Saved from manuals.plus.
Open the live page for links to other documents and user manuals.

Cable Matters 120007-1m

Cable Matters 40Gb OFNP Plenum Rated Multimode Duplex 50/125 OM3 Fiber Cable Instruction Manual

Model: 120007-1m

1. Introduction

This manual provides essential information for the proper installation, operation, and maintenance of your Cable Matters 40Gb OFNP Plenum Rated Multimode Duplex 50/125 OM3 Fiber Cable. This fiber optic cable is designed for high-speed data transmission in demanding network environments, supporting 10 Gigabit applications in SAN networks and data centers.

The cable features dual small form factor LC connectors and is OM3 LOMMF (laser optimized multi-mode fiber) rated, ensuring reliable connectivity with VCSEL laser network equipment such as SFP+ transceivers, Ethernet switches, media converters, industrial Ethernet devices, and optical fiber NICs.

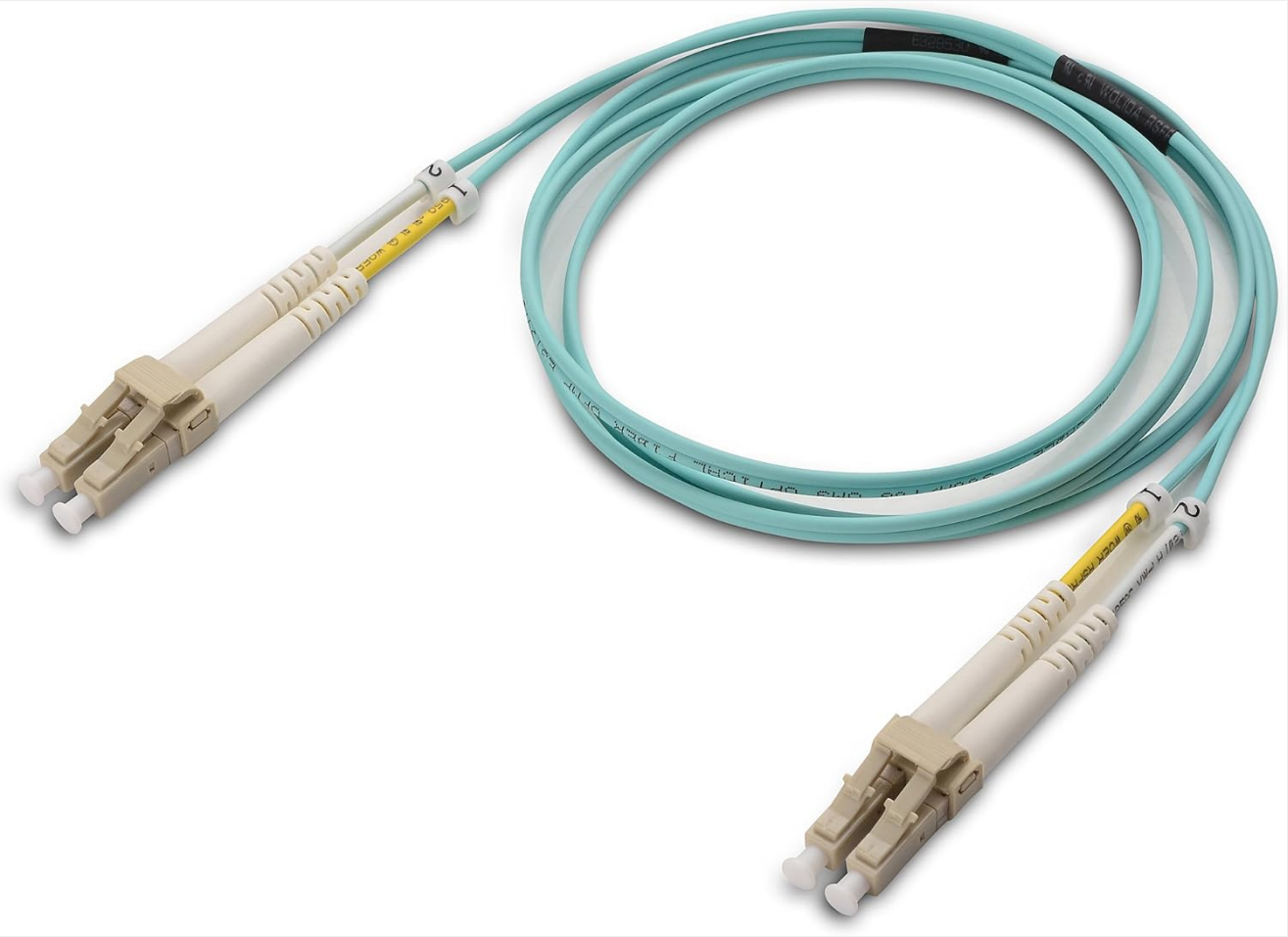


Image 1.1: The Cable Matters 40Gb OM3 Fiber Cable, showing its aqua jacket and LC connectors.

2. Key Features

- **High-Speed Performance:** Supports 10 Gigabit Ethernet (1000Base-LX, 1000Base-SX, 10GBase-S/LR4/LRM) and Fibre Channel (100/200/400/1200-MX) applications.
- **OM3 LOMMF Rating:** Laser optimized multimode fiber for enhanced performance with VCSEL lasers.
- **LC Connectors:** Dual small form factor LC connectors with slim-profile boots, PC polish, and zirconia ceramic ferrules for precise alignment.
- **Flexible Installation:** Features adjustable clips and removable dust caps for protection and individual fiber access. Embossed A/B position labels and jacket tag rings (1 & 2) aid in quick identification during installation and troubleshooting.
