SYSTEM INFORMATION			
MODULE HANWHA Q.PEAK DUO BLK ML-G10+ 410			
INVERTER ENPHASE IQ7PLUS-72-2-US			
RACKING UNIRAC NXT HORIZON 2-RAIL RACKIN SYSTEM			
SYSTEM SIZE (DC) 3.69 KW			
LOCATION	30.1965144,-82.6124971		

GENERAL	NOTES:
----------------	---------------

THIS PV SYSTEM HAS BEEN DESIGNED TO MEET THE MINIMUM DESIGN STANDARDS FOR BUILDING AND OTHER STRUCTURES OF THE ASCE 7-22, 8TH EDITION 2023 FLORIDA RESIDENTIAL CODE, 8TH EDITION 2023 FLORIDA BUILDING CODE, 8TH EDITION 2023 FLORIDA FIRE PREVENTION CODE, NEC 2020 AND ALL LOCAL CODES & ORDINANCES.

ROOF SHALL HAVE NO MORE THAN TWO LAYERS OF COVERING IN ADDITION TO THE SOLAR EQUIPMENT.

INSTALLATION OF SOLAR EQUIPMENT SHALL BE FLUSH MOUNTED, PARALLEL TO AND NO MORE THAN 6-INCHES ABOVE THE SURFACE OF THE ROOF.

ANY PLUMBING VENTS ARE NOT TO BE CUT OR COVERED FOR SOLAR EQUIPMENT INSTALLATION. ANY RELOCATION OR MODIFICATION OF THE VENT REQUIRES A PLUMBING PERMIT AND INSPECTION.

ALL DESIGN, CALCULATIONS ARE PERFORMED BY MICHAEL S. REZK, P.E. PROFESSIONAL ENGINEER, WITH LICENCE No. 95844.

INVERTER PLACEMENT:

SYSTEM UTILIZES "ENPHASE" MICRO-INVERTERS WITH RAPID SHUTDOWN CONTROL LOCATED ON THE BACK SIDE OF EACH MODULE.

STRUCTURAL STATEMENT:

THE EXISTING STRUCTURE IS ADEQUATE TO SUPPORT THE NEW LOADS IMPOSED BY THE PHOTOVOLTAIC MODULE SYSTEM INCLUDING UPLIFT & SHEAR.EXISTING RAFTER SIZES & DIMENSIONS CONFORM TO 8TH EDITION 2023 FLORIDA RESIDENTIAL CODE

MOUNTING BRACKETS AND HARDWARE MEET OR EXCEED FLORIDA CODE REQUIREMENTS FOR THE DESIGN CRITERIA OF THE TOWN.

FSEC CERTIFICATION STATEMENT:

PER FL. STATUE 377.705 , I, MINA A. MAKAR PE# 86753, CERTIFICATE OF AUTHORIZATION #33404, AN ENGINEER LICENSED PURSUANT TO CHAPTER 471, CERTIFY THAT THE PV ELECTRICAL SYSTEM AND ELECTRICAL COMPONENTS ARE DESIGNED AND APPROVED USING THE STANDARDS CONTAINED IN THE MOST RECENT VERSION OF THE FLORIDA BUILDING CODE. FBC 2023

CLIMATIC & GEOGRAPHIC DESIGN CRITERIA TABLE R301.2(1)			
SPEED (MPH)	120		
TOPOGRAPHIC EFFECTS	В		
SPECIAL WIND REGION	NO		
WIND BORNE DEBRIS ZONE	2		
SEISMIC DESIGN CATEGORY	С		
CLIMATE ZONE	2A		
WIND EXPOSURE CATETORY	В		

FBC, RESIDENTIAL 2023

	TABLE R301.2.1.3										
,	WIND SPEED CONVERSIONS ^a										
V _{ult}	110	115	120	130	140	150	160	170	180	190	200
V _{asd}	85	89	93	101	108	116	124	132	139	147	155

For SI: 1 mile per hour = 0.447 m/s.

a. Linear interpolation is permitted.

HANWHA Q.PEAK DUO BLK ML-G10+ 410 410 WATT MODULE

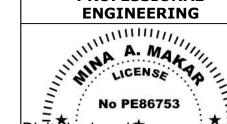
PLAN KEY			
PV-1	COVER PAGE		
PV-1.1	ATTACHMENT DETAIL		
PV-1.1(2)	ATTACHMENT DETAIL		
PV-1.2	INVERTER SPECS		
PV-1.3	COMBINER SPECS		
PV-1.4	PANEL SPECS		
PV-2	PANEL LAYOUT		
PV-3	ELETRICAL		
PV-3.1	ELECTRICAL CONT.		
PV-3.2	EQUIPMENT LABELS		

BILL OF MATERIALS		
MODULES	9	
INVERTERS	9	
L-FOOT ATTACHMENT W/ UNIRAC NXT	21	
171" RAILS	4	
SKIRTS	0	
ENPHASE COMBINER BOX	1	
EATON 60A FUSIBLE AC DISCONNECT	1	
35A FUSES	2	
15A BACKFEED BREAKER	1	



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PROFESSIONAL



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SOLAR CONTRACTOR

CAMERON CHRISTENSEN
CERTIFIED SOLAR CONTRACTOR LICENSE NUMBER: CVC57036 MOMENTUM SOLAR 5728 MAJOR BLVD. SUITE 307, ORLANDO FL. 32819

