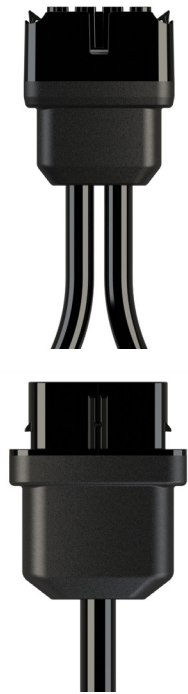


Enphase QD Cable & Accessories

The **Enphase QD™ Cable** and accessories are integral parts of the IQ8D-based small commercial PV system for grid-tied, three-phase 208V PV applications.

The QD Cable works with the Enphase IQ8D™ Microinverter (one micro for two series-connected PV modules) 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 QD-12-42-63 (15.1 ft landscape ballast cable) for maintaining <1% voltage rise with easy plug and play installations

Field-Wireable Connectors

- Easily connect QD cables on the roof without complex wiring
- Available in male and female connector types
- UL listed

Enphase QD Cable and Accessories

CONDUCTOR SPECIFICATIONS








QD Cable	4 Conductors 12 AWG
Outer Diameter	11.5mm
Voltage rating	600V (Connector rating up to 277 Vac)
Certification	UL3003 (raw cable), UL 9703 (cable assemblies), 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, combined UL for the United States
Conductor type	THHN/THWN-2 dry/wet

QD CABLE TYPES / ORDERING OPTIONS

Connectorized Models	Size / Max Nominal Voltage	Connector Spacing	PV Module Orientation	Connector Count per Box
QD-12-10-150	12 AWG / 277 VAC	1.4 m (4.6 ft)	Portrait	150
QD-12-20-135	12 AWG / 277 VAC	2.4 m (7.9 ft)	Landscape	135
QD-12-42-63	12 AWG / 277 VAC	4.6 m (15.1 ft)	Landscape ballast	63

ENPHASE 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 connector (male)	QD-CONN-10M	Male field wireable AC connector for raw QD cable, pack of 10 connectors
Field wireable connector (female)	QD-CONN-10F	Female field wireable AC connector for raw QD cable, pack of 10 connectors
Disconnect tool	QD-DISC-10	Disconnect tool for QD Cable connectors, DC connectors, and AC module mount, pack of 10 connectors
QD Cable sealing caps (female)	QD-SEAL-10	One needed to cover each unused connector on the cabling, pack of 10 connectors
Cable clip	ET-CLIP-100	Used to fasten cabling to the racking or to secure looped cabling, pack of 10 connectors
Terminator	QD-TERM-10	Terminator for unused cable ends, pack of 10 terminators
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

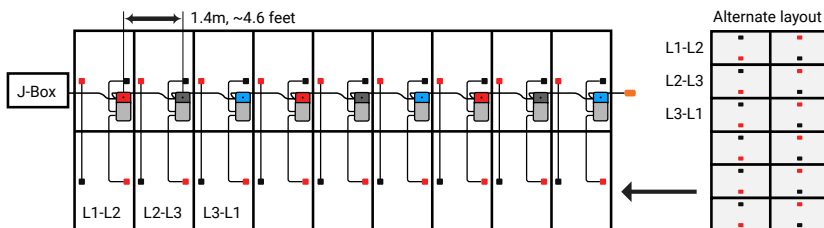
 <p>FIELD WIREABLE CONNECTOR (M) Male field wireable AC connector, sold in packs of ten (QD-CONN-10M)</p>	 <p>FIELD WIREABLE CONNECTOR (F) Female field wireable AC connector, sold in packs of ten (QD-CONN-10F)</p>
 <p>TERMINATOR Terminator cap for unused cable ends, sold in packs of ten. Center feed requires two per branch. (QD-TERM-10)</p>	 <p>SEALING CAPS Female sealing caps for unused cable connections, sold in packs of ten (QD-SEAL-10)</p>
 <p>DISCONNECT TOOL Plan to use at least one per installation, sold in packs of ten (QD-DISC-10)</p>	 <p>CABLE CLIP Used to fasten cabling to the racking or to secure looped cabling, sold in packs of one hundred (ET-CLIP-100)</p>
 <p>CENTER TAP ADAPTER CABLE Use 1 cable per branch circuit when used for IQ8D installations with QD-12-42-63 (15.1 ft cable) only. Center tap adapter cable has 300 mm cable length with 4 pole QD female connector on one side which should be connected only to center tapping connector in QD-12-42-63 and female field wireable connector on the other side which should be connected to male field wireable connectors for extension cables.</p>	

