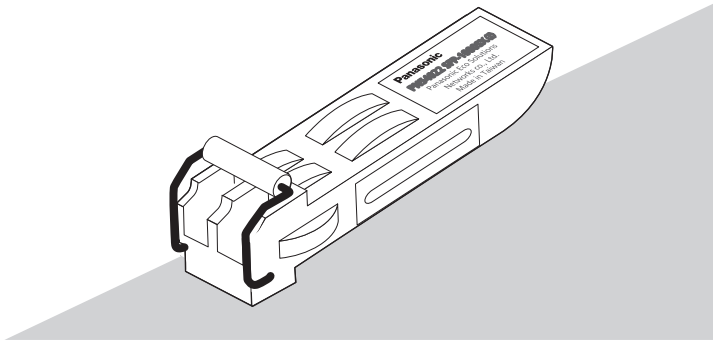


Installation Guide

1000BASE-SX SFP Module(i) (SFP-1000SX(i))
1000BASE-LX SFP Module(i) (SFP-1000LX(i))

Model No. PN54022-TH/PN54024-TH
PN54022-MY/PN54024-MY
PN54022-ID/PN54024-ID
PN54022-SG/PN54024-SG
PN54022-NZ/PN54024-NZ
PN54022-IN/PN54024-IN

- Thank you for purchasing our product.
- This document provides important information about safe and proper operations of this SFP Module.
- Please read the "Important Safety Instructions".
- Any problems or damages resulting from disassembly of this SFP Module by customers are not covered by the warranty.



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I0324-0 Printed in Japan

Basic Instructions for the Use of This Product

- For inspection and/or repair, consult the technical support.
- Please properly and firmly connect the devices into the Panasonic Ethernet Switch's SFP extension port which are compatible with the SFP Module. If the SFP Module is connected to Ethernet Switches other than Panasonic Ethernet Switches which are compatible with the SFP Module, please note that operations are not guaranteed.
- If fiber optic cables are going to be connected to this product, check that the fiber optic cable connectors are not contaminated with dust, etc. and if they are contaminated, be sure to clean them, then connect them to the fiber optic ports.
- Remove the SFP Module from the SFP extension port before cleaning the SFP Module.
- Do not touch the SFP Module's metal terminals, nor allow charged objects to get close to them. Deviation could lead to malfunctions due to static electricity.
- Do not store and/or use this SFP Module in the environment with the characteristics listed below. (Store and/or use this SFP Module in the environment in accordance with the specification.)
 - High humidity. Possible spilled liquid (water).
 - Dusty. Possible static charge (such as carpet).
 - Under direct sunlight.
 - Possible condensation. High/low temperature exceeding the specifications environment.
 - Strong vibration and/or strong shock.
- Do not use the SFP Module in any condition where the specification limits are exceeded. Deviation could lead to malfunctions.

1. Please note that Panasonic shall not bear any liability whatsoever for any damages (this shall include lost earnings, lost opportunities, etc. but this is not restricted to these things) which were generated in relation to damages caused by operations and usage, or the inability to use this SFP Module, whereby the customer does not follow this Installation Guide.
2. The contents described in this document may be changed without prior notice. For the latest version, please refer to the Panasonic website.
3. For any question, please contact the technical support where you purchased the product.

Important Safety Instructions

This chapter contains important safety instructions for preventing bodily injury and/or property damage. Please read carefully, and follow them at all times.

- Severity of bodily injury and/or property damage, which could result from incorrect use of the SFP Module, are explained below.

⚠WARNING

This symbol indicates a potential hazard that could result in serious injury or death.

⚠CAUTION

This symbol indicates safety instructions. Deviation from these instructions could lead to bodily injury and/or property damage.

⊘

This symbol is used to alert users what they must not do.

❗

This symbol is used to alert users what they must do.

⚠WARNING

⊘

- Do not look at the laser light. Deviation could lead to visual impairment. (Class 1 Laser Product)

⚠CAUTION

❗

- If fiber optic cables are going to be connected to this product, check that the fiber optic cable connectors are not contaminated with dust, etc. If they are contaminated, the optical signals will not be properly transmitted, which might cause misoperations, or malfunctions. If they are contaminated, be sure to clean them, then connect them to the fiber optic ports.
- Be careful when performing the following operations since the device will be at high temperatures immediately after it has been energized or the power has been shut off.
 - Moving the product from the installation area, or transporting it
 - Connecting and disconnecting the product, or plugging in or unplugging the fiber optic cablesDeviation could lead to injuries or burns, etc. because of high temperatures.

Product Outline

1000BASE-SX SFP Module(i) and 1000BASE-LX SFP Module(i) are SFP (Small Form-Factor Pluggable) modules to be connected to a Panasonic Ethernet Switch's SFP extension port.