CUSTOMER INFORMATION

SANDRA REEVES - MS152195 1744 NE BASCOM NORRIS DRIVE LAKE CITY, FL 32055 (718) 703-8830

PV SYSTEM INFORMATION

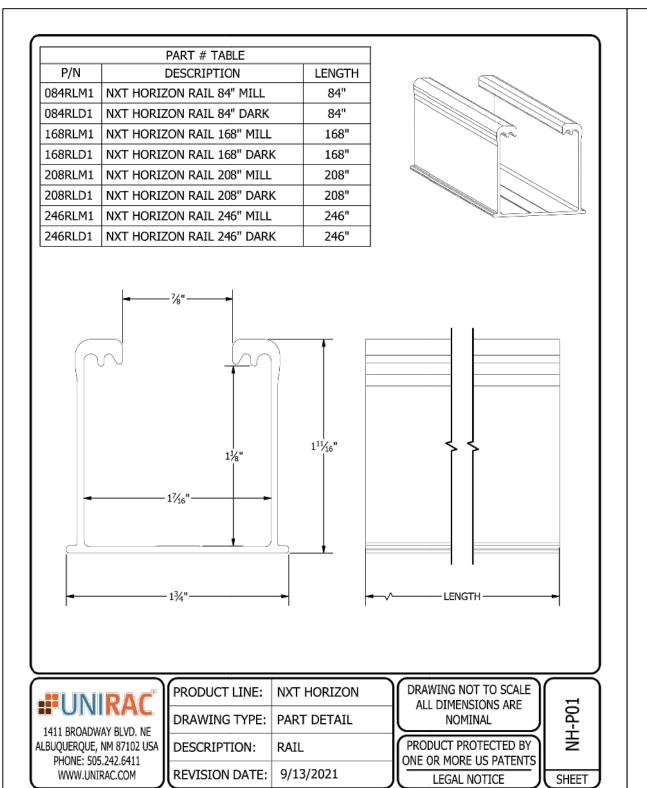
SYSTEM SIZE (DC): 3.69 KW 9 MODULES: HANWHA Q.PEAK DUO BLK ML-G10+ 410

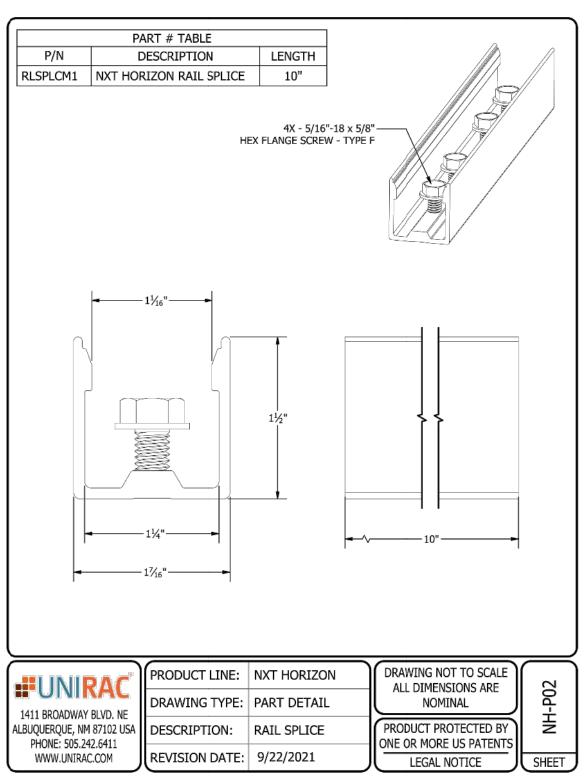
9 INVERTERS: ENPHASE IQ7PLUS-72-2-US

	PROJECT INFORMATION					
NITIAL	DATE: 6/3/2024	DESIGNER: RA				
EV:	DATE:	DESIGNER:				
EV:	DATE:	DESIGNER:				

COVER PAGE

PV-1







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CERTIFIED SOLAR CONTRACTOR LICENSE NUMBER: CVC570
MOMENTUM SOLAR
5728 MAJOR BLVD. SUITE 307, ORLANDO FL. 32819

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SANDRA REEVES - MS152195 1744 NE BASCOM NORRIS DRIVE LAKE CITY, FL 32055 (718) 703-8830

PV SYSTEM INFORMATION

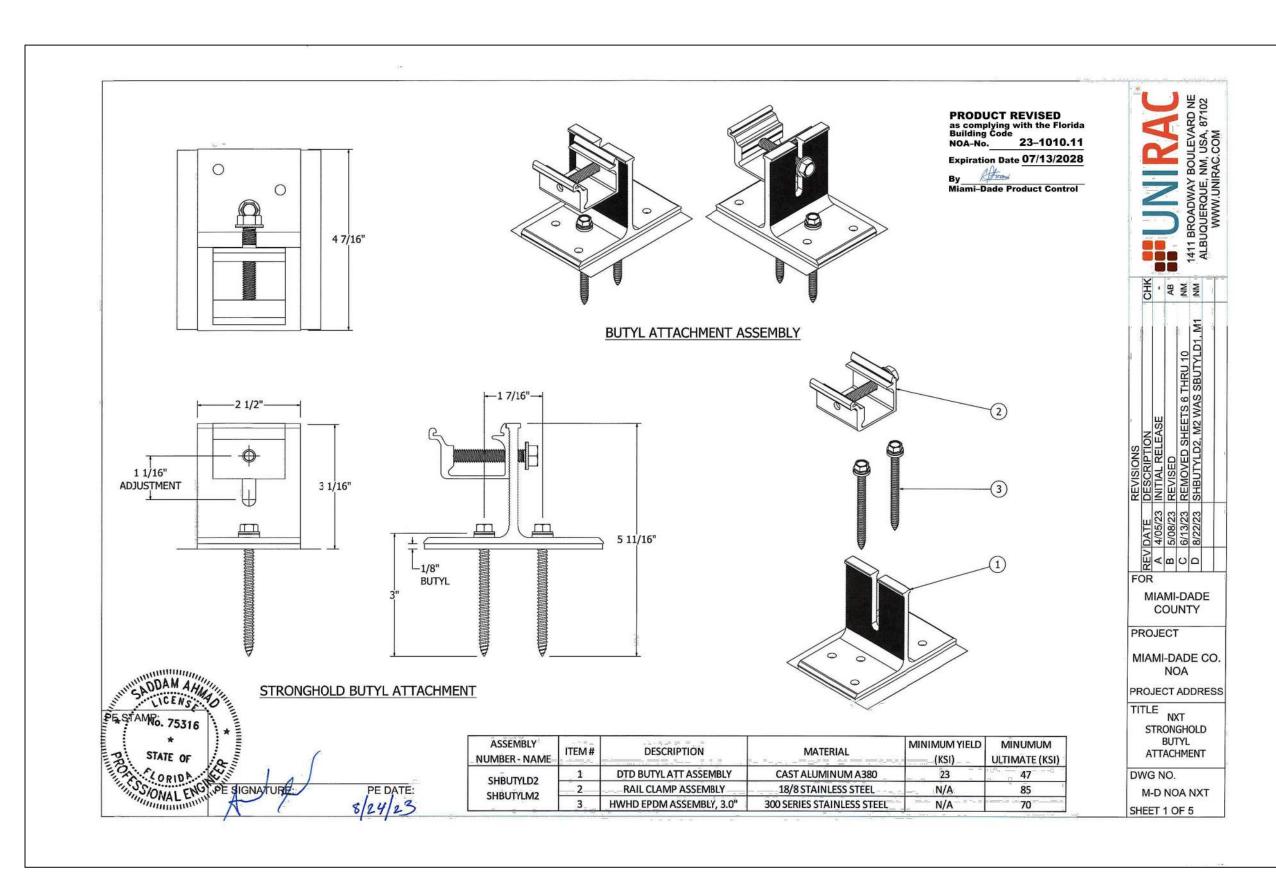
SYSTEM SIZE (DC): 3.69 KW 9 MODULES: HANWHA Q.PEAK DUO BLK ML-G10+ 410

9 INVERTERS: ENPHASE IQ7PLUS-72-2-US

	PROJECT INFORMA	TION
INITIAL	DATE: 6/3/2024	DESIGNER: RA
REV:	DATE:	DESIGNER:
REV:	DATE:	DESIGNER:

ATTACHMENT DETAIL

PV-1.1



ATTACHMENT DETAIL FOR SHINGLE ROOF



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MOMENTUM SOLAR
5728 MAJOR BLVD. SUITE 307, ORLANDO FL. 32819

CUSTOMER INFORMATION

SANDRA REEVES - MS152195 1744 NE BASCOM NORRIS DRIVE LAKE CITY, FL 32055 (718) 703-8830

PV SYSTEM INFORMATION

SYSTEM SIZE (DC): 3.69 KW 9 MODULES: HANWHA Q.PEAK DUO BLK ML-G10+ 410

9 INVERTERS: ENPHASE IQ7PLUS-72-2-US

PROJECT INFORMATION						
INITIAL	DATE: 6/3/2024	DESIGNER: RA				
REV:	DATE:	DESIGNER:				
REV:	DATE:	DESIGNER:				

ATTACHMENT DETAIL

PV-1.1 (2)

Enphase Microinverters Region: AMERICAS

Enphase IQ 7 and IQ 7+ **Microinverters**

The high-powered smart grid-ready Enphase IQ 7 Micro™ and Enphase IQ 7+ Micro™ dramatically simplify the installation process while achieving the highest system efficiency.

Part of the Enphase IQ System, the IQ 7 and IQ 7+ Microinverters integrate with the Enphase IQ Envoy™, Enphase IQ Battery™, and the Enphase Enlighten™ monitoring and analysis software.

IQ Series Microinverters extend the reliability standards set forth by previous generations and undergo over a million hours of power-on testing, enabling Enphase to provide an industry-leading warranty of up to 25 years.



