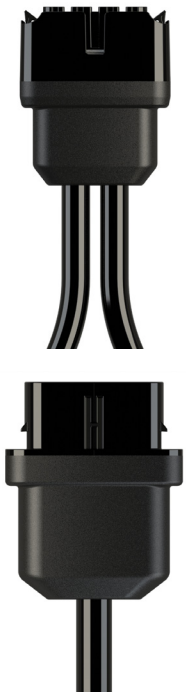
QD Cable and accessories

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 QD 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

QD Cable and accessories

CONDUCTOR SPECIFICATIONS	
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 orientation	Connector count per box
QD-12-13-120	12 AWG / 277 VAC	1.7 m (5.6 ft)	Portrait	120
QD-12-20-120	12 AWG / 277 VAC	2.4 m (7.9 ft)	Landscape	120
QD-12-25-108	12 AWG / 277 VAC	2.9 m (9.5 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 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 AC branch circuit when using QD-12-42-63; pack of 10 adapter cables

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 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)

QD Center Tap Adapter Cable

Use one cable per branch circuit for IQ8 Commercial installations. The center tap adapter cable is 300 mm long with a 4-pole QD female 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.

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Revision history

REVISION	DATE	DESCRIPTION
DSH-00251-2.0	January 2024	Updated the "QD Cable Types" table.
DSH-00251-1.0	November 2023	Initial release.
Previous releases		

To learn more about Enphase offerings, visit **enphase.com**

QD-12-RAW-300-DSH-00251-2.0-EN-US-2024-01-02

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