

QD Cable and accessories

The Enphase QD Cable and accessories are integral parts of the IQ Commercial Microinverter-based PV system for grid-tied, three-phase PV applications.

The QD Cable provides self-phase balancing and neutral sensing for phase loss protection.



Conductor specifications

QD Cable	4 conductors 12 AWG
Outer diameter	11.5 mm
Certification	UL 3003 (raw cable), UL 9703 (cable assemblies), and DG cable
Max. AC conductor resistance (20°C) (Ω/km)	12 AWG 5.43 Ω/km
Flame test rating	FT4
Compliance	RoHS, OIL RES I, CE, UV resistant, and combined UL for the United States
Conductor type	THHN/THWN-2 dry/wet

✓ Reliable

- Neutral sensing for phase loss protection
- Locking-type connectors
- Rated for outdoor, wet environments, sunlight resistance, and oil resistance

⚙️ Easy

- Self-phase balancing
- Lightweight and simple for fast installation
- Modularly expandable
- Reduction in balance-of-system costs and installation time
- Phase ID marked on QD Cable connectors for easy identification (C1: L1-L2, C2: L2-L3, and C3: L3-L1 sequentially)
- Separate center feeding connector in all AC branch circuit cabling SKUs for maintaining <1% voltage rise with easy plug-and-play installations

📍 Field Wireable QD Connectors

- Easily connect QD Cables on the roof without complex wiring
- Available as male and female connector types
- UL Listed

QD Cable types					
Connectorized models	Size	Connector spacing	PV module spacing	PV module orientation	Connector count per box
QD-12-13-120	12 AWG	1.7 m (5.6 ft)	1.3 m (4.3 ft)	Portrait	120
QD-12S-13-120	12 AWG	1.7 m (5.6 ft)	1.3 m (4.3 ft)	Portrait	120
QD-12-20-120	12 AWG	2.4 m (7.9 ft)	2.0 m (6.6 ft)	Landscape	120
QD-12S-20-120	12 AWG	2.4 m (7.9 ft)	2.0 m (6.6 ft)	Landscape	120
QD-12-25-108	12 AWG	2.9 m (9.5 ft)	2.5 m (8.2 ft)	Landscape	108
QD-12S-25-108	12 AWG	2.9 m (9.5 ft)	2.5 m (8.2 ft)	Landscape	108

✓ **NOTE:** The QD Cables are rated for operation in electrical systems at 480 V WYE (277 V Line-to-Neutral) and 208 V WYE (120 V Line-to-Neutral) configurations.

✓ **NOTE:** SKUs containing an "S" denote the integrated splice connector, which supports center tapping for installations using IQ9 Microinverters. These specific QD Cable SKUs do not require the QD-LINKFW-10 adapter cable for center tapping.

QD Cable accessories		
Name	Model number	Description
Raw QD Cable	QD-12-RAW-300	300 m (984.2 ft) of 12 AWG cable with no connectors
Field Wireable QD Connector (male)	QD-CONN-10M	Male field-wireable AC connector for Raw QD Cable; pack of 10 connectors
Field Wireable QD Connector (female)	QD-CONN-10F	Female field-wireable AC connector for Raw QD Cable; pack of 10 connectors
QD Disconnect Tool	QD-DISC-10	QD Disconnect Tool for QD Cable connectors, DC connectors, and AC Module mount; pack of 10 connectors
QD Sealing Caps (female)	QD-SEAL-10	One required to cover each unused connector on the cabling; pack of 10 connectors
QD Cable Clip	ET-CLIP-100	Used to fasten cabling to the racking or to secure looped cabling; pack of 100 cable clips
QD Cable Terminator	QD-TERM-10	Terminator for unused cable ends; pack of 10 terminators
QD Center Tap Adapter Cable	QD-LINKFW-10	Center tap adapter cable for center feeding of the AC branch circuit
Enphase MC4 to MC4 Extension Cable (1000 mm)	ECA-S22-S22-10-12	MC4 to MC4 extension cable to connect PV module to DC adapter (MC4) or IQ Microinverters with MC4, 1000 mm/39.4"
Enphase MC4 to MC4 Extension Cable (1800 mm)	ECA-S22-S22-18-12	MC4 to MC4 longer extension cable to connect PV module to DC adapter (MC4) or IQ Microinverters with MC4, 1800 mm/70.9"

✓ **NOTE:** QD-LINK is required only with the QD-12-xx-xxx cables.

QD Cable accessories



Field Wireable QD Connector (male)

Male field-wireable AC connector; sold in packs of ten (QD-CONN-10M)



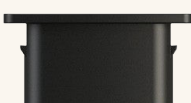
Field Wireable QD Connector (female)

Female field-wireable AC connector; sold in packs of ten (QD-CONN-10F)



QD Cable Terminator

Terminator cap for unused cable ends; sold in packs of ten; center feed requires two per branch (QD-TERM-10)



QD Sealing Caps

Female sealing caps for unused cable connections; sold in packs of ten (QD-SEAL-10)



QD Disconnect Tool

Plan to use at least one per installation; sold in packs of ten (QD-DISC-10)



QD Cable Clip

Used to fasten cabling to the racking or to secure looped cabling; sold in packs of one hundred (ET-CLIP-100)

Revision	Date	Description
DSH-00251-5.0	December 2025	Updated IQ9 Commercial Microinverter information and added the new cable model SKUs.
DSH-00251-4.0	August 2024	Updated the "QD Cable Types" information.
DSH-00251-3.0	March 2024	Updated the "QD Cable Accessories" information.
DSH-00251-2.0	January 2024	Updated the "QD Cable Types" information.
DSH-00251-1.0	November 2023	Initial release.

Previous releases.