Easy to Install

- Lightweight and simple
- Faster installation with improved, lighter two-wire cabling
- Built-in rapid shutdown compliant (NEC 2014 & 2017)

Productive and Reliable

- Optimized for high powered 60-cell/120 half-cell and 72cell/144 half-cell* modules
- · More than a million hours of testing
- · Class II double-insulated enclosure
- UL listed

Smart Grid Ready

- · Complies with advanced grid support, voltage and frequency ride-through requirements
- · Remotely updates to respond to changing
- Configurable for varying grid profiles
- Meets CA Rule 21 (UL 1741-SA)
- * The IQ 7+ Micro is required to support 72-cell/144 half-cell modules.



Enphase IQ 7 and IQ 7+ Microinverters

INPUT DATA (DC)	IQ7-60-2-US		IQ7PLUS-72-2	-US
Commonly used module pairings ¹	235 W - 350 W +		235 W - 440 W +	
Module compatibility	60-cell/123 half-cell PV modules		60-cell/120 half-cell and 72-	
	only		cell/144 half-cell PV modules	
Maximum input DC voltage	48 V		60 V	
Peak power tracking voltage	27 V - 37 V		27 V - 45 V	
Operating range	16 V - 48 V		16 V - 60 V	
Min/Max start voltage	22 V / 48 V		22 V / 60 V	
Max DC short circuit current (module lsc)	15 A		15 A	
Overvoltage class DC port	II		11	
DC port backfeed current	0 A		0 A	
PV array configuration	AC side protect	ed array; No additio ion requires max 20	A per branch circu	ıît
OUTPUT DATA (AC)	IQ 7 Microinve	erter	IQ 7+ Microin	verter
Peak output power	250 VA		295 VA	
Maximum continuous output power	240 VA		290 VA	
Nominal (L-L) voltage/range ²	240 V / 211-264 V	208 V / 183-229 V	240 V / 211-264 V	208 V / 183-229 V
Maximum continuous output current	1.0 A (240 V)	1.15 A (208 V)	1.21 A (240 V)	1.39 A (208 V)
Nominal frequency	60 Hz		60 Hz	
Extended frequency range	47 - 68 Hz		47 - 68 Hz	
AC short circuit fault current over 3 cycles	5.8 Arms		5.8 Arms	
Maximum units per 20 A (L-L) branch circuit ^a	16 (240 VAC)	13 (208 VAC)	13 (240 VAC)	11 (208 VAC)
Overvoltage class AC port	H		111	
AC port backfeed current	18 mA		18 mA	
Power factor setting	1.0		1.0	
Power factor (adjustable)	0.85 leading (0.85 lagging	0.85 leading (0.85 lagging
EFFICIENCY	@240 V	@208 V	@240 V	@208 V
Peak efficiency	97.6 %	97.6 %	97.5 %	97.3 %
CEC weighted efficiency	97.0 %	97.0 %	97.0 %	97.0 %
MECHANICAL DATA				
Ambient temperature range	-40°C to +55°C			
Relative humidity range	4% to 100% (cor			
Connectortype		enol H4 UTX with ac		adapter)
Dimensions (HxWxD)		nm x 30.2 mm (with	out bracket)	
Weight	1.08 kg (2.38 lbs	The second second		
Cooling	Natural convect	ion - No fans		
Approved for wet locations	Yes			
Pollution degree	PD3			
Enclosure	Class II double-	insulated, corrosio	n resistant polyme	ric endosure
Environmental category / UV exposure rating	NEMA Type 6 /			
FEATURES				
Communication	Power Line Con	nmunication (PLC)		
Monitoring	Enlighten Mana	ger and MyEnlighte		
Disconnecting means	The AC and DC	connectors have be		approved by UL for use as the load-break
Compliance	disconnect required by NEC 690. CA Rule 21 (UL 1741-SA) UL 62109-1, UL1741/IEEE1547, FCC Part 15 Class B, ICES-0003 Class B, CAN/CSA-C22.2 NO. 107.1-01 This product is UL Listed as PV Rapid Shut Down Equipment and conforms with NEC 2014, NEC 2017, and NEC 2020 section 690.12 and C22.1-2015 Rule 64-218 Rapid Shutdown of PV Systems, for AC and DC conductors, when installed according manufacturer's instructions.			

- 1. No enforced DC/AC ratio. See the compatibility calculator at https://enphase.com/en-us/support/module-compatibility.
- Nominal voltage range can be extended beyond nominal if required by the utility.
 Limits may vary. Refer to local requirements to define the number of microinverters per branch in your area.

To learn more about Enphase offerings, visit enphase.com

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SOLAR CONTRACTOR

CAMERON CHRISTENSEN
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CUSTOMER INFORMATION

SANDRA REEVES - MS152195 1744 NE BASCOM NORRIS DRIVE LAKE CITY, FL 32055 (718) 703-8830

PV SYSTEM INFORMATION

SYSTEM SIZE (DC): 3.69 KW 9 MODULES: HANWHA Q.PEAK DUO BLK ML-G10+ 410

9 INVERTERS: ENPHASE IQ7PLUS-72-2-US

PROJECT INFORMATION						
INITIAL	DATE: 6/3/2024	DESIGNER: RA				
REV:	DATE:	DESIGNER:				
REV:	DATE:	DESIGNER:				

🕀 ENPHASE.

INVERTER DETAIL

PV-1.2



To learn more about Enphase offerings, visit enphase.com

Data Sheet Enphase Networking

IQ Combiner 4/4C



The IQ Combiner 4/4C with IQ Gateway and integrated LTE-M1 cell modem (included only with IQ Combiner 4C) consolidates interconnection equipment into a single enclosure. It streamlines IQ Microinverters and storage installations by providing a consistent, pre-wired solution for residential applications. It offers up to four 2-pole input circuits and Eaton BR series busbar assembly.

Smart

- · Includes IQ Gateway for communication and control
- Includes Mobile Connect cellular modem (CELLMODEM-M1-06-SP-05), included only with IO Combiner 4C
- Includes solar shield to match Enphase IQ Battery aesthetics and deflect hea:
- Supports Wi-Fi, Ethernet, or cellular connectivity
- · Optional AC receptacle available for PLC bridge
- Provides production metering and consumption monitoring

Simple

- · Mounts on single stud with centered brackets
- · Supports bottom, back and side conduit entry
- Allows up to four 2-pole branch circuits for 240VAC plug-in breakers (not included)
- · 80A total PV or storage branch circuits

Reliable

- · Durable NRTL-certified NEMA type 3R enclosure
- · Five-year limited warranty
- Two years labor reimbursement program coverage included for both the IQ Combiner SKU's
- · UL listed
- X2-IQ-AM1-240-4 and X2-IQ-AM1-240-4C comply with IEEE 1547:2018 (UL 1741-SB, 3rd Ed.)



