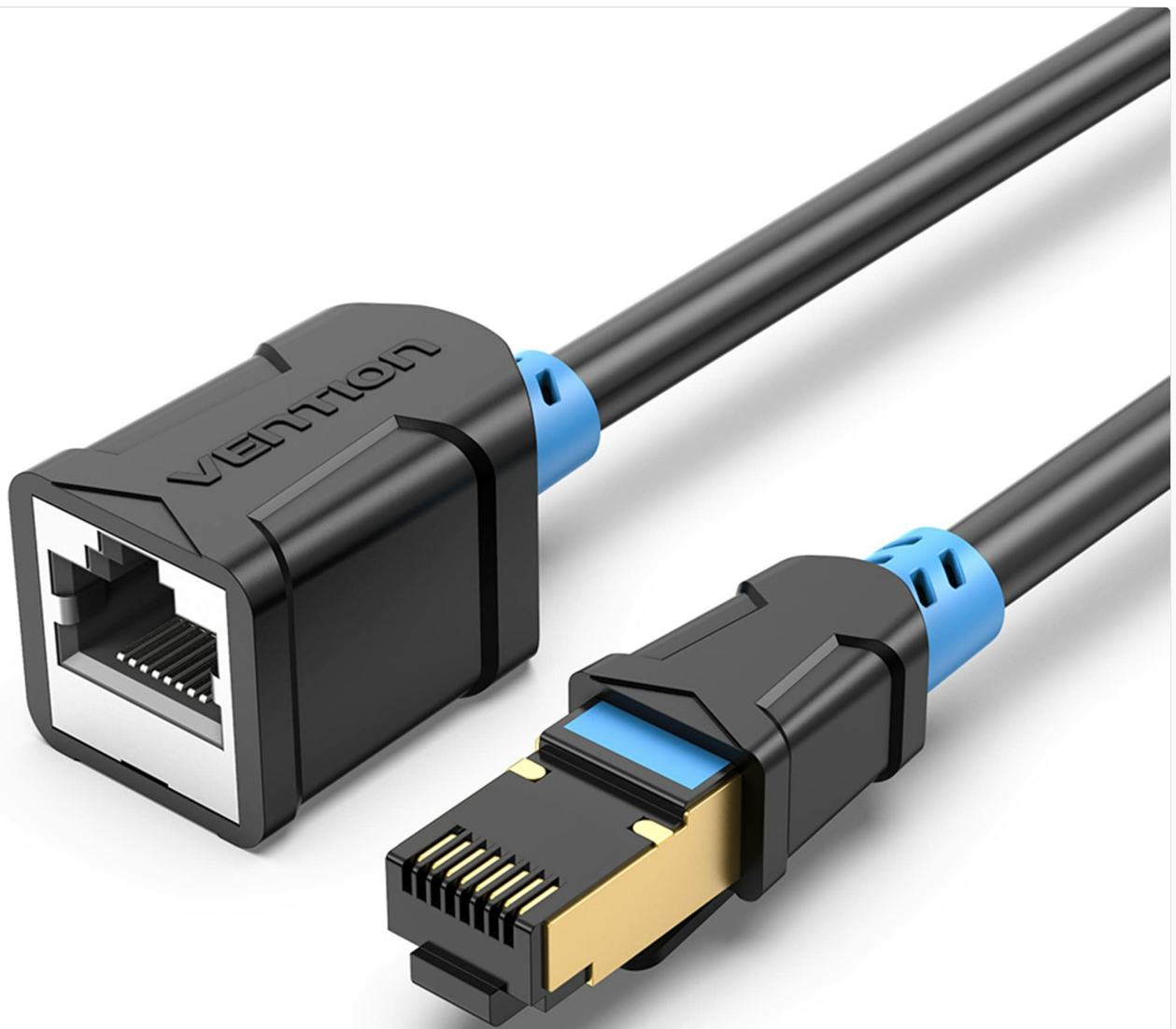
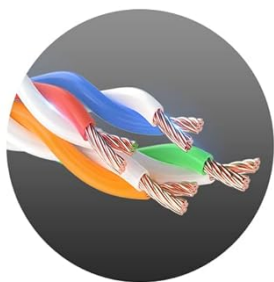


Image: The VENTION Cat6 RJ45 Ethernet Extension Cable connected to a laptop, illustrating its function in extending network reach with 1000Mbps speed.

