QD Cable and accessories

The **Enphase QD Cable** and accessories are integral parts of the IQ8 Commercial Microinverter based PV system for grid-tied, three-phase 208 V PV applications.

The OD Cable works with the Enphase IQ8 Commercial Microinverter and provides self-phase balancing and neutral sensing for phase loss protection.



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

To learn more about Enphase offerings, visit enphase.com







QD Cable and accessories

CONDUCTOR SPECIFICATIO	NS				
QD Cable	4 conductors 12 AWG				
Outer diameter	11.5 mm				
Voltage rating	600 V (connector rating up to 277 VAC)				
Certification	UL3003 (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				
QD CABLE TYPES					
Connectorized models	Size/Max. nominal voltage	Connector spacing	PV module spacing	PV module orientation	Connector count per box
(D-12-13-120	12 AWG / 277 VAC	1.7 m (5.6 ft)	1.3 m (4.3 ft)	Portrait	120
D-12-20-120	12 AWG / 277 VAC	2.4 m (7.9 ft)	2.0 m (6.6 ft)	Landscape	120
QD-12-25-108	12 AWG / 277 VAC	2.9 m (9.5 ft)	2.5 m (8.2 ft)	Landscape	108
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 10 connectors		
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		
	Field Wireable QD Co	nnector (male)		Field Wire	able QD Connector (female
	Male field-wireable AC connector; sold in packs of ten (QD-CONN-10M)			Female field-wireable AC connector; sold in packs of ten (QD-CONN-10F)	
	QD Cable Terminator			QD Sealin	g Caps
	Terminator cap for unused cable ends; sold in packs of ten; center feed requires two per branch (QD-TERM-10)				aling caps for unused cable ns; sold in packs of ten 10)
4.4	QD Disconnect Tool			QD Cable	Clip
7	Plan to use at least one per installation; sold in packs of ten (QD-DISC-10)		Used to fasten cabling to the racking or to secure looped cabling; sold in packs of one hundred (ET-CLIP-100)		

Use one cable per branch circuit for IQ8 Commercial installations. The center tap adapter cable is 300 mm long with a 4-pole female Field Wireable QD Connector on one side, which should be connected only to the center tapping connector of an AC branch circuit cable. The female Field Wireable QD Connector on the other side can be connected to male Field Wireable QD Connectors for cable extension.



Revision history

REVISION	DATE	DESCRIPTION
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.