To learn more about Enphase offerings, visit enphase.com IO-C-4-4C-DS-0103-EN-US-12-29-2022



IQ Combiner 4/4C

MODEL NUMBER	
IQ Combiner 4 X-IQ-AM1-240-4 X2-IQ-AM1-240-4 (IEEE 1547:2018)	IQ Combiner 4 with IQ Gateway printed circuit board for integrated revenue grade PV production metering (ANSI C12.20 \pm 0.5%) and consumption monitoring (\pm 2.5%). Includes a silver solar shield to match the IQ Battery and IQ System Controller 2 and to deflect heat.
IQ Combiner 4C X-IQ-AM1-240-4C X2-IQ-AM1-240-4C (IEEE 1547:2018)	IQ Combiner 4C with IQ Gateway printed circuit board for integrated revenus grade PV production metering (ANSI C12.20 ± 0.55 and consumption monitoring (± 2.5%). Includes Mobile Connect cellular modem (CELLMODEM-M1-06-SP-05), a plug-and-play industrial-grade cell modem for systems up to 60 microinverters. (Available in the US, Canada, Mexico, Puerto Rico, and the US Virgin Islands, where there is adequate cellular service in the installationarea.) Includes a silver solar shield to match the IQ Battery and IQ System Controller and to deflect heat.
ACCESSORIES AND REPLACEMENT PARTS	(not included, order separately)
Supported microinverters	IQ6, IQ7, and IQ8. (Do not mix IQ6/7 Microinverters with IQ8)
Communications Kit COMMS-CELLMODEM-M1-06 CELLMODEM-M1-)6-SP-05 CELLMODEM-M1-)6-AT-05 Circuit Breakers	- Includes COMNS-KIT-01 and CELLMODEM-M1-06-SP-05 with 5-year Sprint data plan - 4G based LTE-M1 cellular modem with 5-year Sprint data plan - 4G based LTE-M1 cellular modem with 5-year AT&T data plan Supports Eaton BR210, BR215, BR220, BR240, BR250, and BR260 circuit breakers.
BRK-10A-2-240V BRK-15A-2-240V BRK-20A-2P-240V BRK-5A-2P-240V-B BRK-20A-2P-240V-B	Circuit breaker, 2 pole, 15A, Eaton BR210 Circuit breaker, 2 pole, 20A, Eaton BR215 Circuit breaker, 2 pole, 20A, Eaton BR215 Circuit breaker, 2 pole, 20A, Eaton BR215 Circuit breaker, 2 pole, 20A, Eaton BR215B with hold down kit support Circuit breaker, 2 pole, 20A, Eaton BR220B with hold down kit support
XA-SOLARSHIELD-ES	Replacement solar shield for IQ Combiner 4/4C
XA-PLUG-120-3	Accessory receptacle for Power Line Carrier in IQ Combiner 4/4C (required for EPLC-01)
X-IQ-NA-HD-125A	Hold-down kit for Eaton circuit breaker with screws
Consumption monitoring CT (CT-200-SPLIT/CT-200-CLAMP)	A pair of 200A split core current transformers
ELECTRICAL SPECIFICATIONS	
Rating	Continuous duty
System voltage	120/240VAC, 60Hz
Eaton BR series busbar rating	125A
Max. continuous current rating	65A
Max. continuous current rating (input from PV/storage)	64A
Max. fuse/circuit rating (output)	90A
Branch circuits (solar and/or storage)	Up to four 2-poleEaton BR series Distributed Generation (DG) breakers only (not included)
Max, total branch circuit breaker rating (input)	80A of distributed generation/95A with IQ Gateway breaker included
IQ Gateway breaker	10A or 15A rating GE/Siemens/Eaton included
Production metering CT	200A solid core pre-installed and wired to IQ Gateway
MECHANICAL DATA	
Dimensions (WxHzD)	37.5 cm x 49.5 cm x 16.8 cm (14.75 in x 19.5 in x 6.63 in). Height is 53.5 cm (21.06 in) with mounting brackets.
Weight	7.5 kg (16.5 lbs)
Ambient temperature range	-40°C to +46°C (40°F to 115°F)
Cooling	Natural convection, plus heat shield
Enclosure environmental rating	Outdoor, NRTL-cartified, NEMA type 3R, polycarbonate construction
Wire sizes	20A to 50A breaker inputs: 14 to 4 AWG copper conductors 60A breaker branch input: 4 to 1/0 AWG copper conductors Main lug combined output: 10 to 2/0 AWG copper conductors Neutral and ground: 14 to 1/0 copper conductors Always follow local code requirements for conductor sizing.
Altitude	Up to 3,000 meters (9,842 feet)
INTERNET CONNECTION OPTIONS	
Integrated Wi-Fi	IEEE 802.11b/g/n
Cellular	CELLMODEM-M1-06-SP-05, CELLMODEM-M1-06-AT-05 (4G based LTE-M1 cellular modem). Note that an Mobile Connect cellular modem is required for all Enphase Energy System installations.
Ethernet	Optional, IEEE 8C2.3, Cat5E (or Cat6) UTP Ethernet cable (not included)
COMPLIANCE	CA Dule 23 (III 3743 CA)
Compliance, IQ Combiner	CA Rule 21 (UL 1741-SA) IEEE 1547:2018 - UL 1741-SB, 3rd Ed. (X2-IQ-AM1-240-4 and X2-IQ-AM1-240-4C) CAN/CSA C22-2No. 107.1, Title 47 CFR, Part 15, Class B, ICES 003 Production metering: ANSI C12.20 accuracy class 0.5 (PV production) Consumption metering: accuracy class 2.5
Compliance, IQ Gateway	UL 60601-1/CANCSA 22.2 No. 61010-1



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PROFESSIONAL ENGINEERING

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CUSTOMER INFORMATION

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PV SYSTEM INFORMATION

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9 INVERTERS: ENPHASE IQ7PLUS-72-2-US

	TION	
INITIAL	DATE: 6/3/2024	DESIGNER: RA
REV:	DATE:	DESIGNER:
REV:	DATE:	DESIGNER:

COMBINER DETAIL

PV-1.3

Q.PEAK DUO BLK ML-G10+ SERIES



385-410Wp | 132 Cells 20.9% Maximum Module Efficiency

MODEL Q.PEAK DUO BLK ML-G10+





Breaking the 20% efficiency barrier

Q.ANTUM DUO Z Technology with zero gap cell layout boosts module efficiency up to 20.9%.



A reliable investment

Inclusive 25-year product warranty and 25-year linear performance warranty¹



Enduring high performance

Long-term yield security with Anti LeTID Technology, Antl PID Technology² and Hot-Spot Protect.



Extreme weather rating

High-tech aluminium alloy frame, certified for high snow (5400 Pa) and wind loads (4000 Pa).



Innovative all-weather technology

Optimal yields, whatever the weather with excellent low-light and temperature behaviour.



The most thorough testing programme in the industry

Ocells is the first solar module manufacturer to pass the most comprehensive quality programme in the industry: The new "Quality Controlled PV" of the independent certification institute TÜV Rheinland.

The ideal solution for:







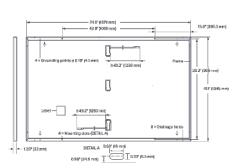




Q.PEAK DUO BLK ML-G10+ SERIES

■ Mechanical Specification

Format	74.0 in × 41.1 in × 1.26 in (including frame) (1879 mm × 1045 mm × 32 mm)
Weight	48.5 lbs (22.0 kg)
Front Cover	0.13 in (3.2 mm) thermally pre-stressed glass with anti-reflection technology
Back Cover	Composite film
Frame	Black anodised aluminium
Cell	6 × 22 monocrystalline Q.ANTUM solar half cells
Junction box	2.09-3.98 in × 1.26-2.36 in × 0.59-0.71 in (53-101 mm × 32-60 mm × 15-18 mm), IP67, with bypass diodes
Cable	4 mm² Solar cable; (+) ≥49.2 ln (1250 mm), (-) ≥49.2 ln (1250 mm)
Connector	Stäubli MC4; IP68