- **Bend Insensitive Design:** Allows for a 7.5mm bending radius, which is four times more flexible than standard 50 micron fiber cables, minimizing macro-bending loss in tight spaces.
- **OFNP Plenum Rated:** Superior safety fire rating meeting UL 910 regulations, suitable for plenum spaces and can substitute for OFNR (riser) rated cable.
- **Broad Compatibility:** Interoperable with standard OM3 cabling systems and backwards compatible with FDDI and Fast Ethernet 10/100BASE SX or FX.

3. Setup and Installation

Follow these steps for proper installation of your fiber optic cable:

1. **Unpack and Inspect:** Carefully remove the cable from its packaging. Inspect the cable and connectors for any

visible damage. Do not use if damage is present.

2. **Prepare Connectors:** Gently remove the protective dust caps from both ends of the LC connectors. Store these caps for future use when the cable is not connected.
3. **Connect to Equipment:** Insert the LC connectors into the corresponding SFP+ transceivers or fiber optic ports on your network equipment. Ensure the connectors are fully seated and click into place. The embossed A/B labels and numbered rings (1 & 2) on the duplex clip assist in maintaining correct polarity (transmit to receive, receive to transmit).
4. **Cable Routing:** Route the cable carefully, avoiding sharp bends or kinks. While the cable is bend-insensitive, excessive force or bending beyond the 7.5mm radius can still cause signal degradation or damage. Secure the cable using appropriate cable management solutions.

