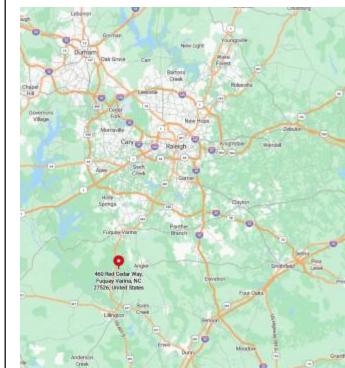
SR.# PHOTOVOLTAIC ROOF MOUNT SYSTEM **PROJECT INFORMATION PV MODULES** 26 x Canadian Solar CS6.1-54TM-450H 1 **CODE AND STANDARDS** 2 **INVERTER + BATTERY** 01 X POWERWALL3 THE INSTALLATION OF SOLAR ARRAYS AND PHOTOVOLTAIC POWER SYSTEMS SHALL COMPLY 3 **ROOF TYPE ASPHALT SHINGLES** WITH THE FOLLOWING CODES: 2020 NATIONAL ELECTRICAL CODE 4 RACKING PSR-B84 RAILS (BLACK) 2018 NORTH CAROLINA RESIDENTIAL CODE 2018 NORTH CAROLINA BUILDING CODE **INSTAFLASH2** 5 **MOUNTING TYPE** ALL OTHER ORDINANCE ADOPTED BY THE LOCAL GOVERNING AGENCIES DC SIZE 6 11.70 KW **SITE NOTES / OSHA REGULATION AC SIZE** 11.5 KVA 7 1. A LADDER SHALL BE IN PLACE FOR INSPECTION IN COMPLIANCE WITH OSHA REGULATIONS. THE SOLAR PV INSTALLATION SHALL NOT OBSTRUCT ANY PLUMBING, MECHANICAL, OR SR.# **PROJECT INFORMATION** BUILDING ROOF VENTS. ROOFTOP MOUNTED PHOTOVOLTAIC PANELS AND MODULES SHALL BE TESTED, LISTED AND PV1 1 **DRAWING INDEX** IDENTIFIED BY RECOGNIZED ELECTRICAL TESTING LABORATORY. MODULES AND SUPPORT STRUCTURES SHALL BE GROUNDED 2 PV2 SITE LAYOUT SOLAR INVERTER SHALL BE LISTED TO UL1741 PV3 3 STRING MAPPING ALL CONDUCTORS SHALL BE COPPER AND SHOULD BE 75 AND 90 DEG RATED REMOVAL OF AN INTERACTIVE INVERTER OR OTHER EQUIPMENT SHALL NOT DISCONNECT PV4 4 **ELECTRICAL ONE LINE DIAGRAM** THE BONDING CONNECTION BETWEEN THE GROUNDING ELECTRODE CONDUCTOR, THE PHOTOVOLTAIC SOURCE AND OUTPUT CIRCUIT GROUNDED CONDUCTORS. PV5 5 DETAILED ELECTRICAL WIRING SCHEMATIC LIVE PARTS OF PV SOURCE CIRCUITS AND PV OUTPUT CIRCUITS OVER 150V TO GROUND SHALL NOT BE ACCESSIBLE TO OTHER THAN QUALIFIED PERSONS WHILE ENERGIZED. PV6 6 **PV LABELS**



PV7

PV8

7

8

BILL OF MATERIALS

ATTACHMENT DETAILS

460 Red Cedar W Fuquay Varina, N	•			
Customer Signat	ure:			
Sheet Name:				
Drawing Index				
JOB NUMBER:				
25-16	7-WG			
Date:	Revision:			
04/16/2025	А			

8 M S O L A R

5112 Departure Drive,

E: info@8msolar.com

Customer Information:

Raleigh NC 27616

O: 919.948.6474

William Griffith

4		
	Date:	Revision:
	04/16/2025	А
	Sheet Size:	Sheet Number:
1	ANSI C 17" X 22"	PV1

CERTIFIED

PV Installation

Professional

Ali Buttar

DESIGN CRITERIA WIND SPEED: 120 MPH **GROUND SNOW LOAD: 15 PSF** WIND EXPOSURE FACTOR: B

CONNECTIONS.