2. PRODUCT FEATURES

- **Cable Extension:** Extends existing Cat 6 Ethernet cables, preventing the need to purchase longer cables and protecting device ports from wear.
- **High-Speed Transmission:** Supports data transfer speeds up to 1000 Mbps and a bandwidth of 250MHz, ensuring consistent network performance.
- **Advanced Shielding:** Constructed with 4 pairs of copper conductors, each shielded with aluminum foil, and an overall aluminum foil braided mesh for double shielding against signal interference.
- **Durable Design:** Designed for durability, capable of withstanding over 10,000 bends and operating in temperatures from -15 to 65 degrees Celsius, suitable for indoor and outdoor applications.
- **Universal Compatibility:** Universally compatible with all Cat 6 Ethernet cables, and backward compatible with Cat 5 and 5e cables. Connects various LAN components including PCs, laptops, servers, switches, routers, modems, smart TVs, and gaming consoles (PS5, PS4).



Twisted pair



Gold-plating



Durable

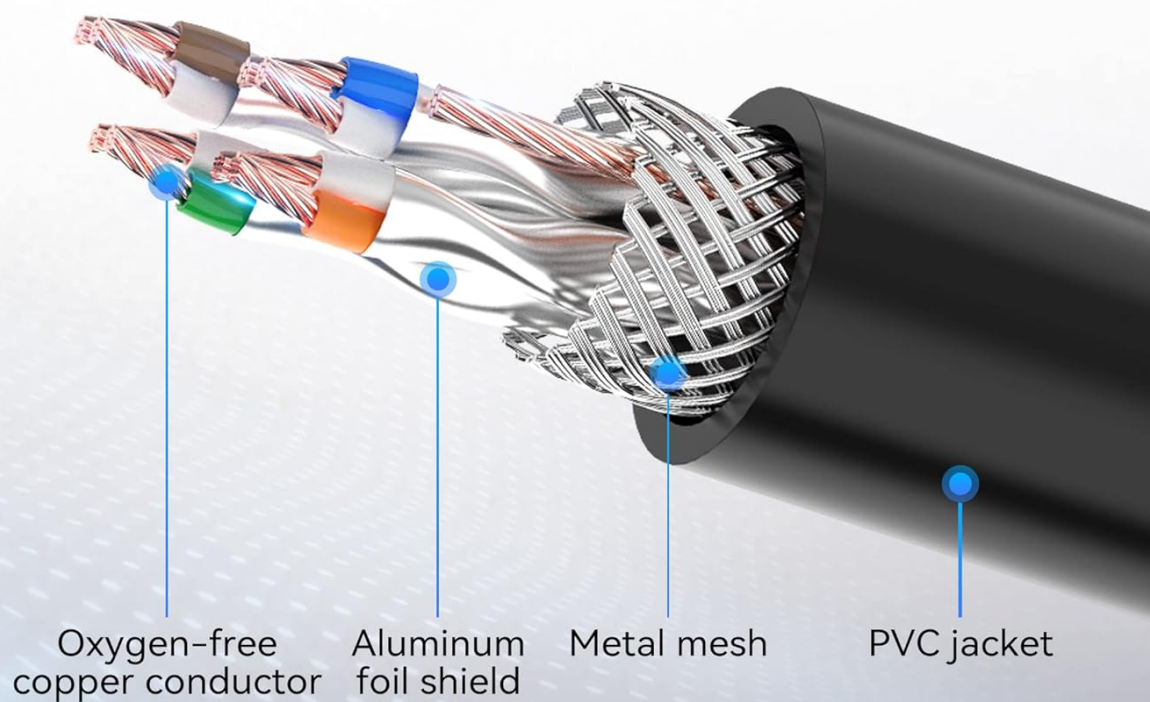


Image: Detailed diagram illustrating the internal construction of the VENTION Ethernet cable, highlighting its oxygen-free copper conductors, aluminum foil shielding, and metal mesh for enhanced performance and durability.