■ Electrical Characteristics

		385	390	395	400	405	410
CONDITIONS, ST	C1 (POWER T	OLERANCE +51	v/-ow)				
PMPP	[W]	385	390	395	400	405	410
l _{sc}	[A]	11.04	11.07	11.10	11.14	11,17	11.20
V _{oc}	[V]	45.19	45.23	45.27	45.30	45.34	45.37
I _{MPP}	[A]	10.59	10.65	10.71	10.77	10.83	10.89
V _{MPP}	[V]	36.36	36.62	36.88	37.13	37.39	37.64
η	[%]	≥19.6	≥19.9	≥20.1	≥20.4	≥20.6	≥20.9
	P _{MPP} I _{SC} V _{OC} I _{MPP}	P _{MPP} [W] SC [A] V _{QC} [V] I _{MR0} [A] V _{MPP} [V]	CONDITIONS, STC' (POWER TOLERANCE +5 V	CONDITIONS, STC¹ (POWER TOLERANCE +5W/−0W) P _{NPP} [W] 385 390 □ □ □ □ 11.04 11.07 V _{OC} [V] 45.19 45.23 □ □ 10.59 10.65 V _{NPP} [V] 36.36 36.62	CONDITIONS, STC' (POWER TOLERANCE +5W/-0W) PMFF [W] 385 390 395 \$\begin{array}{cccccccccccccccccccccccccccccccccccc	CONDITIONS, STC* (POWER TOLERANCE +5 W/-0 W) PMPP* [W] 385 390 395 400 \$\begin{array}{c c c c c c c c c c c c c c c c c c c	CONDITIONS, STC' (POWER TOLERANCE +5W/-0W) PMPP [W] 385 390 395 400 405 405 406 405 406 405 406 405 406 405 406

MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT

IVIII	MINION FERFORMANCE AT NORMAL OF EXALING CO	DIAIDILIOIA:	3, 14191011-						
	Power at MPP	P_{MPP}	[W]	288.8	292.6	296.3	300.1	303.8	307.6
Ę	Short Circuit Current	l _{sc}	[A]	8.90	8.92	8.95	8.97	9.00	9.03
į.	Open Circuit Voltage	Vac	[V]	42.62	42.65	42.69	42.72	42.76	42.79
Ž	Current at MPP	I _{MPP}	[A]	8.35	8.41	8.46	8.51	8.57	8.62
	Voltage at MPP	V _{MPP}	[V]	34.59	34.81	35.03	35.25	35.46	35.68

Qcells PERFORMANCE WARRANTY



Standard terms of guarantee for the 5 PV companies with the ighest production capacity in 2021 (February 2021)

At least 98% of nominal power during first year. Thereafter max, 0.5% degradation per year. At least 93.5% of nominal power up to 10 years. At least 86% of nominal power up to 25 years.

All data within measurement tolerances. Full warranties in accordance with the warranty terms of the Qcells sales organisation of your respective country.

80 200 400 900 800 900 900 1IRRADIANCE (M/m²)

PERFORMANCE AT LOW IRRADIANCE

Typical module performance under low irradiance condition

TEMPERATURE COEFFICIENTS							
Temperature Coefficient of I _{sc}	q	[%/K]	+0.04	Temperature Coefficient of V _{oc}	β	[%/K]	-0.27
Temperature Coefficient of P _{MPP}	У	[%/K]	-0.34	Nominal Module Operating Temperature	NMOT	[°F]	109±5.4

■ Properties for System Design

Maximum System Voltage	V_{sys}	[V]	1000 (IEC)/1000 (UL)
Maximum Series Fuse Rating		[A DC]	20
Max, Design Load, Push/Pull ³		[lbs/ft²]	75 (3600 Pa) / 55 (2660 Pa)
Max. Test Load, Push/Pull ³		[lbs/ft°]	113 (5400 Pa)/84 (4000 Pa)

)	PV module classification	Class II
)	Fire Rating based on ANSI/UL 61730	TYPE 2
)_	Permitted Module Temperature	-40°F up to +185°F
1	on Continuous Duty	(-40°C up to +85°C)

■ Qualifications and Certificates

Ul. 61730, CE-compilant, Quality Controlled PY - TÜV Rheinland IEC 61215:2016, IEC 61730:2016, U.S. Patent No. 9.893,215 (solar cells),

3 See Installation Manual







Qcells pursues minimizing paper output in consideration of the global environment.

e: Installation instructions must be followed. Contact our technical service for further information on approved installation of this product.

who Q CELLS America Inc. 400 Spectrum Center Drive, Suite 1400, Invine, CA 92618, USA LTEL 41949 748 59 96 LEMAIL Inquinquiry@qcells.com | WEB www.qcells.com |

ocells

momentum

PRO CUSTOM SOLAR LLC D.B.A. MOMENTUM SOLAR 325 HIGH STREET, METUCHEN, NJ 08840 (732) 902-6224 MOMENTUMSOLAR COM

PROFESSIONAL ENGINEERING

No PE86753

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SOLAR CONTRACTOR

CAMERON CHRISTENSEN
CERTIFIED SOLAR CONTRACTOR LICENSE NUMBER: CVC57036
MOMENTUM SOLAR
5728 MAJOR BLVD. SUITE 307, ORLANDO FL. 32819

CUSTOMER INFORMATION

SANDRA REEVES - MS152195 1744 NE BASCOM NORRIS DRIVE LAKE CITY, FL 32055 (718) 703-8830

PV SYSTEM INFORMATION

SYSTEM SIZE (DC): 3.69 KW 9 MODULES: HANWHA Q.PEAK DUO BLK ML-G10+ 410

9 INVERTERS: ENPHASE IQ7PLUS-72-2-US

	PROJECT INFORMATION										
INITIAL	DATE: 6/3/2024	DESIGNER: RA									
REV:	DATE:	DESIGNER:									
REV:	DATE:	DESIGNER:									

PANEL DETAIL

PV-1.4

¹See data sheet on rear for further information.

² APT test conditions according to IEC/TS 62804-t:2015, method A (-1500 V, 96 h)