VOC UNLESS NOT AVAILABLE.

PHYSICAL DAMAGE.

SOLAR CONTRACTOR

UTILITY COMPANY: DUKE ENERGY

MODULE CERTIFICATIONS INCLUDE UL1703, IEC61646, IEC61370.

DOCUMENTATION AND APPROVED BY THE AHJ.

2. IF APPLICABLE, MODULE GROUNDING LUGS MUST BE INSTALLED AT THE MARKED

IN PLACE OF STANDARD GROUNDING LUGS AS SHOWN IN MANUFACTURER

GROUNDING LUG HOLES PER THE MANUFACTURERS INSTALLATION REQUIREMENTS.

ALL MICROINVERTERS, PHOTOVOLTAIC MODULES, AC COMBINERS, DC-AC CONVERTERS

TERMINALS AND LUGS WILL BE TIGHTENED TO MANUFACTURER TORQUE SPECIFICATIONS

AND SOURCE CIRCUIT COMBINERS INTENDED FOR USE IN A PHOTOVOLTAIC POWER

(WHEN PROVIDED) IN ACCORDANCE WITH NEC CODE 110.14(D) ON ALL ELECTRICAL

7. MAX DC VOLTAGE CALCULATED USING MANUFACTURER PROVIDED TEMP COEFFICIENT FOR

SYSTEM WILL BE IDENTIFIED AND LISTED FOR THE APPLICATION PER NEC690.4(B).

ALL SIGNAGE TO BE INSTALLED IN ACCORDANCE WITH LOCAL BUILDING CODE.

AS INDICATED BY DESIGN, OTHER NRTL LISTED MODULE GROUNDING DEVICES MAY BE USED

PERMIT ISSUER (AHJ): HARNETT COUNTY

ALL PV MODULES AND ASSOCIATED EQUIPMENT AND WIRING SHALL BE PROTECTED FROM

SCOPE OF WORK INSTALLATION OF UTILITY INTERACTIVE PHOTOVOLTAIC SOLAR SYSTEM.

VICINITY MAP

TOP VIEW OF THE BUILDING

	ROOF DES	CRIPTION		MODULE DIMENSIONS
ROOF	PITCH	AZIMUTH	NO. OF MODULES	44.6 in.
А	27°	149°	26	<u>.</u>
				70.9 in.
			•	

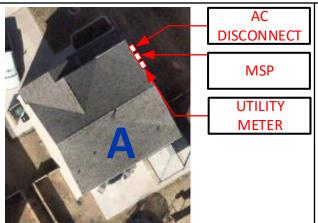
No vent will be covered by PV modules during the installation.

PV System Dead Load (Panel + Racking weight) / PV System Area (No. of panels x Weight of panel(lbs.) +Length of racking(ft.) x 1.15 lb.ft) / (No. of panels x Height x Width) = Total psf ROOF Α

DEAD LOAD

(PSF)

2.70

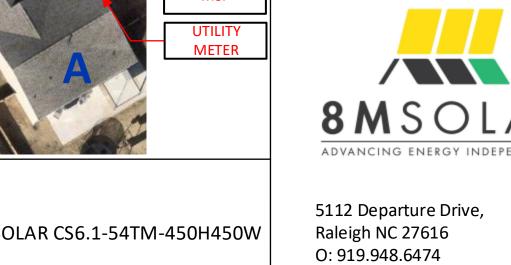


SYSTEM DETAILS

NUMBER OF PANELS: 26

PANELS MODEL: CANADIAN SOLAR CS6.1-54TM-450H450W

DC SIZE: 11.70 KW AC SIZE: 11.5 KVA



Customer Information:

E: info@8msolar.com

William Griffith

460 Red Cedar Way Fuquay Varina, NC 27526

Customer Signature:

Sheet Name:

Site Layout

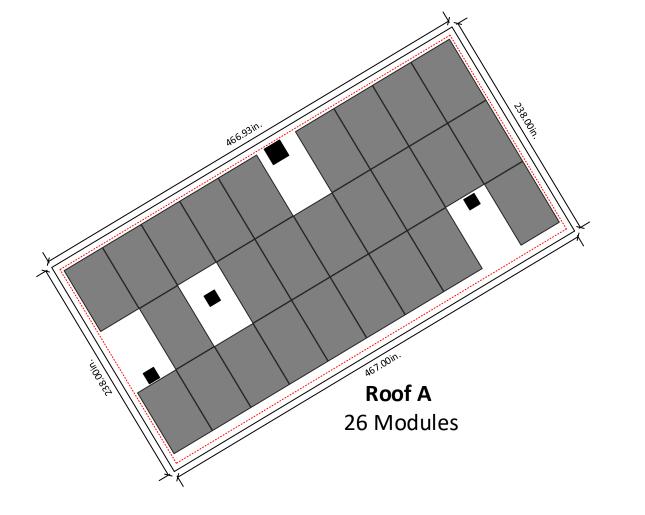
JOB NUMBER:

25-167-WG

Date:	Revision:
04/16/2025	А
Sheet Size:	Sheet Number:
ANSI C 17" X 22"	PV2



PV Installation Professional

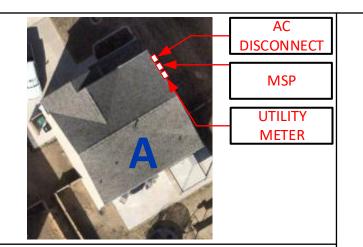


6in setback from sides of the roof

Vent

N SITE LAYOUT SCALE: 1/8" - 1'

ROOF DESCRIPTION			MODU	LE DIMENSIONS	STRING LAYOUT						
ROOF	PITCH	AZIMUTH	NO. OF MODULES	J	→ 44.6 in. →			TESLA POV	WERWALL3		
A	27°	149°	26			Strings #	No. of Modules	Color	Strings #	No. of Modules	Color
				70.9 in.		String 1	09				
				7		String 2	09				
				\rightarrow		String 3	08				

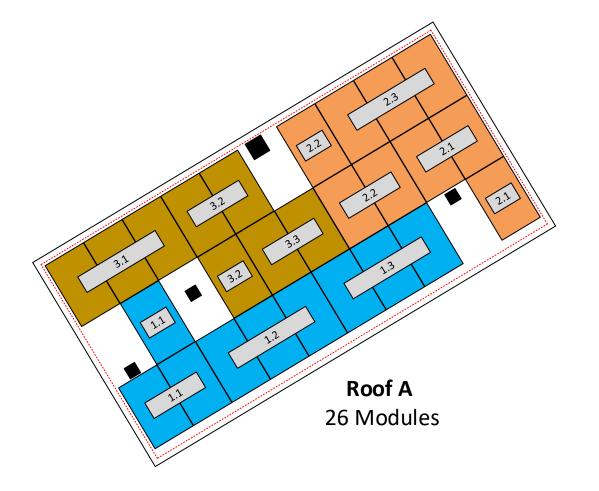




NUMBER OF PANELS: 26

PANELS MODEL: CANADIAN SOLAR CS6.1-54TM-450H450W

DC SIZE: 11.70 KW AC SIZE: 11.5 KVA





5112 Departure Drive, Raleigh NC 27616 O: 919.948.6474 E: info@8msolar.com

Customer Information:

William Griffith

460 Red Cedar Way Fuquay Varina, NC 27526

Customer Signature:

Sheet Name:

String Mapping

JOB NUMBER:

25-167-WG

Date:	Revision:
04/16/2025	А
Sheet Size:	Sheet Number:
ANSI C 17" X 22"	PV3

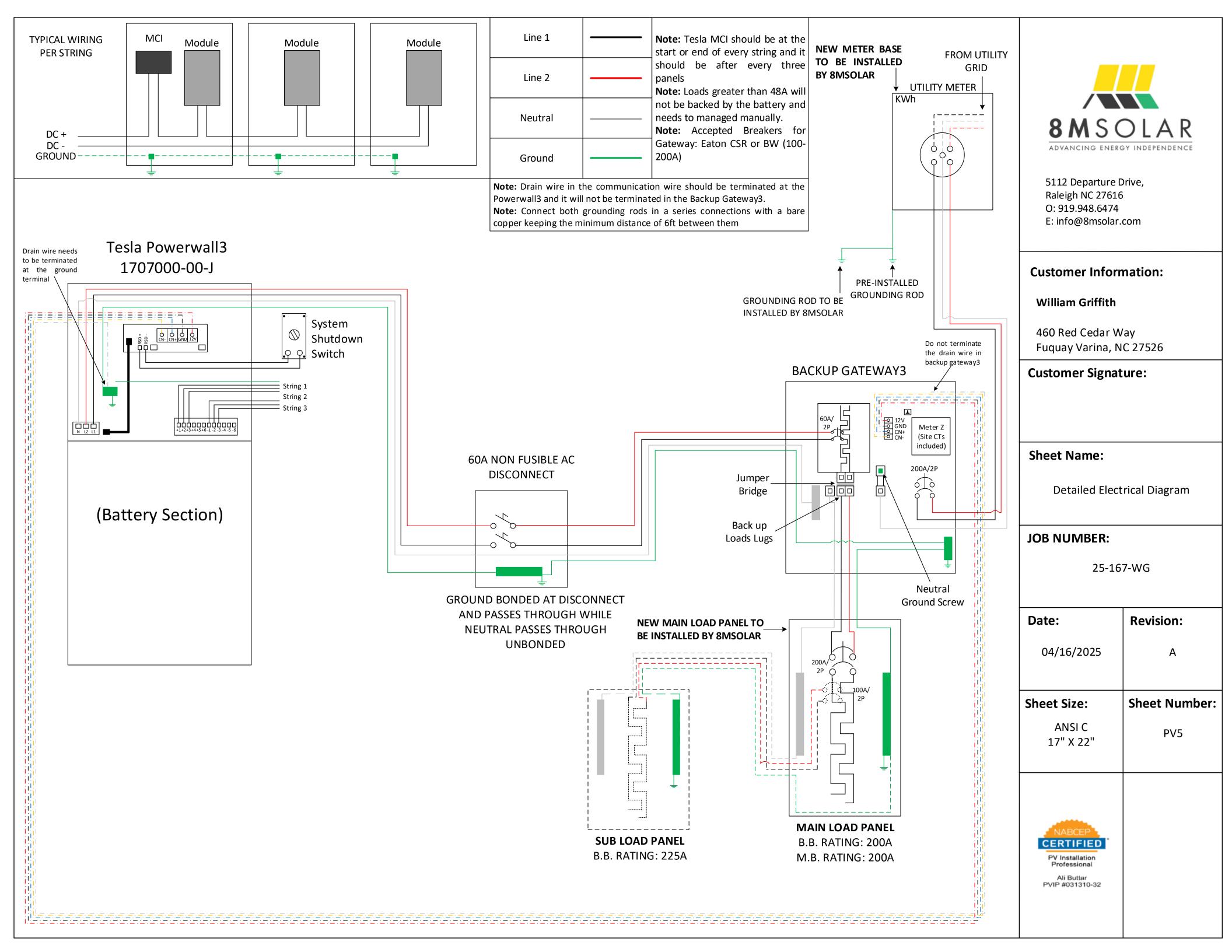


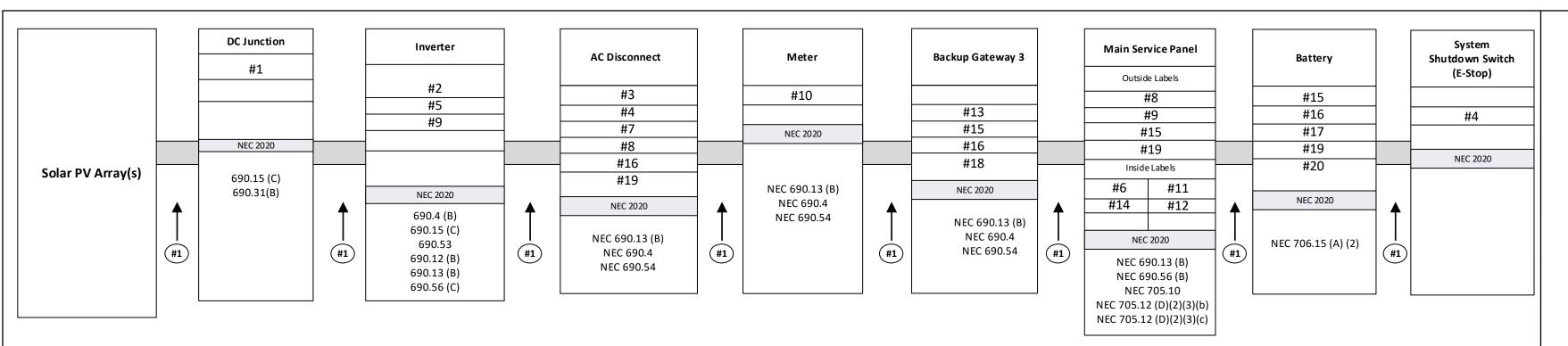
PV Installation Professional

STRING MAPPING SCALE: 1/8" - 1'

Tesla MCI (Mid Circuit Interrupter)

