




Using Adapters

SAFETY













Important Safety Information

This document contains important instructions when using Enphase-supplied adapters with Enphase Microinverters. To reduce the risk of electrical shock, and to ensure the safe installation, follow these instructions. The following safety symbols and instructions indicate dangerous conditions and detail important safety information.

Safety Symbols

	DANGER! This indicates a hazardous situation, which if not avoided, will result in death or serious injury.
	WARNING! This indicates a situation where failure to follow instructions may be a safety hazard or cause equipment malfunction. Use extreme caution and follow instructions carefully.
	NOTE: This indicates information particularly important for optimal system operation. Follow instructions closely.

Safety Instructions

	DANGER: Risk of Electrical Shock. Be aware that installation of this equipment includes risk of electric shock. Do not install the AC junction box without first removing AC power from the Enphase System.
	WARNING: Risk of skin burns. The body of the Enphase Microinverter is the heat sink. Under normal operating conditions, the temperature is 15°C above ambient, but under extreme conditions the microinverter can reach a temperature of 80°C. To reduce risk of burns, use caution when working with microinverters.
	WARNING: Before installing or using the adapter, read all instructions and cautionary markings in the technical description and on the Enphase Microinverter System and the photovoltaic (PV) equipment.
	WARNING: Only use electrical system components approved for wet locations.
	WARNING: Only qualified personnel should troubleshoot, install, or replace Enphase Microinverters or the Engage Cable and Accessories.
	WARNING: Never disconnect the DC wire connectors under load. Ensure that no current is flowing in the DC wires prior to disconnecting. If necessary, use an opaque covering to cover the PV module prior to disconnecting the PV module.
	WARNING: DO NOT connect Enphase Microinverters to the grid or energize the AC circuit(s) until you have completed all of the installation procedures.
	WARNING: Be aware that installation of this equipment includes risk of electric shock. Normally grounded conductors may be ungrounded and energized when a ground fault is indicated.
	WARNING: Always de-energize the AC branch circuit before servicing. Never disconnect the DC connectors under load. Disconnect DC connections first, then disconnect AC connections.
	WARNING: Perform all electrical installations in accordance with all applicable local electrical codes and the National Electrical Code (NEC), ANSI/NFPA 70.
	NOTE: The Status LED on the microinverter will blink green six times to indicate normal start-up operation one to two minutes after DC power is applied.
	NOTE: The AC output neutral is not bonded to ground inside the microinverter.