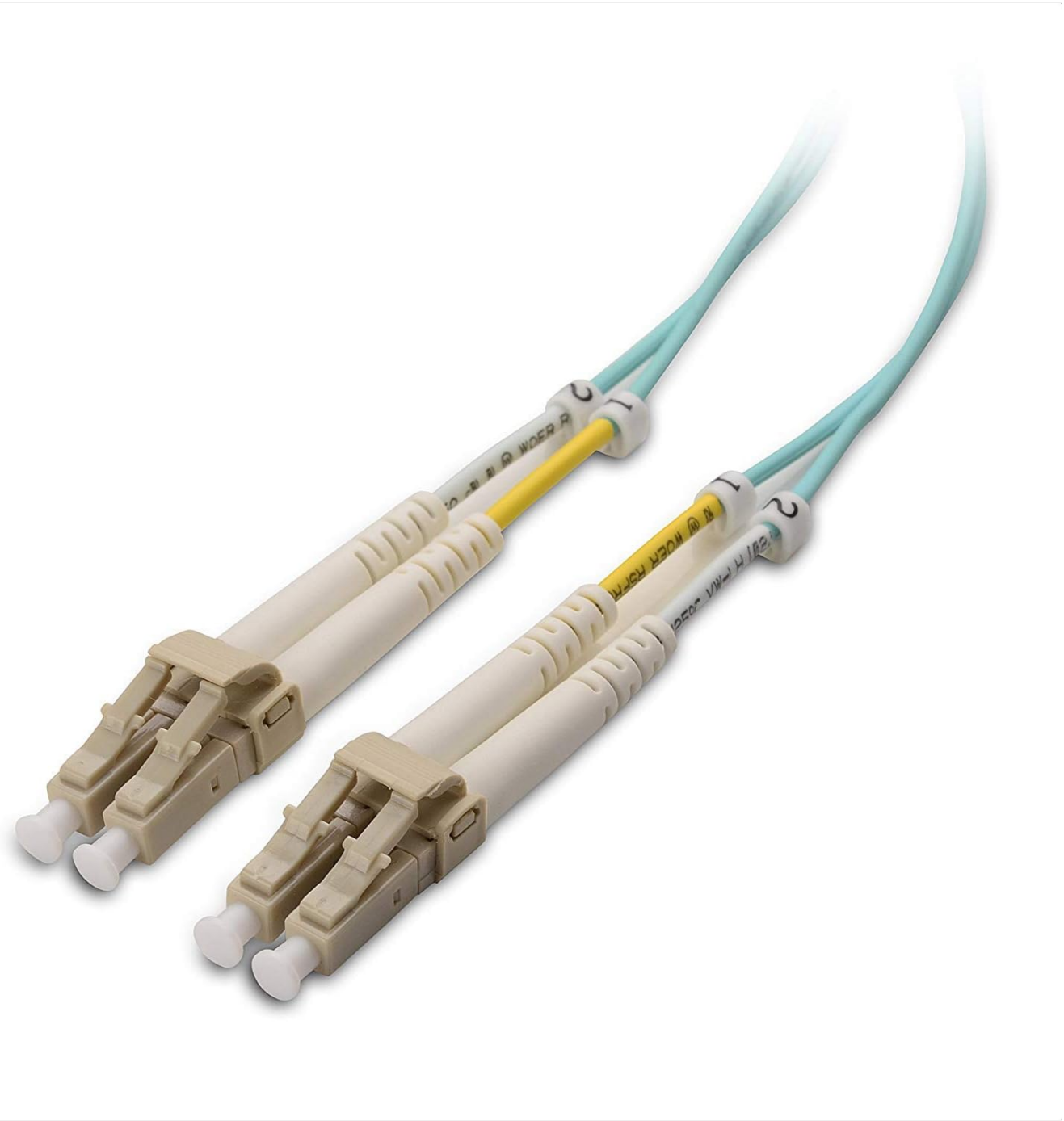


Image 3.1: Close-up view of the LC connectors, showing the protective dust caps and duplex clip.

4. Operation

Once properly installed, the Cable Matters fiber optic cable operates passively to facilitate high-speed data transmission between compatible network devices. Ensure that all connected equipment (e.g., SFP+ transceivers, Ethernet switches, media converters) are powered on and correctly configured for fiber optic communication.

The cable supports full-duplex communication, meaning data can be transmitted and received simultaneously over the two fiber strands. The OM3 rating ensures optimal performance for 10 Gigabit applications over specified distances.