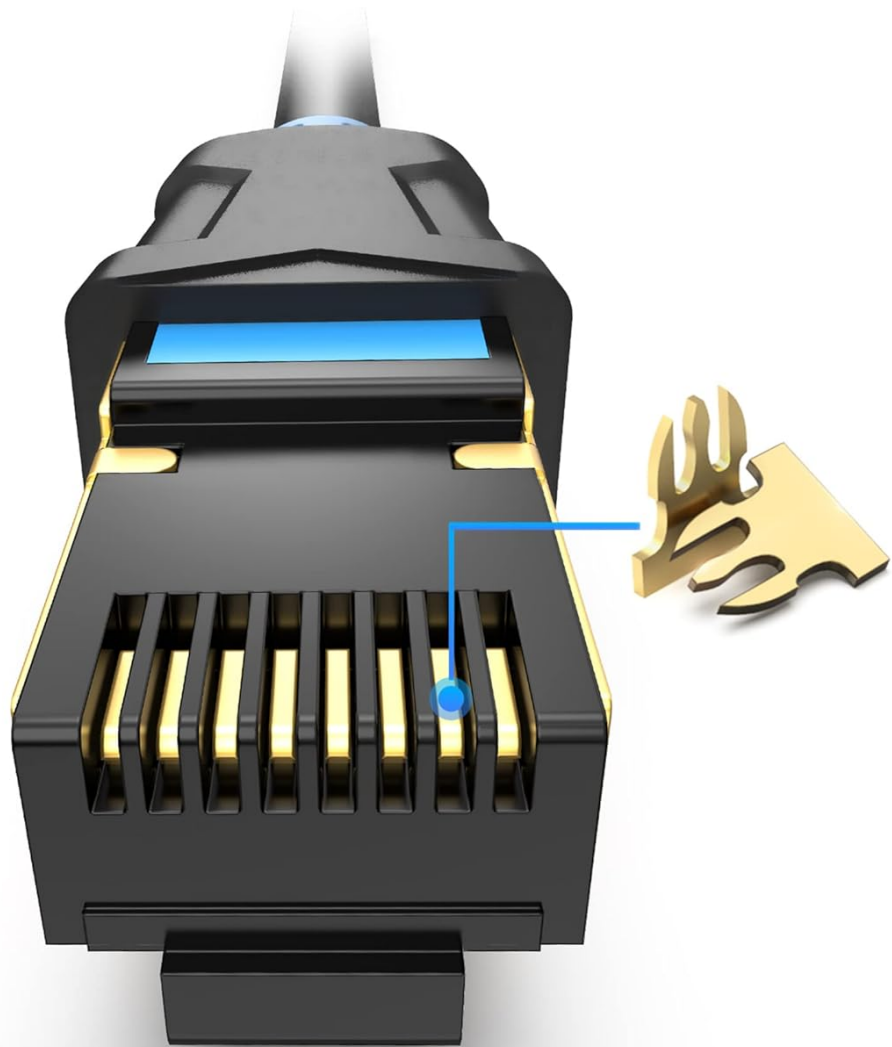


Image: A close-up view of the VENTION RJ45 connector, showcasing its gold-plated contacts for optimal signal integrity.

3. SETUP

The VENTION Cat6 RJ45 Ethernet Extension Cable is designed for simple plug-and-play installation.

1. **Identify Connection Points:** Locate the existing Ethernet cable you wish to extend and the device (e.g., computer, router) you want to connect.
2. **Connect Existing Cable:** Plug the male end of your existing Ethernet cable into the female port of the VENTION extension cable. Ensure a secure connection.
3. **Connect to Device:** Plug the male end of the VENTION extension cable into the Ethernet port of your desired device.
4. **Verify Connection:** Check the network status indicators on your device or router to confirm a successful connection.