		STR	RING CALCUI	ATION					NEC C	de (202)()) and (Ctoudoud Dofus			
String #	No of	Estimated	Imax	Impp	Voc	Vmpp				·	.12 (A-D),	Standard Refre		_	
1,2	Modules 09	Power 4,050 W	21.31 Adc	13.66 Adc	350.1 Vdc	550 Vdc	_	Rapid Sh	nut Down		1741	Grounding	NEC Article 250.30(A)		
3	08	3,600 W	21.31 Adc	13.66 Adc	311.2 Vdc	550 Vdc	_	Disconnec	ting Means	NEC 6	590.13	Conduit Fill	NEC Table C.9, 310.15(B)(3)(a)		
		3,000 **	21.317140	13.00 / 100	311.2 vac	330 140			r Sizing		10, 15(B)(16, 7)	Interconnection	NEC 705.12	2 M S	OLAR
									current ection	NEC (690.9			ADVANCING ENERG	
	DIAN SOLAR CS	66.1-54TM-450	Н							Service Sid	de Work: Powe	er Drop Required			
	HIGH CURRENT		terrupter)							NEVA	N MAETED DAG	FROM UTILITY	Utility	5112 Departure I Raleigh NC 27616 O: 919.948.6474 E: info@8msolar.	5
										INST	TALLED BY 8M	E TO BE SOLAR	Meter	Customer Inform	mation:
						System							(5)	William Griffith	
					S	hutdown Switch (E-Stop)	Tesla Powerwall3 1707000-00-J				ER CONNECTION P GATEWAY 3	ON INSIDE		460 Red Cedar W Fuquay Varina, N	•
=	-8	- = -			1	8			(7	·)	– . – . – . – . – . –	E	ackup Gateway 3	Customer Signat	
String 1													60A/2P 200A/2P		
=	-=	-=			Sola Sola	J.Box -3	ACO	<u>4</u>		0]	4			
					Deck				60A NON-	FUSIRI F Δι				Sheet Name:	
String 2						Attic	(Battery			NNECT	C			Sheet Name.	
=	-=	-=			1		Section)						(6)	Electrical One	Line Diagram
String 3											N MAIN LOAD	—→	200A/2P	JOB NUMBER:	7-WG
										i ! !				Date:	Revision:
										 				04/45/2025	
										 				04/16/2025	A
Note: Followin	ng existing breal lo	kers will be insta ad panel.											AIN LOAD PANEL B RATING: 200A		
Sr.No	1	er Amperage 100/2P	Quantities 1								OAD PANEL		.B RATING: 200A	Sheet Size:	Sheet Number:
3		40/2P 35/2P	1	-	and the second	dans 1 B	and the Land			B.B. RA	ATING: 225A			ANSI C 17" X 22"	PV4
				cl	amps to ensure t	done via Pegasus gro he rail and panels ai	ounding lugs and mid- re continuously	Sr.No	#Wi	re	Conduit Size	Ground Wire	Amperage		
				• R	•		Circuit Interrupter ,	1	2 x #10			#10 Bare Cu	21.31		