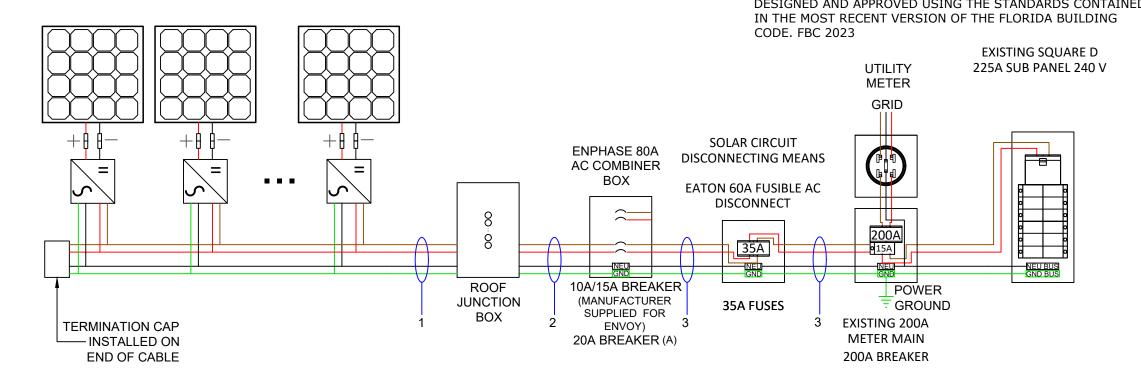
						LANDSCAPE MAX SPAN	PORTRAIT MAX SPAN		LANDSCAPE MAX	1	PORTRAIT MAX	<u> </u>		_
SCALE: 3/32" = 1'-0"	ROOF	PANEL COUNT	TILT	AZIMUTH	SHADING	(ROOF AREA 1/2/3)	(ROOF AREA 1/2/3)		CANTILEVER		CANTILEVER			
	R1	9	15°	178°	76%	48 /48 /48	48 /48 /48		16 /10 /10		16/10/10		mome	ntum
]	SOLAR	
												PRO CL	ISTOM SOLAR LLC D.B.A. 25 HIGH STREET, METUC (732) 902-62: MOMENTUMSOLAI	MOMENTUM SOLAR HEN, NJ 08840 24 R.COM
													PROFESSIO	ONAL
				NE BASCOM DRIVI FRONT OF RES	≣		GROUND ACCESS (TYP)					Digita Reas	No PE867	53 * Ined by Mina
				GUTTER			FIRE SETBACK (36" VENTILATION, 36" ROOF ACCESS) (TYP)					86753	Ily signed by n. Digitally signed Real Storically signed and Time Storically	4] on the
			////Rx/60	SE/////	3	'-0"	Д <					PSIASO ERRIPSI PARSIC 3B404	nnsigrieres tom a digitaltsignæ ordatnysigneur tennalsignædæ posignædære m	kukeeRrinted AROKEEKEUUT BYUTSEEUTA # WETHEE Stam
RAFTER SPACING————————————————————————————————————					3',6"	→ · · · · · · · · · · · · · · · · · · ·						Printed not col and th	d ்றை அப்பு leat d copies of this nsidered signed e signature mus	document are I and sealed at be verified
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	 						DRIVEWAY		RE FOOTAGE OF SOLAR				SOLAR CONTR	ACTOR
									NTAGE OF SOLAR ROC				SOLAR CONTRACTOR LICE MOMENTUM SOLA 3 MAJOR BLVD. SUITE 307, C	ENSE NUMBER: CVC57036 AR
Ī								19 KID	OGE SETBACK SHALL B				JSTOMER INFO	
<u> </u>	25	5'-1 1 " ———				<u></u>			SYMBOL	LEGE	ND	1	44 NE BASCOM NO LAKE CITY, FL	ORRIS DRIVE
, "	_	۷	·					MSP	MAIN SERVICE PANEL		CHIMNEY		(718) 703-8	830
			СВ	AC MSP M	/			SP	SUB-PANEL		SKYLIGHT	SYSTEM	/ SYSTEM INFO 1 SIZE (DC): 3.69 K ULES: HANWHA Q	W
				ICAL EQUIPME	NT			M	UTILITY METER		VENT	ML-G10)+ 410	
								AC	AC DISCONNECT	0	PIPE VENT	19 INVEF	RTERS: ENPHASE IC	Q7PLUS-72-2-US
								DISC				+		
CLAMPING MAX SPACING IN ZONE 1 48	8" O.C							UDC	UTILITY DISCONNECT		FAN	-		
AND IN ZONE 2 AND ZONE 3 48" O.C								LC	LOAD CENTER		SATELLITE DISH	INITIAL	PROJECT INFORM DATE: 6/3/2024	DESIGNER: RA
NOTE: 1. ROOF COVERING MATERIAL IS COMPO	OSED OF SINGIF	LAYER ASPHALT	COMPOSITE	SHINGLE.				N3R	NEMA 3R BOX W/ ENVOY-S		FIRE SETBACKS	REV:	DATE: 0/3/2024	DESIGNER:
2. EXACT ATTACHMENT LOCATION AND OBTAINED FROM FIELD MEASUREMENTS	QUANTITY OF AT	TACHMENTS ARE	BASED ON	EXISTING RAP	TER LOCATION	NS N RAFTER		СВ	COMBINER BOX		MIN 3'x3' GROUND ACCESS	REV:	DATE:	DESIGNER:
LAYOUT START POINT, SPACING VARIAT	ΓΙΟΝS AND ROOF	ING TYPE. VERIF	Y IN THE FIE	ELD ALL RAFTE	R LOCATIONS	S AND			MODULE		PITCH DIRECTION	1	ROOF LAY	OUT
ADJUST LAYOUT AS REQUIRED. A TILE STAGGERED TILE JOINT LOCATIONS.	KUUF WILL PRO	DUCE A STAGGE	KED ATTACH	1MENT LAYOUT	RECAUSE OF	- EXISTING		<u> </u>]			-	D\/	<u> </u>
								_		PV-2.2 FO	SSURE ZONE LINES. REFER TO R ADDITIONAL INFO		PV-	_

PV MODULE RA	PV MODULE RATINGS INVERTER RATINGS		5	VOLTAGE DROP CALCULATIONS									
MODULE MAKE	HANWHA	INVERTER MAKE	ENPHASE		FORMULA US	ED PER NEC H	ANDBOOK 21	5.2(A)(4) WHE	RE APPLICABL	.E			
	HANWHA	MODEL	IQ7PLUS-72-2-	WIRE RUN	V_{mp}	I _{mp}	R	L (FT)	Vo	% V _o	WIRE SIZE		
MODEL	Q.PEAK DUO BLK ML-G10+ 410	MODEL	US	BRANCH TO J-BOX	240.00	10.89	1.98	59.25	2.555	1.06%	12 AWG	1	
MAX POWER	410W	MAX OUTPUT POWER	290W	2.0	2 10.00			55.25		2.0075	127,000	PR	
OPEN CIRCUIT VOLTAGE	45.37V	OPEN DC VOLTAGE	60V	J-BOX TO LOAD CENTER	240.00	10.89	1.24	50.00	1.350	0.56%	10 AWG		
MPP VOLTAGE	37.64V	NOMINAL AC VOLTAGE	240V	LOAD CENTER TO AC	240.00	13.6125	0.778	3.00	0.064	0.03%	08 AWG		
SHORT CIRCUIT CURRENT	11.2A	MAX AC CURRENT	1.21A	DISCONNECT	240.00	15.0125	0.776	3.00	0.064	0.05%	Uo AWG	-	
MPP CURRENT	10.89A	CEC INVERTER EFFICIENCY	97%	AC DISCONNECT TO INTERCONNECTION	240.00	13.6125	0.778	10.00	0.212	0.09%	08 AWG		
NUMBER OF MODULES	9	NUMBER OF INVERTERS	9			1		<u> </u>			1	1	

_UL1703 COMPLIANT YES **UL1703 COMPLIANT** PV BREAKER # OF MODULES SUB PANEL PER BRANCH THIS SOLAR PHOTOVOLTAIC SYSTEM COMPLIES WITH THE 2023 **BREAKER SIZE** FLORIDA BUILDING CODE AND THE 2020 NATIONAL ELECTRICAL CODE **UP TO 16** 20A

> 9 HANWHA Q.PEAK DUO BLK ML-G10+ 410 410W MODULES PAIRED WITH 9 ENPHASE IQ7PLUS-72-2-US MICRO-INVERTERS

BRANCH CIRCUIT A 9 MICRO-INVERTERS



NEC 705.12(B)(2)(3)(b) 120% RULE

 $(1.25 \times 10.89) + 200 \le 200 \times 1.20$

(1.25 x INVERTER OUTPUT) + MAIN OCPD ≤ BUS RATING x 1.20

FSEC CERTIFICATION STATEMENT:

PER FL. STATUE 377.705, I, MINA A. MAKAR PE# 86753,

CERTIFICATE OF AUTHORIZATION #33404, AN ENGINEER LICENSED PURSUANT TO CHAPTER 471, CERTIFY THAT THE PV

ELECTRICAL SYSTEM AND ELECTRICAL COMPONENTS ARE

Wire Tag	Conduit	Wire Qty	Wire Gauge	Wire Type	Temp. Rating	Wire Ampacity (A)	Temp. Derate	Conduit Fill Derate	Derated Ampacity (A)	Inverter Qty	NOC (A)	NEC Correction	Design Current (A)	Ground Size	Ground Wire Type	L
1	OPEN AIR	1	12 AWG	Trunk Cable	90°C	30	0.96	1	28.80	9	1.21	1.25	13.61	12 AWG	Trunk Cable	INI
2	3/4" PVC	2	10 AWG	THWN-2	75°C	35	0.96	1	33.60	9	1.21	1.25	13.61	08 AWG	THWN-2	RE
3	3/4" PVC	3 + G	08 AWG	THWN-2	75°C	50	0.96	1	48.00	9	1.21	1.25	13.61	08 AWG	THWN-2	[-
																ŀ.