5. Maintenance and Care

Proper care extends the lifespan and ensures optimal performance of your fiber optic cable:

- **Connector Cleaning:** Fiber optic connectors are sensitive to dust and debris. Always keep connectors clean. Use only approved fiber optic cleaning tools (e.g., lint-free wipes, fiber optic cleaning pens) to clean the ferrule ends if contamination is suspected. Never touch the ferrule ends with bare hands.
- **Dust Cap Usage:** Always replace the protective dust caps on the LC connectors when the cable is not in use or disconnected from equipment. This prevents dust and damage to the delicate fiber ends.
- **Avoid Stress:** Do not pull, twist, or excessively bend the cable. While bend-insensitive, extreme stress can still damage the internal fibers. Avoid placing heavy objects on the cable.
- **Storage:** When storing the cable, coil it loosely to prevent kinks and replace dust caps. Store in a clean, dry environment.



Image 5.1: A fiber optic connector with its protective dust cap in place, highlighting the importance of keeping the connector ends clean and protected.

6. Troubleshooting

If you experience issues with your fiber optic connection, consider the following troubleshooting steps:

6.1 No Link or Signal Loss

- **Verify Connections:** Ensure both ends of the fiber cable are securely and fully inserted into their respective ports on the network equipment.
- **Check for Contamination:** Disconnect the cable, inspect the connector ferrules for dust or debris, and clean them using a proper fiber optic cleaning tool if necessary. Reconnect the cable.
- **Confirm Polarity:** Ensure the transmit (Tx) fiber from one device is connected to the receive (Rx) port of the other device, and vice-versa. The A/B labels and numbered rings on the duplex clip can help verify correct pairing.
- **Equipment Compatibility:** Confirm that the connected SFP+ transceivers or network equipment are compatible with OM3 multimode fiber and the desired data rate (e.g., 10Gb).
- **Test with Known Good Cable:** If possible, test your setup with another known working fiber optic cable to

isolate the issue.

6.2 Reduced Performance

- **Inspect Cable Path:** Check the entire length of the cable for any tight bends, kinks, or physical damage that could be causing signal attenuation.
- **Re-clean Connectors:** Even minor contamination can affect performance. Re-clean both connectors thoroughly.
- **Environmental Factors:** Ensure the cable is not exposed to extreme temperatures or excessive electromagnetic interference, although fiber is generally immune to EMI.

7. Specifications

Attribute	Detail
Brand	Cable Matters
Model Number	120007-1m
ASIN	B00T5796DQ
Cable Type	Multimode Duplex Fiber Optic Cable
Fiber Type	OM3 50/125 Micron (Laser Optimized)
Connector Type	LC to LC (Male-to-Male)
Data Transfer Rate	Up to 40 Gigabits Per Second
Jacket Rating	OFNP (Plenum Rated), UL 910 Compliant
Bend Radius	7.5mm (Bend Insensitive)
Cable Color	Aqua
Connector Color	Beige
Compatible Devices	PC, SFP+ Transceivers, Ethernet Switches, Media Converters, Industrial Ethernet Devices, Optical Fiber NICs
Recommended Uses	SAN networks, data centers, 10 Gigabit connections
Product Dimensions	9 x 6 x 0.7 inches (packaging)
Item Weight	0.634 ounces
Specification Met	RoHS, UL
Indoor/Outdoor Usage	Indoor, Outdoor

Cable Matters

Item Number	120007			
Date	Testing Date XX/XX/20XX			
Length	XX			
	END A		END B	
Connector Type	LC		LC	
	A1	A2	A3	A4
Insertion Loss(dB)	0.24	0.18	0.14	0.25
Q.C.	PASS			

Factory Test Report

Image 7.1: Example of a Factory Test Report, indicating quality control and performance metrics for fiber optic cables.

8. Warranty and Support

For warranty information, technical support, or further assistance with your Cable Matters product, please visit the official Cable Matters website or contact their customer service department. Details can typically be found on the product packaging or the brand's online support pages.

Online Resources: For additional product information, FAQs, and support, please visit theCable Matters Store on Amazon or their official website.

© 2025 Cable Matters. All rights reserved.

Ask a question about this manual

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. Privacy details.

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question

Open the live page

https://manuals.plus/asin/B00T5796DQ

More documents and user manuals: **https://manuals.plus/**