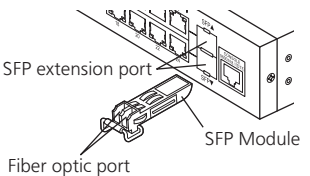
Specifications

Product name	1000BASE-SX SFP Module(i)	1000BASE-LX SFP Module(i)
Model No.	PN54022	PN54024
Standards	IEEE 802.3z 1000BASE-SX	IEEE 802.3z 1000BASE-LX
	SFF-8472 (Diagnostic Monitoring Interface)	
Compatible cable	MMF cable	SMF, MMF cable*
Fiber optic port connector type	LC connector (Duplex)	
Optical wavelength	850 nm	1310 nm
Operating voltage	DC 3.3 V	
Power consumption	0.7 W max	0.9 W max
Operating ambient temperature/humidity	0 to 60°C/20 to 80% RH (No dew condensation)	
External dimensions	14 mm (Height) x 14 mm (Width) x 57 mm (Depth) (Excluding protruding sections)	
Mass (Weight)	17 g	
Accessories	Installation Guide (this document) x1(*) * Just the PN54022-TH/PN54024-TH has 1 Installation Guide in Thai (at total of 2 guides) Protection cap of the fiber optic port (Attached to the module) x1	

MMF: Multi Mode Fiber SMF: Single Mode Fiber

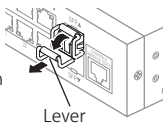
Installation

1. Securely connect the SFP Module to the SFP extension port of a Panasonic Ethernet Switch.
2. Remove the protective cap of the SFP Module's fiber optic port.
3. Connect a fiber optic cable that meets the standards specified for the SFP Module.
4. Connect another SFP Module of the same model number on the opposite end.



Removal

1. Unlatch the fiber optic cable and remove it from the SFP Module.
2. Pull down the lever of the SFP Module 90 degrees as shown in the figure to unlatch the SFP Module.
3. Pull out the SFP Module.



Troubleshooting

If you find any problem, please take the following steps to check.

- ◆ The port LED of the Ethernet Switch to which the SFP Module connected is not lit.
 - Is the Ethernet Switch powered on?
 - Is the SFP Module securely connected to the target SFP extension port of the Ethernet Switch?
 - Is the connected port of the Ethernet Switch enabled?
 - Is the cable correctly connected to the target port?
 - Is a conforming cable used? Is the same type of SFP Module used on the opposite end?
 - Is the equipment connected to the target port compliant with the specified standards?
 - Ensure that 100BASE-FX or 10GBASE-R equipment is not connected.

Information [India Only]

The information below pertains to products for India.

Information on hazardous constituents as specified in sub-rule1 of rule16 in electrical and electronic equipment.
Declaration of Conformity with the requirements of the E-Waste (Management) Amendment Rules, 2023 with the sub-rule1 of rule16 limits with respect to Lead, Mercury, Cadmium, Hexavalent chromium, Polybrominated biphenyls, Polybrominated diphenyl ethers.
The content of hazardous substance with the exemption of the applications listed in SCHEDULE II of the E-Waste (Management) Amendment Rules, 2023:

1. Lead (Pb) – not over 0.1% by weight.
2. Cadmium (Cd) – not over 0.01% by weight.
3. Mercury (Hg) – not over 0.1% by weight.
4. Hexavalent chromium (Cr6+) – not over 0.1% by weight.
5. Polybrominated biphenyls (PBBs) – not over 0.1% by weight.
6. Polybrominated diphenyl ethers (PBDEs) – not over 0.1% by weight.



For the purpose of recycling to facilitate effective utilization of resources, please return this product to a nearby authorized collection center, registered dismantler of recycler, or Panasonic service center when disposing of this product.

Customer care number (Toll free) : 1800 103 1333, 1800 108 1333

Please see the Panasonic website for further information on collection centers, etc. or call the customer care toll-free number

<https://www.panasonic.com/in/corporate/e-waste-management.html>

Do's & Don't		
S.No.	Do's	Don't
1	All electrical and electronic products are required to be handed over only to the Authorized recycler.	The product should not be opened by the User himself/herself, but only by authorized service personnel.
2	The product should be handed over only to authorized recycler for disposal.	The product is not meant for re-sale to any unauthorized agencies/scrap dealer/kabari-walas.
3	Keep the product in isolated area, after it becomes non-function/un-repairable so as to prevent its accidental breakage.	The product is not meant for mixing into house-hold waste stream.
4	Refer to operating instruction for handling of End-of Life products.	Do not keep any replaced spare part(s) from the product in exposed area.
5	Always dispose products that have reached end-of life at Panasonic Life Solutions India Authorized Service Centre.	Do not donate old electronic items to any body. Do not dispose your product in garbage bins along with municipal waste that ultimately reaches landfill.
6	Wherever possible or as instructed, separate the packaging material according to responsible waste disposal options and sorting for recycling.	Do not give e-waste to informal and unorganized sectors like Local Scrap Dealer/ Rag Pickers.

Technical Support

Panasonic Life Solutions India Pvt. Ltd.,
12th Floor, Ambience Tower, Ambience Island, NH-48,
Gurugram – 122 002, Haryana.

In case of consumer complaints contact:
Customer Care Executive
3rd Floor, B Wing, I-Think Techno Campus, Pokharan Road No.2,
Thane (W) – 400 607, Maharashtra.

Customer care no.: 022-41304130, WhatsApp no.: 91360 28606
Email : wecare@in.panasonic.com