	em Size: 11,700\ ery Total Energy			d	atasheets.	t Interrupter and In		2	3 x #10 M		0/2" == :=	1140.0	21.31	_	
• (26)	Canadian Solar (CS6.1-54TM-450				sconnect will be visi y linesmen, and prop	ble, lockable, perly labeled per NEC	3	6 x #10 Th		3/4" EMT	#10 Green Cu		NABCEP	
1 ' '	1879359-15-B: 1 Tesla Powerwall	•		re			exterior wall next to	4	3 x #6 TH		3/4" EMT	#6 Green Cu	60	CERTIFIED PV Installation	
	ter Output: 48 <i>i</i> kVA AC output i		AC (each)	• P	repare cable in u		form weld for a live	5	3 x #3/0 TI		2" PVC		200	Professional Ali Buttar	
11.5	NVA AC OULPUL I	ПИЛ		D	egree of stretch i	s not critical and ma		6	3 x #3/0 TI 4-conductor		2" PVC	#6 Green Cu	200	PVIP #031310-32	
						accomplish void-fregith two half-lapped	ee application. layers of any scotch	7	(1 twisted pai	r) 16 AWG				-	
					nyl plastic electri			8	2-conductor (1 twisted pai		1/2" LFNC				





8MSOLAR

5112 Departure Drive, Raleigh NC 27616 O: 919.948.6474 E: info@8msolar.com

LABELING AND WARNING **SIGNS: NEC 2020**

A. PURPOSE

PROVIDE EMERGENCY RESPONDERS WITH APPROPRIATE WARNING AND GUIDANCE WITH RESPECT TO ISOLATING THE SOLAR ELECTRIC SYSTEM. THIS CAN FACILITATE IDENTIFYING ENERGIZED ELECTRICAL LINES THAT CONNECT THE SOLAR PANELS TO THE INVERTER, AS SHOULD NOT BE CUT WHEN VENTING FOR SMOKE REMOVAL.

B. MAIN SERVICE DISCONNECT:

- 1. RESIDENTIAL BUILDINGS- THE MARKING MAY BE PLACED WITHIN THE MAIN SERVICE DISCONNECT. THE MARKING SHALL BE PLACED ON THE OUTSIDE COVER IF THE MAIN SERVICE DISCONNECT IS OPERABLE WITH THE SERVICE PANEL CLOSED.
- 2. COMMERCIAL BUILDINGS- THE MARKINGS SHALL BE PLACED ADJACENT TO THE MAIN SERVICE DISCONNECTCLEARLY VISIBLE FROM THE LOCATION WHERE THE LEVER IS OPERATED
- 3. MARKINGS, VERBIAGE, FORMAT AND TYPE OF MATERIAL
 - a. VERBIAGE: CAUTION; SOLAR ELECTRIC SYSTEM CONNECTED b. FORMAT:
 - (1) WHITE LETTERING ON A RED BACKGROUND
 - (2) MINIMUM 3/8 INCH LETTER HEIGHT
 - (3) ALL LETTERS SHALL BE CAPITALIZED
 - (4) ARIAL OR SIMILAR FONT, NON-BOLD

c. MATERIAL:

(1) REFLECTIVE, WEATHER RESISTANT MATERIAL SUITABLE FOR THE ENVIRONMENT (USE UL-969) AS STANDARD FOR WEATHER RATING): DURABLE ADHESIVE MATERIALS MEET THIS REQUIREMENT.

C. MARKING REQUIREMENTS ON DC CONDUIT, RACEWAYS, ENCLOSURES, CABLE ASSEMBLIES, DC COMBINERS AND JUNCTION BOXES;

- 1. MARKING: PLACEMENT, VERBIAGE, FORMAT AND TYPE OF MATERIAL.
 - a. PLACEMENT: MARKINGS SHALL BE PLACED EVERY 10 (TEN) FEET ON ALL INTERIOR AND EXTERIOR DC CONDUITS, RACEWAYS, ENCLOSURES AND CABLE ASSEMBLIES, AT TURNS ABOVE AND/OR BELOW PENETRATIONS, ALL DC COMBINERS AND JUNCTION

BOXES.

- b. VERBIAGE: CAUTION SOLAR CIRCUIT
- c. THE FORMAT AND TYPE OF MATERIAL SHALL ADHERE TO SECTION B-3.B & C ABOVE
- D. INVERTERS ARE NOT REQUIRED TO HAVE CAUTION MARKINGS

WARNING:PHOTOVOLATIC #1 **POWER SOURCE**

#2 **PHOTOVOLTAIC** DC DISCONNECT

#3 **PHOTOVOLTAIC AC DISCONNECT**

#4 **RAPID SHUTDOWN SWITCH FOR SOLAR PV SYSTEM**

#5 MAXIMUM VOLTAGE 550Vdc MAX. RATED CIRCUIT CURRENT 13.66Adc OF THE CHARGE CONTOLLER OR DC-TO-DC CONVERTER (IF INSTALLED)