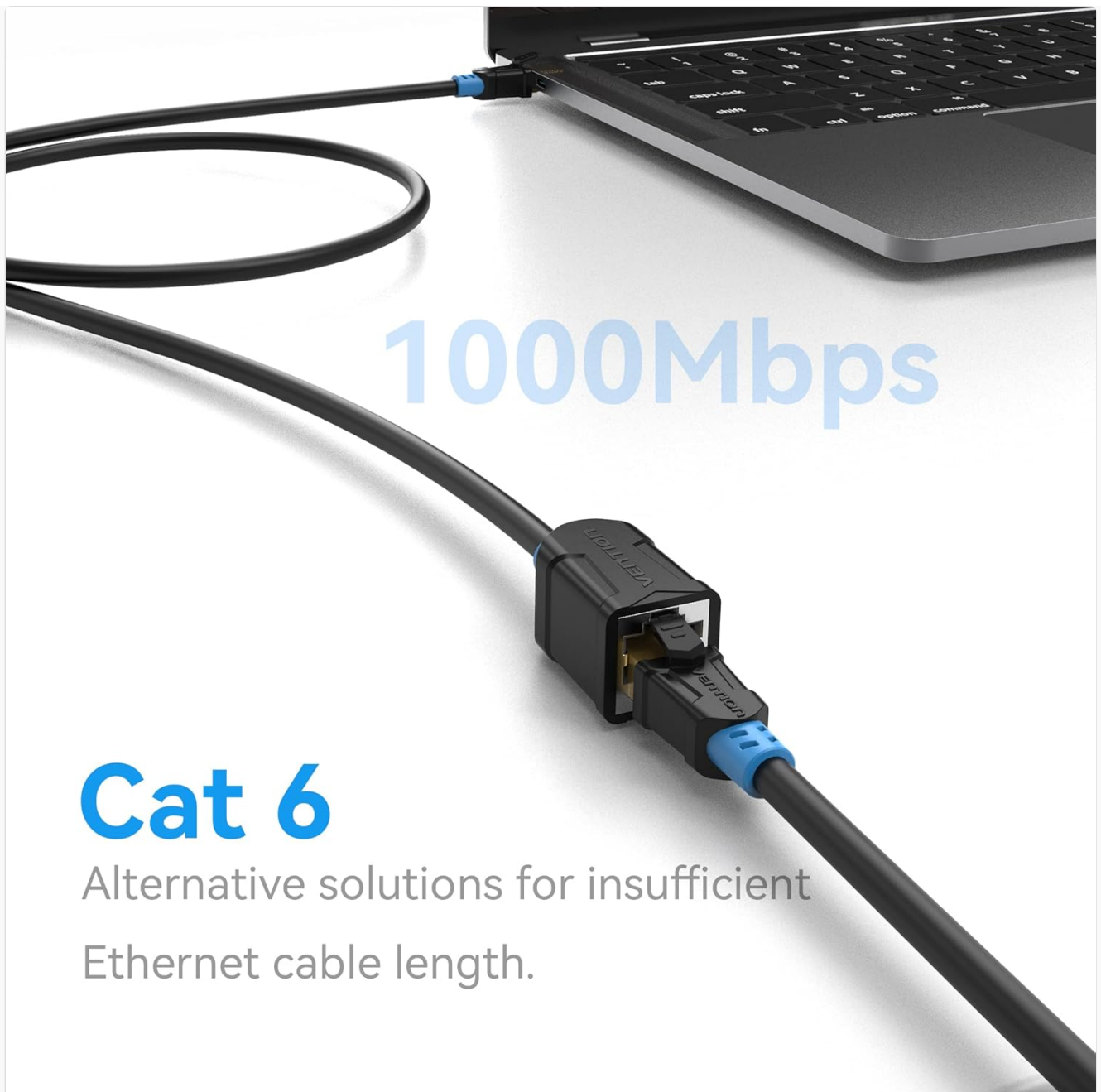
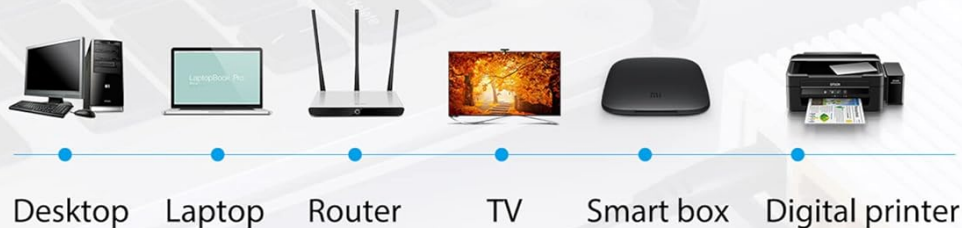


Image: The VENTION Ethernet Extension Cable in use, extending the reach of a standard Ethernet cable to a laptop, demonstrating a typical setup.

4. OPERATING INSTRUCTIONS

Once connected, the VENTION Cat6 RJ45 Ethernet Extension Cable operates automatically to extend your network signal. No additional software or configuration is required.