QD Cable Selection Guide

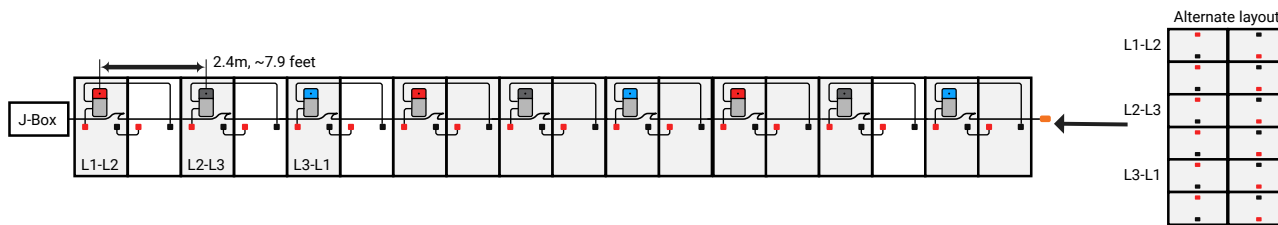
Each IQ8D Microinverter supports two series connected PV modules, with a maximum of 9 microinverters in a branch circuit. IQ8D Microinverter system supports multiple positioning and orientation options for PV modules through multiple QD cable SKUs. Cable pitch/SKU selection and microinverter mounting needs to be decided based on module positioning and orientation on roof.

Following are some example around module layout and cable pitch requirements. Based on module layout correct QD cable SKU should be selected.

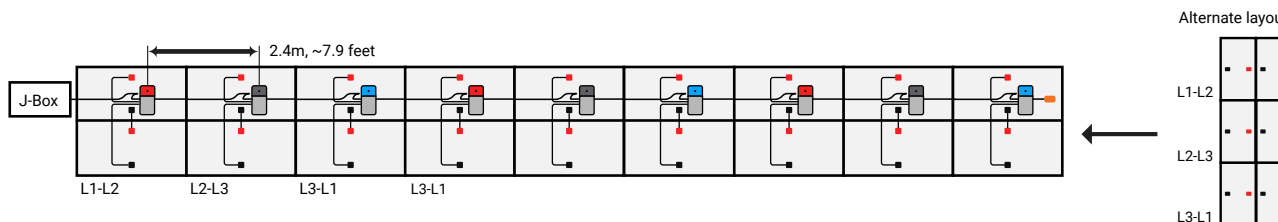
2 x 9 Module Matrix - Portrait Layout: QD-12-10-150 (4.6 feet)



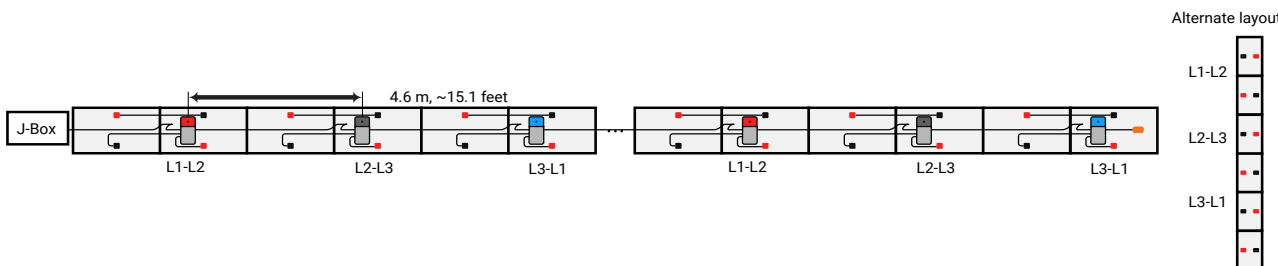
1 x 18 Module Matrix - Landscape Layout: QD-12-20-135 (7.9 feet)



2 x 9 Module Matrix - Landscape Layout: QD-12-20-135 (7.9 feet)



1 x 18 Module Matrix - Landscape Ballast Layout: QD-12-42-63 (15.1 feet)



To learn more about Enphase offerings, visit enphase.com