Data Sheet Enphase QD Cable REGION: Americas

Enphase QD Cable & Accessories

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

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



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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-12-13-120 | 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 |

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, pack of 10 adapter cables |

| | FIELD WIREABLE CONNECTOR (M) | FIELD WIREABLE CONNECTOR (F) | | |
|---|---|---|--|--|
| | 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) | | |
| | TERMINATOR | SEALING CAPS | | |
| | Terminator cap for unused cable ends, sold in packs of ten Center feed requires two per branch. (QD-TERM-10) | Female sealing caps for unused cable connections, sold in packs of ten (QD-SEAL-10) | | |
| | DISCONNECT TOOL | CABLE CLIP | | |
| | 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) | | |
| | CENTER TAP ADAPTER CABLE | | | |
| - | Use 1 cable per branch circuit when used for IQ8 Commercial installations. 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 AC branch circuit cable and female field wireable connector on the other side which should be connected to male field wireable connectors for extension cables. | | | |

To learn more about Enphase offerings, visit enphase.com

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