- The cable maintains the data transfer speed and bandwidth of your Cat6 network.
- It is compatible with various network devices and applications, including internet browsing, streaming, online gaming, and data transfer.



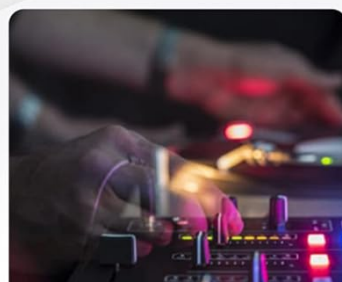
Home / Office



Internet Cafe / Community



Supermarket / Department Store



KTV / Club



Hotel



School / Building

Image: An illustration demonstrating the broad compatibility of the VENTION Ethernet Extension Cable with common network devices such as PCs, laptops, routers, and smart TVs.

5. MAINTENANCE

To ensure the longevity and optimal performance of your VENTION Ethernet Extension Cable, follow these maintenance guidelines:

- **Avoid Sharp Bends:** While durable, avoid excessively sharp bends or kinks in the cable to prevent internal damage.
- **Keep Connectors Clean:** Periodically inspect the RJ45 connectors for dust or debris. Use a soft, dry cloth or compressed air to clean them if necessary.
- **Secure Connections:** Ensure both ends of the extension cable are securely plugged in to prevent intermittent connections.
- **Temperature Range:** Operate the cable within its specified temperature range of -15 to 65 degrees Celsius.
- **Storage:** When not in use, store the cable in a clean, dry place, ideally coiled loosely to prevent tangling or damage.

6. TROUBLESHOOTING

If you encounter issues with your Ethernet extension cable, consider the following troubleshooting steps:

Problem	Possible Cause	Solution
No network connection	Loose connection, faulty cable, incorrect port.	Ensure all RJ45 connectors are fully seated. Test with a different Ethernet cable or port. Check device network settings.
Slow network speed	Cable damage, interference, network congestion.	Inspect the cable for visible damage. Ensure the cable is not near strong electromagnetic sources. Restart your router and device.
Intermittent connection	Loose connection, cable stress.	Firmly re-seat all connections. Avoid pulling or stressing the cable.

7. SPECIFICATIONS

Detailed technical specifications for the VENTION Cat6 RJ45 Ethernet Extension Cable:

- **Brand:** VENTION
- **Model Number:** IBL
- **Connector Type:** RJ45
- **Cable Type:** Ethernet
- **Ethernet Cable Category:** Cat 6 (backward compatible with Cat 5, 5e)
- **Connector Gender:** Male-to-Female
- **Data Transfer Rate:** 1000 Megabytes Per Second (1 Gbps)
- **Frequency:** 250 MHz
- **Number of Pins:** 8
- **Special Features:** Braided, Data Transfer, High Speed, Double Shielded (Aluminum Foil Shield, Metal Mesh)
- **Conductor Material:** Oxygen-free copper
- **Jacket Material:** PVC
- **Shape:** Round
- **Item Weight:** 45 Grams (1.59 ounces)
- **Usage Environment:** Indoor, Outdoor
- **Durability:** Withstands 10,000+ bends
- **Operating Temperature:** -15 to 65 degrees Celsius
- **Compatible Devices:** PC, Router, Laptops, Servers, Switches, Modems, Network Media Players, Smart TVs, Network Printers, PS5, PS4

FLUKE Networks Test

Meet the Cat.6 network
cable standards



Cable ID: IBLBD

Date / Time: 05/23/2020 01:47:44 PM

Headroom 11.6 dB (NEXT 36-45)

Test Limit: TIA Cat 6 Channel

Cable Type: Cat 6 F/UTP

NVP: 70.0%

Operator: KINGDATA

Software Version: V6.1 Build 3

Limits Version: V7.1

Calibration Start Date:

Main (Module): 05/11/2018

Remote (Module): 05/11/2018

Test Summary: PASS

Model: DSX-8000

Main S/N: 1747425

Remote S/N: 1747424

Main Adapter: DSX-CHA804

Remote Adapter: DSX-CHA804

Length (m), Limit 100.0	[Pair 12]	1.3
Prop. Delay (ns), Limit 555	[Pair 12]	6
Delay Skew (ns), Limit 50	[Pair 12]	0
Resistance (ohms)	[Pair 12]	0.21
Insertion Loss Margin (dB)	[Pair 36]	30.7
Frequency (MHz)	[Pair 36]	197.5
Limit (dB)	[Pair 36]	31.3