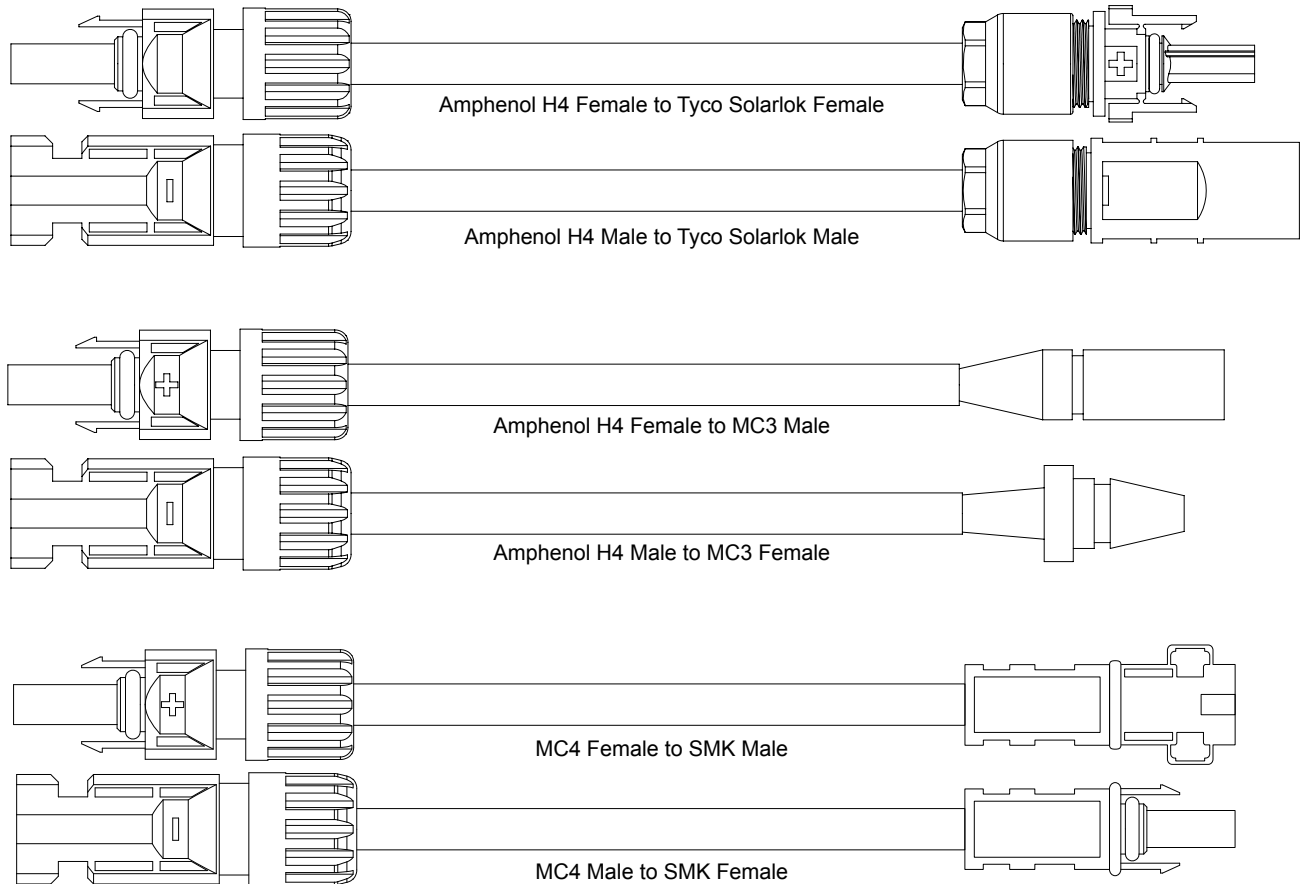


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Adapter Description and Installation

PV adapters allow you to connect a PV module to an Enphase Microinverter equipped with a different type of DC connector. The adapters must have the physical format to attach the PV module to the microinverter, and they must have the appropriate polarity. The adapters plug into the PV module DC cables, thus providing an appropriate mate for the microinverter.

Adapter Types that may be Supplied with your Replacement Microinverter



What Type Do I Need?

Check the connectors on the DC leads of the PV module.

- If the PV module has Tyco connectors, use the Amphenol H4 to Tyco adapters.
- If the PV module has MC3 connectors, use the Amphenol H4 to MC3 adapters.
- If the PV module has SMK connectors, use the MC4 to SMK adapters.

Install the Adapter

1. Verify that the AC branch circuit breaker is de-energized.
2. Remove the inoperable microinverter from the PV racking and PV module as described in the Enphase microinverter installation and operation manual for the M-Series, S-Series, or D-Series microinverter being replaced.
3. Install the replacement microinverter to the PV racking following the instructions in the manual.
4. Connect the Amphenol H4 or MC4 ends of the two adapters, as appropriate, to the two microinverter DC leads.
5. Connect the far end connector (SMK, Tyco, or MC3) of each of the adapters to the appropriate leads of the PV module.
6. Verify that you have mated the microinverter and PV module as required by checking that the microinverter indicator light blinks green six times one to two minutes after connection to the PV module. This indicates to indicate normal start up. You may need a handheld mirror to see the indicator light.
7. Energize the AC branch circuit breaker, and verify operation of the replacement microinverter by checking its indicator light.