NOTE: LETTER "G" IN WIRE QTY TAB STANDS FOR GROUNDING CONDUCTOR.



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PROFESSIONAL ENGINEERING

No PE86753 Digitally signed by

Reason: Digitally signed by Mina A Maker Reason This it is has been electronically signed and sealed by MANAL Makar, PE DESIGNED AND APPROVED USING THE STANDARDS CONTAINED 86753, COA # 33404] on the Date and Jine Stame shawar. ksiaspa digitaltsignatureeRrinted environtally signed rapporter the noty promiside nod keigneed aands ealend # | 3040th caigned but a must be Stamp section of the state of the sta

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SOLAR CONTRACTOR

CERTIFIED SOLAR CONTRACTOR LICENSE NUMBER: CVC57036 MOMENTUM SOLAR 5728 MAJOR BLVD. SUITE 307, ORLANDO FL. 32819

CUSTOMER INFORMATION

SANDRA REEVES - MS152195 1744 NE BASCOM NORRIS DRIVE LAKE CITY, FL 32055 (718) 703-8830

PV SYSTEM INFORMATION

SYSTEM SIZE (DC): 3.69 KW 9 MODULES: HAŃWHA Q.PEAK DUO BLK ML-G10+ 410

9 INVERTERS: ENPHASE IQ7PLUS-72-2-US

		PROJECT INFORMATION									
	INITIAL	DATE: 6/3/2024	DESIGNER: RA								
_	REV:	DATE:	DESIGNER:								
	REV:	DATE:	DESIGNER:								

THREE LINE DIAGRAM

PV-3

ELECTRICAL NOTES:

- 1. ALL CALCULATIONS FOR VOC, VMAX, IMP AND ISC HAVE BEEN CALCULATED USING THE MANUFACTURED STRING CALCULATOR BASED ON ASHRAE 2% HIGH AND EXTREME MINIMUM TEMPERATURE COEFFICIENTS.
- 2. THE ENTIRE ARRAY IS BONDED ACCORDING TO (NEC 690.43(A) THROUGH (D) WITH 250.134 OR 250.136.
- 3. THIS SYSTEM COMPLIES WITH NEC 2020
- BRANCH CIRCUIT CALCULATION FOR WIRE TAG 1 DISPLAYS THE LARGEST BRANCH CIRCUIT IN SYSTEM. OTHER BRANCH CIRCUITS SHALL HAVE LOWER DESIGN CURRENT THAN THE ONE SHOWN. IN ADDITION, VOLTAGE DROP CALCULATIONS FROM PANELS TO THE COMBINER BOX SHALL BE SHOWN IN A SIMILAR FASHION
- 5. ALL CONDUCTORS ARE SIZED BASED ON NEC 2020 ARTICLE 310
- 6. ALL EQUIPMENT INSTALLED IS RATED AT 75°C
- 7. INVERTER NOC (NOMINAL OPEN CURRENT) OBTAINED FROM **EQUIPMENT DATASHEET**
- CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL LOCAL AND NATIONAL CODE REQUIREMENTS.
- 9. EACH MODULE MUST BE GROUNDED ACCORDING TO USER **INSTRUCTIONS**
- 10. ALL EQUIPMENT SHALL BE LISTED PER NEC 690.4(B)
- 11. PER NEC 690.13, 690.15, PROVIDE A WARNING SIGN AT ALL LOCATIONS WHERE TERMINALS OF THE DISCONNECTING MEANS MAY BE ENERGIZED IN THE OPEN POSITION> SIGN SHALL READ *WARNING -ELECTRIC SHOCK HAZARD - DO NOT TOUCH TERMINALS - OR EQUIVALENT.
- 12. PER NEC 705.10, PROVIDE A PERMANENT PLAQUE OR DIRECTORY SHOWING ALL ELECTRIC POWER SOURCES ON THE PREMISES AT SERVICE ENTRANCE.
- 13. INTERCONNECTION METHOD SHALL COMPLY WITH NEC 705.12
- 14. AND OPTION FOR A SINGLE CIRCUIT BRANCH TO BE SPLIT INTO TWO SUB-CIRCUIT BRANCHES IS ACCEPTABLE.
- 15. ALL CONDUCTORS MUST BE COPPER.
- 16. NEUTRAL AND EQUIPMENT GROUNDING CONDUCTOR BONDED AS PER NEC 250.24(C).
- 17. EQUIPMENT GROUNDING CONDUCTOR IS CONNECTED TO A GROUNDING ELECTRODE SYSTEM PER 250.54(D).
- 18. FUSES FOR PV DISCONNECT HAVE AIC RATINGS OF 200KA AC AND 20KA DC.
- 19. SUPPLY SIDE CONNECTION SHALL BE MADE USING ILSCO INSULATION PIERCING CONNECTORS (IPC), MAKE, MODEL, AND RATING OF INTERCONNECTION CAN BE SEEN ON TABLE 1 BELOW.
- 20. METHOD OF INTERCONNECTION CAN BE SEEN IN FIGURE 1.
- 21. UTILITY HAS 24-HR UNRESTRICTED ACCESS TO ALL PHOTOVOLTAIC SYSTEM COMPONENTS LOCATED AT THE SERVICE ENTRANCE

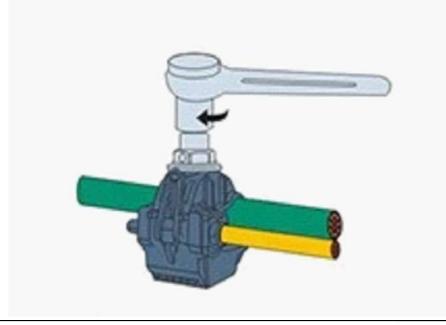
- 22. WORKING CLEARANCES AROUND THE EXISTING AND NEW ELECTRICAL EQUIPMENT WILL BE MAINTAINED IN ACCORDANCE WITH NEC ARTICLE 110.26
- CONDUCTORS EXPOSED TO SUNLIGHT SHALL BE LISTED AS SUNLIGHT RESISTANT PER NEC ARTICLE 300.6 (C)(1) AND ARTICLE 310.8 (D).
- 24. CONDUCTORS EXPOSED TO WET LOCATIONS SHALL BE SUITABLE FOR USE IN WET LOCATIONS PER NEC ARTICLE 310.10 (C).
- 25. TOTAL AREA OF ALL CONDUCTORS, SPLICES, AND TAPS INSTALLED AT ANY CROSS SECTION OF THE WIRING DOES NOT EXCEED 75% OF THE CROSS SECTIONAL AREA OF THE SPACE. NEC 312.8(A)(2).
- 26. SYSTEM IS CONSIDERED AN AC MODULE SYSTEM. NO DC CONDUCTORS ARE PRESENT IN CONDUIT, COMBINER, JUNCTION BOX, DISCONNECT. AND COMPLIES WITH 690.6 - NO DC DISCONNECT AND ASSOCIATED DC LABELING ARE REQUIRED.
- 27. SYSTEM COMPLIES WITH 690.12 RAPID SHUTDOWN AND ASSOCIATED LABELING AS PER 690.56(C), AC VOLTAGE AND SYSTEM OPERATING CURRENT SHALL BE PROVIDED 690.51
- 28. CONDUCTORS IN CONDUIT ARE AC CONDUCTORS BRANCH CIRCUITS AND NOT PV SOURCE CIRCUITS, 690.6.
- 29. ALL GROUNDING SHALL COMPLY WITH 690.47(A) IN THAT THE AC MODULES WILL COMPLY WITH 250.64.
- 30. NO TERMINALS SHALL BE ENERGIZED IN THE OPEN POSITION IN THIS AC MODULE SYSTEM 690.13(B), 690.6.
- 31. WHERE APPLICABLE: INTERCONNECTION SHALL COMPLY WITH 705.11(A) THROUGH (E) OR 705.12(B) THROUGH (E)
- 32. ALL WARNING SIGN(S) OR LABEL(S) SHALL COMPLY WITH 2020 NEC ARTICLE 110.21(B). LABEL WARNINGS SHALL ADEQUATELY WARN OF THE HAZARD. LABELS SHALL BE PERMANENTLY AFFIXED TO THE EQUIPMENT, AND LABELS REQUIRED SHALL BE SUITABLE FOR THE ENVIRONMENT.
- 33. PV POWER CIRCUIT LABELS SHALL APPEAR ON EVERY SECTION OF THE WIRING SYSTEM THAT IS SEPARATED BY ENCLOSURES, WALLS, PARTITIONS, CEILINGS, OR FLOORS.