Worst Case Margin Worst Case Value

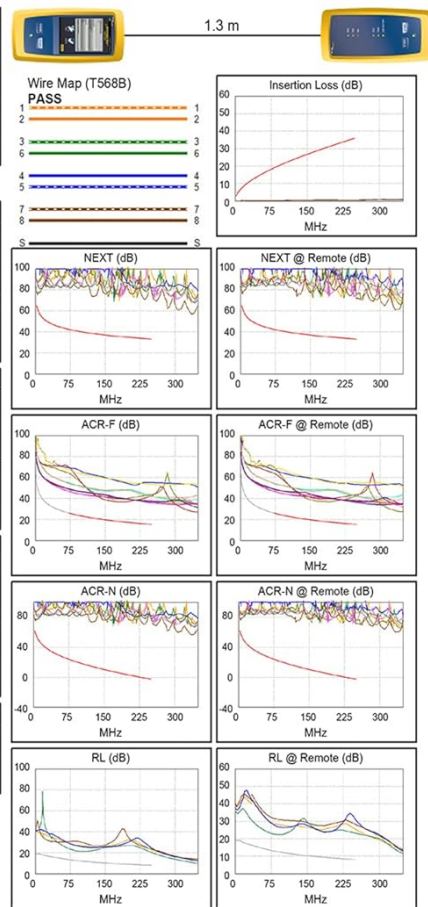
PASS	MAIN	SR	MAIN	SR
Worst Pair	36-45	36-45	36-45	36-45
NEXT (dB)	11.6	12.5	37.5	38.5
Freq. (MHz)	3.1	3.4	236.0	249.5
Limit (dB)	64.8	64.2	33.5	33.1
Worst Pair	36	36	45	45
PS NEXT (dB)	13.8	14.0	39.5	39.5
Freq. (MHz)	3.3	3.4	236.0	249.5
Limit (dB)	62.0	61.7	30.6	30.2

PASS	MAIN	SR	MAIN	SR
Worst Pair	45-36	36-45	12-45	12-45
ACR-F (dB)	18.4	18.5	20.5	20.6
Freq. (MHz)	171.5	171.5	250.0	250.0
Limit (dB)	18.6	18.6	15.3	15.3
Worst Pair	36	45	36	36
PS ACR-F (dB)	18.9	19.4	21.0	21.1
Freq. (MHz)	180.0	160.0	249.5	250.0
Limit (dB)	15.2	16.2	12.3	12.3

N/A	MAIN	SR	MAIN	SR
Worst Pair	36-45	36-45	36-45	36-45
ACR-N (dB)	15.2	16.2	71.8	74.0
Freq. (MHz)	3.1	3.4	236.0	249.5
Limit (dB)	61.2	60.5	-1.2	-2.8
Worst Pair	36	36	45	45
PS ACR-N (dB)	17.4	17.7	73.8	75.0
Freq. (MHz)	3.3	3.4	236.0	249.5
Limit (dB)	58.4	58.0	-4.1	-5.7

N/A	MAIN	SR	MAIN	SR
Worst Pair	36	36	36	36
RL (dB)	9.1	9.6	12.1	10.0
Freq. (MHz)	92.3	82.0	250.0	93.3
Limit (dB)	12.4	12.9	8.0	12.3

Compliant Network Standards:
 10BASE-T 100BASE-TX 100BASE-T4
 1000BASE-T 2.5GBASE-T 5GBASE-T
 ATM-25 ATM-51 ATM-155
 100VG-AnyLan TR-4 TR-16 Active
 TR-16 Passive



