



**ENPHASE**

<b>DWG TITLE:</b> TYPICAL IQ8D 400kW SYSTEM SLD END FEEDING		<b>SIZE:</b> A3
<b>DATE:</b> 08 OCT 2021		<b>SHEET:</b> 1 OF 2





**System Details**

SYSTEM SIZE (DC)	SYSTEM SIZE (AC)	DC/AC RATIO
399.5kW	297.5kW	1.34

**Enphase BOM for Portrait (1.4m QD Cable Pitch) and Landscape Orientation (2.4m QD Cable Pitch)**

SYSTEM COMPONENT	SKU DETAILS	QUANTITY
IQ 8D MICROINVERTER	IQ8D-72-E-US	470
EN4 TO MC4 BULKHEAD ADAPTER CABLE	ECA-EN4-S22 (Default Supply with IQ 8D)	470 Pairs
QD CABLE	QD-12-42-63 (4.6 m pitch)	470 Drops (Assumption:No drops skipped)
Cable Termination	QD-TERM-10	11 (SKU of 10 Units)
Cable Clip	Q-CLIP-100	Based on Site
Disconnect Tool	QD-DISC-10	2 (SKU of 10 Units)
Sealing Cap	QD-SEAL-10	Based on Site
Center Feeding Adapter cable	QD-LINKFW-10	6 (SKU of 10 Units) for center feeding using CTAP connector only in QD-12-42-63 (4.6 mt cable)
Field Wireables	QD-CONN-10M	6 ( SKU of 10 Units) Only Male connector shall be required for Center feeding using QD-LINKFW-10
Communication Gateway-Envoy	ENV-IQ8D-AM3-3P	3
Production CTs	CT-400-SOLID	400A-9 CTs default Supply
Power Line Filters	QD-LCF-400-3P	400A - 3 (Recommended)

\* Above BOM contains only Enphase system components

NOTE: CENTER FEEDING RECOMMENDED FOR INSTALLATIONS WITH QD-12-42-63 (4.6 METER QD CABLE) WITH > 6 MICROINVERTERS IN BRANCH CIRCUIT ; END FEEDING RECOMMENDED FOR <= 6 MICROS IN BRANCH CIRCUIT

**MODULES:**

- 940 PV SOLAR MODULES, 2 PV MODULES PER MICROINVERTER
- 425W PV MODULES ON UL 2703 LISTED RACKING
- BARE 12 AWG EGC BONDED TO RACKING WITH UL LISTED LUGS
- EACH MODULE EFFECTIVELY BONDED TO RACKING.

**MICROINVERTER:**

- 470 MODULE LEVEL MICROINVERTER, MAXIMUM 9 PER BRANCH CIRCUIT
- ENPHASE, IQ8D-72-E-US MICROINVERTERS
- UL 1741, NEMA 4, 208VAC, 3.04A L-L, FUNCTIONALLY GROUNDED
- INTEGRATED DC/AC LOAD BREAK CONNECTIONS.

**BRANCH CIRCUIT CURRENT :**

3 (MICROS PER PHASE) X 3.04A (IQ8D MICROINVERTER CURRENT) X 1.732 X 1.25= 19.8A

**COMBINED CIRCUIT CURRENT :**

54 (MICROS PER PHASE) X 3.04A (IQ8D MICROINVERTER CURRENT) X 1.732 X 1.25= 355.8A

54 (MICROS PER PHASE) X 3.04A (IQ8D MICROINVERTER CURRENT) X 1.732 X 1.25= 355.8A

49 (MICROS PER PHASE) X 3.04A (IQ8D MICROINVERTER CURRENT) X 1.732 X 1.25= 322.8A

**NOTE:**

THIS DOCUMENT IS PROVIDED FOR RECOMMENDATION AND SUGGESTIVE PURPOSE TO DEMONSTRATE ENPHASE IQ 8D SOLUTIONS AND PRODUCTS IN END USE ENERGY PROJECT APPLICATIONS. FINAL DESIGN AND ACTUAL PERFORMANCE OF ANY SOLAR ENERGY PROJECT AS WELL AS COMPLIANCE WITH ALL SPECIFICATIONS, INSTALLATION REQUIREMENTS AND LOCAL CODES IS THE RESPONSIBILITY OF THE PARTY THIS INFORMATION IS PROVIDED TO. THIS SINGLE LINE DIAGRAM IS NOT INTENDED TO REPLACE SITE SPECIFIC DIAGRAM FOR INSPECTION OF PROJECT. ENPHASE IS NOT RESPONSIBLE FOR USE OF THE DATA PROVIDED HEREIN.



<b>DWG TITLE:</b> TYPICAL IQ8D 400kW SYSTEM SLD CENTER FEEDING		<b>SIZE:</b> A3
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