TABLE 1:

MAKE	MODEL	VOLTAGE RATING	CONDUCTOR RANGE MAIN	CONDUCTOR RANGE TAP
ILSCO	IPC 4006	600 V	4/0-4 AWG	6-14 AWG
ILSCO	IPC 4020	600 V	4/0-2 AWG	2/0-6 AWG

INSTRUCTIONS FOR LINE TAPS

- 1. ADJUST THE CONNECTOR NUT TO SUITABLE LOCATION
- PUT THE BRANCH WIRE INTO THE CAP SHEATH FULLY
- INSERT THE MAIN WIRE, IF THERE ARE TWO LAYS OF INSULATED LAY IN THE MAIN CABLE, SHOULD STRIP A CERTAIN LENGTH OF THE FIRST INSULATED LAY FROM INSERTED END
- TURN THE NUT BY HAND, AND FIX THE CONNECTOR IN SUITABLE LOCATION.
- SCREW THE NUT WITH THE SLEEVE SPANNER.
- SCREW THE NUT CONTINUALLY UNTIL THE TOP PART IS CRACKED AND DROPPED DOWN





PRO CUSTOM SOLAR LLC D.B.A. MOMENTUM SOLAR 325 HIGH STREET, METUCHEN, NJ 08840 (732) 902-6224 MOMENTUMSOLAR.COM

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PROJECT INFORMATION					
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REV:	DATE:	DESIGNER:			
REV: DATE:		DESIGNER:			

ELECTRICAL CONT.

PV-3.1

ALL	WARNING SIGN(S) OR LABEL(S) SHALL COMPLY WITH NEC ARTICLE 110.21(B). LABEL WARNINGS SHAL	L ADEQUATELY W	ARN OF THE HAZARD. LABE	LS SHALL BE PERMANENTLY AFFIXED TO THE E	EQUIPMENT, AND LABELS REQUIRED SHALL BE SUITABLE FOR THE ENVIRONMENT
TAG	LABEL	QUANTITY	LOCATION	NOTE 1 AT EVERY SEPARATION BY	EXAMPLES
0	AC SOLAR VOLTAGE	12	AC CONDUITS	ENCLOSURES / WALLS / PARTITIONS / CEILINGS / FLOORS OR NO MORE THAN 10'	
0	WARNING: PHOTOVOLTAIC POWER SOURCE PHOTOVOLTAIC SYSTEM EQUIPPED WITH RAPID SHUTDOWN	1	COMBINER BOX	1 AT ANY COMBINER BOX	
0	ELECTRICAL SHOCK HAZARD TERMINALS ON BOTH LINE AND LOAD SIDES MAY BE ENERGIZED IN THE OPEN POSITION	1	JUNCTION BOX	1 AT ANY JUNCTION BOX	
0	PHOTOVOLTAIC SYSTEM AC DISCONNECT A RATED AC OUTPUT CURRENT 10.89 A NOMINAL OPERATING AC VOLTAGE 240 V POWER TO THIS SERVICE IS ALSO SUPPLIED FROM ON-SITE SOLAR GENERATION AC SYSTEM DISCONNECT AC SYSTEM DISCONNECT AC WARNING ELECTRICAL SHOCK HAZARD TERMINALS ON BOTH LINE AND LOAD SIDES MAY BE ENERGIZED IN THE OPEN POSITION PHOTOVOLTAIC SYSTEM INSTALLED BY MOMENTUM SOLAR 3096 B HAMILTON BLVD S. PLAINFIELD, NJ 07080 PHONE NUMBER:732-902-6224	1	AC DISCONNECT (RSD SWITCH)	1 OF EACH AT FUSED AC DISCONNECT COMPLETE VOLTAGE AND CURRENT VALUES ON DISCONNECT LABEL	DEGRECATION OF THE PROPERTY OF
0	DUAL POWER SUPPLY SECOND SOURCE IS PHOTOVOLTAIC SYSTEM	1	UTILITY METER	1 AT UTILITY METER	ECCTRC SHOCK HEARD DO NOT TOUCH TERMINALS TEMBRIS OR ROFT HE LIVE NO LOUS SIESS WEE SHEFREZZ IN THE OPEN POSITION
	EMERGENCY RESPONDER THIS SOLAR PV SYSTEM EQUIPPED WITH RAPID SHUTDOWN TURN RAPID SHUTDOWN TURN RAPID SHUTDOWN WITHOUT TO THE "OFFP POSITION TO SHUT DOWN ENTIRE PV SYSTEM BECTION SHUTTON	1	INTERCONNECTION POINT	4.05 54004 47 8144 8320	A CANADA CONTROL OF CO
	POWER SOURCE OUTPUT CONNECTION. DO NOT RELOCATE THIS OVERCURRENT DEVICE	1	BACKFEED PANEL	1 OF EACH AT BUILDING INTERCONNECTION POINT	1/210 cc (20/2/10) \$1 351 328 25
0	NOMINAL OPERATING AC VOLTAGE: 240V NOMINAL OPERATING AC FREQUENCY: 60HZ MAXIMUM AC POWER: VA MAXIMUM AC CURRENT: A MAXIMUM OVERCURRENT DEVICE RATING FOR AC MODULE PROTECTION: 20A	1	AC CURRENT PV MODULES		AWARNING A DUAL FOVER SUPPLY SOURCES UT IN CORD AND ACCOUNT CORD AND ACCOU

















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SANDRA REEVES - MS152195 1744 NE BASCOM NORRIS DRIVE LAKE CITY, FL 32055 (718) 703-8830

PV SYSTEM INFORMATION

SYSTEM SIZE (DC): 3.69 KW 9 MODULES: HANWHA Q.PEAK DUO BLK ML-G10+ 410

9 INVERTERS: ENPHASE IQ7PLUS-72-2-US

PROJECT INFORMATION					
INITIAL	DATE: 6/3/2024	DESIGNER: RA			
REV:	DATE:	DESIGNER:			
REV:	DATE:	DESIGNER:			

EQUIPMENT LABELS

PV-3.2