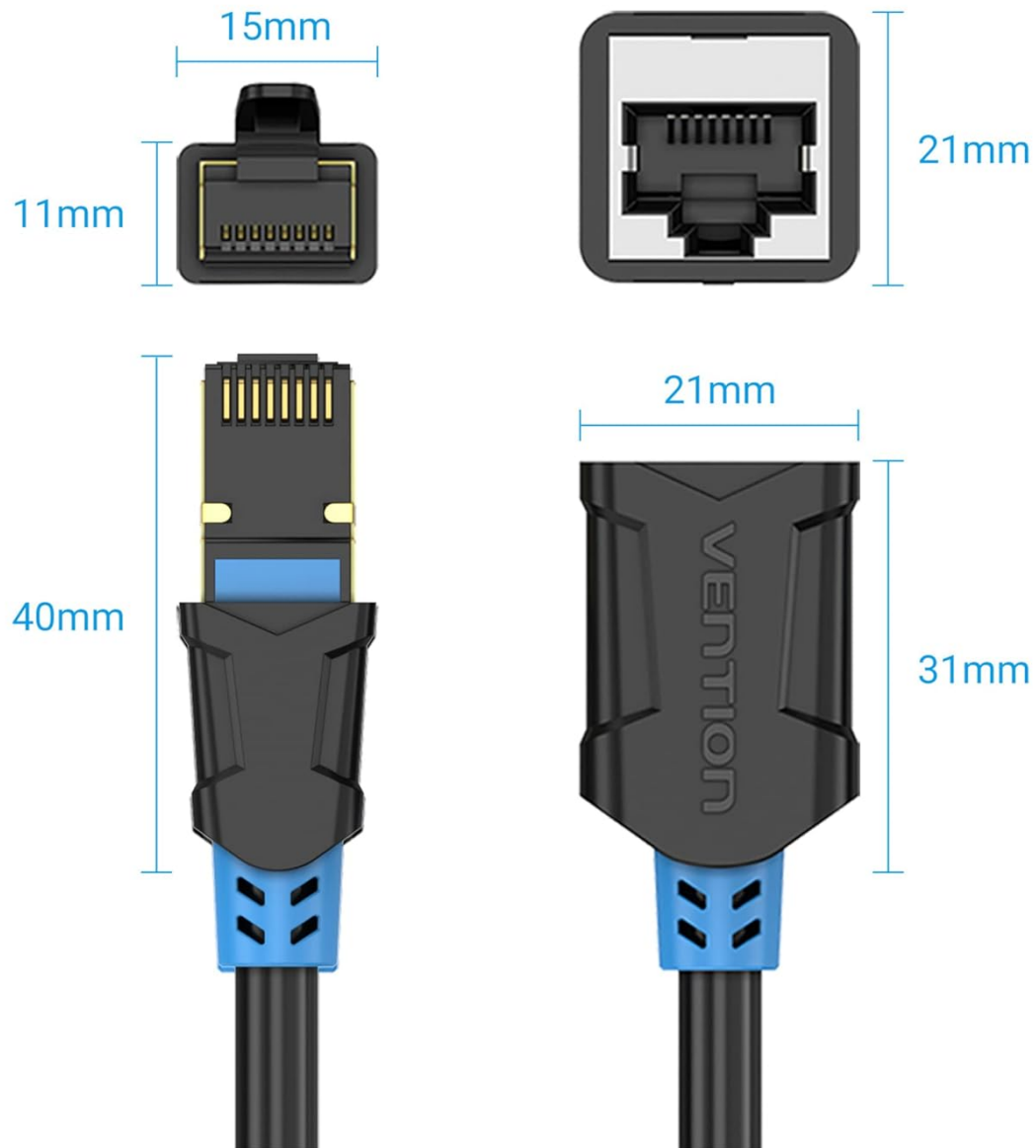
LinkWare™ PC Version 10.1

Project: DEFAULT

Untitled1

FLUKE
networks

Image: A Fluke Networks test report confirming the VENTION Ethernet cable meets Cat6 network standards, indicating reliable performance.



Note: All data are from Vention Lab.
Sizes above are manually measured. There might be slight tolerance.

Image: A diagram providing the precise dimensions of the VENTION RJ45 male and female connectors in millimeters, useful for installation planning.

8. OFFICIAL PRODUCT VIDEO

Your browser does not support the video tag.

Video: An official product video from Vention Official Store demonstrating the features and use of the Ethernet extension cable.
Duration: 0:30.

9. WARRANTY AND SUPPORT

VENTION products are manufactured to high-quality standards. For specific warranty information and customer support, please refer to the product packaging or visit the official VENTION website. If you have any questions or require assistance, please contact VENTION customer service.

