

MODULES:
105 PV SOLAR MODULES, 1 PV MODULE PER MICROINVERTER
- 475W 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:
105 MODULE LEVEL MICROINVERTER, MAXIMUM 15 PER BRANCH CIRCUIT
- ENPHASE, IQ8H-3P-72-E-US MICROINVERTERS
- UL 1741, NEMA 4, 208VAC, 1.83A L-L, FUNCTIONALLY GROUNDED

BRANCH CIRCUIT CURRENT :
 $5 \text{ (MICROINVERTERS PER PHASE)} \times 1.83\text{A (IQ8H-3P CURRENT)} \times 1.732 \times 1.25 = 19.8\text{A}$

COMBINED CIRCUIT CURRENT :
 $35 \text{ (MICROINVERTERS PER PHASE)} \times 1.83\text{A (IQ8H-3P CURRENT)} \times 1.732 \times 1.25 = 138.6\text{A}$

NOTE: CENTER FEEDING RECOMMENDED FOR ALL INSTALLATIONS WITH > 10 MICROINVERTERS IN BRANCH CIRCUIT ; END FEEDING RECOMMENDED FOR <= 10 MICROS IN BRANCH CIRCUIT

System Details

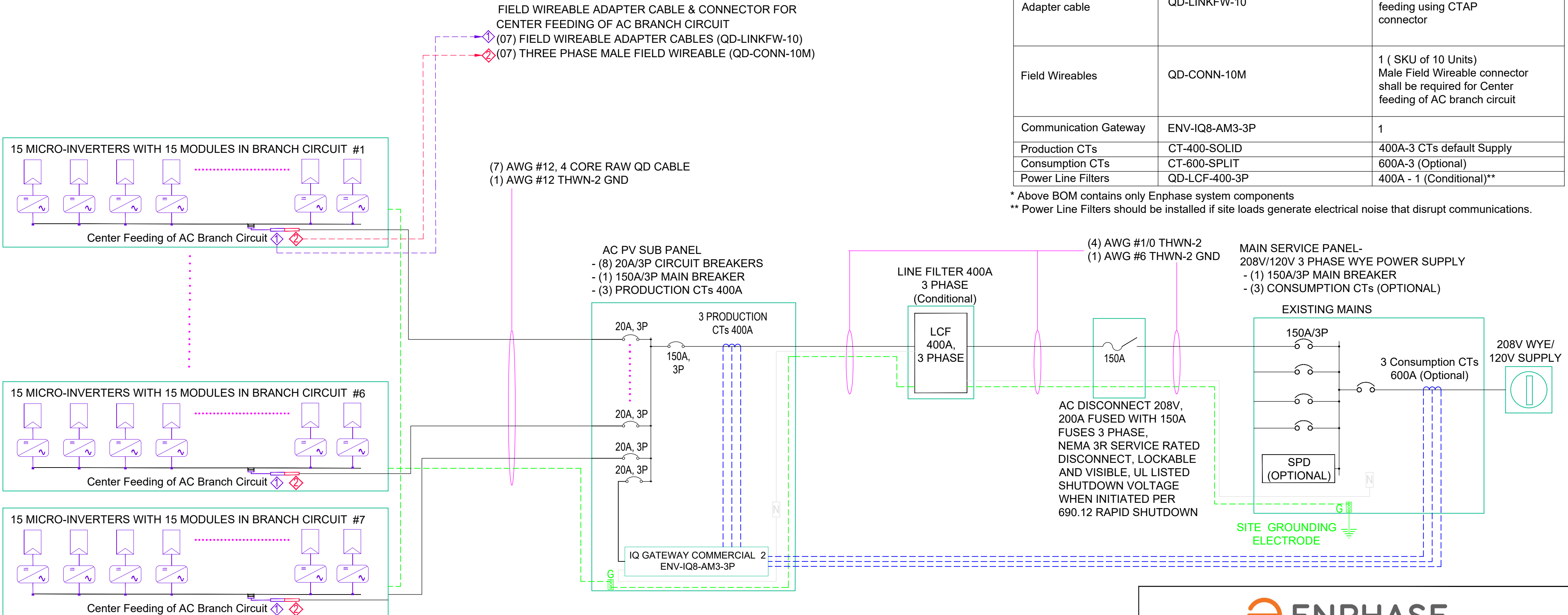
SYSTEM SIZE (DC)	SYSTEM SIZE (AC)	DC/AC RATIO
49.9kW	40.3kW	1.24

Enphase BOM

SYSTEM COMPONENT	SKU DETAILS	QUANTITY
IQ8H-3P MICRO	IQ8H-3P-72-E-US	105
EN4 TO MC4 bulkhead adapter cable	ECA-EN4-S22 (Default Supply with IQ8H-3P)	105 Pairs
QD CABLE	QD-12-13-120 (1.6 m pitch) OR QD-12-20-120 (2.3 m pitch) OR QD-12-25-108 (2.8 m pitch)	105 Drops (Assumption: No drops skipped)
Cable Termination	QD-TERM-10	2 (SKU of 10 Units)
Cable Clip	ET-CLIP-100	Based on Site
Disconnect Tool	QD-DISC-10	1 (SKU of 10 Units)
Sealing Cap	QD-SEAL-10	Based on Site
Center Feeding Adapter cable	QD-LINKFW-10	1 (SKU of 10 Units) for center feeding using CTAP connector
Field Wireables	QD-CONN-10M	1 (SKU of 10 Units) Male Field Wireable connector shall be required for Center feeding of AC branch circuit
Communication Gateway	ENV-IQ8-AM3-3P	1
Production CTs	CT-400-SOLID	400A-3 CTs default Supply
Consumption CTs	CT-600-SPLIT	600A-3 (Optional)
Power Line Filters	QD-LCF-400-3P	400A - 1 (Conditional)**

* Above BOM contains only Enphase system components

** Power Line Filters should be installed if site loads generate electrical noise that disrupt communications.



NOTE:

THIS DOCUMENT IS PROVIDED FOR RECOMMENDATION AND SUGGESTIVE PURPOSE TO DEMONSTRATE ENPHASE IQ8H-3P 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.



DWG TITLE: TYPICAL IQ8H-3P 50kW SYSTEM
SLD CENTER FEEDING

SIZE:
A3

DATE: 22 AUG 2022

SHEET: 1 OF 1