PHOTOVOLTIVC POWER SOURCE OPERATING AC VOLTAGE 240 MAXIMUN OPERATING AC OUTPUT CURRENT

#7 AC DISCONNECT PHOTOVOLTAIC SYSTEM **POWER SOURCE** RATED AC 48 AMPS **OUTPUT CURRENT** NOMINAL OPERATING 240 VOLTS

#8 WARNING

ELECTRIC SHOCK HAZARD TERMINAL ON THE LINE AND LOAD SIDES MAY BE ENERGIZED IN THE **OPEN POSITION**

#9 **WARNING THREE POWER SOURCES SOURCES: UTILITY GRID, BATTERY AND PV SOLAR ELECTRIC SYSTEM**

#10 /!\ WARNING /!\ THREE POWER SOURCES SOURCES: UTILITY GRID, BATTERY AND PV SOLAR ELECTRIC SYSTEM

#11 **WARNING**

TURN OFF PHOTOVOLTAIC AC DISCONNECT PRIOR TO WORKING INSIDE PANEL

#12 WARNING

> **POWER SOURCE OUTPUT CONNECTION** DO NOT RELOCATE THIS OVERCURRENT DEVICE

#13 **WARNING**

> **SOLAR ELECTRIC CIRCUIT BREAKER** IS BACKFEED

#14 **SOLAR PV SYSTEM EQUIPPED WITH RAPID SHUTDOWN**

TURN RAPID SHUTDOWN SWITCH TO THE "OFF" POSITION TO SHUT DOWN PV SYSTEM AND REDUCE SHOCK HAZARD IN THE ARRAY



SOLAR AC DISCONNECT Customer Information: LOCATED AT NORTH-EAST SIDE

WALL OF THE HOUSE BESIDE

THE UTILITY METER

SERIVCE DISCONNECT LOCATED

IN THE BACKUP GATEWAY 3

PANEL

BATTERY

MAIN BATTERY

SYSTEM DISCONNECT

BATTERY DISCONNECT LOCATED

IN THE BACKUP GATEWAY 3

PANEL

ENERGY STORAGE

SYSTEM DISCONNECT

DATE CALCULATION PERFORMED 04/11/2025

240V

550V

160A

NOMINAL ESS AC VOLTAGE

NOMINAL ESS DC VOLTAGE

AVAILABLE FAULT CURRENT

DERIVED FROM THE ESS

#15

#16

#17

#18

#19

#20

William Griffith

460 Red Cedar Way Fuquay Varina, NC 27526

Customer Signature:

Sheet Name:

PV Labels

JOB NUMBER:

25-167-WG

Revision: Date: Α

Sheet Number: Sheet Size:

17" X 22"

PV6

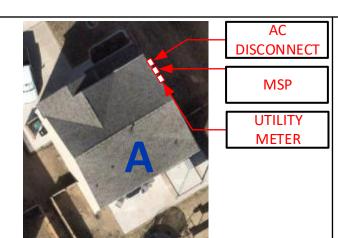


Ali Buttar

04/16/2025

ANSI C

ROOF DESCRIPTION				MODULE DIMENSIONS	Della and Culicas a DCD DCA (DLACK)	Do of Attock worth Do come loots [looks]	
ROOF	PITCH	AZIMUTH	NO. OF MODULES	44.6 in. ↓	Rails and Splices : PSR-B84 (BLACK)	Roof Attachment : Pegasus InstaFlash2	
А	27°	149°	26	70.9 in.	Rafter Spacing : 24 in	There is one layer of shingles Roofing material is asphalt shingles	
					Attachment Span: 6ft	The roof is located in 120mph wind zone	





5112 Departure Drive, Raleigh NC 27616 O: 919.948.6474 E: info@8msolar.com

Customer Information:

William Griffith

460 Red Cedar Way Fuquay Varina, NC 27526

Customer Signature:

Sheet Name:

Bill of Material

JOB NUMBER:

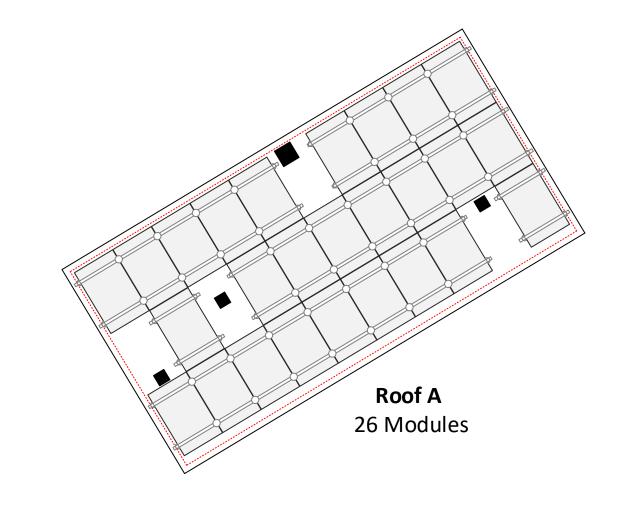
Date:

25-167-WG

Revision:

04/16/2025	А
Sheet Size:	Sheet Number:
ANSI C 17" X 22"	PV7
PV Installation Professional Ali Buttar PVIP #031310-32	

	PV LABELS	
Sr. No	Code	Qty
01	02-314	12
02	03-301	01
03	03-302	01
04	02-316	02
05	03-308	01
06	03-390	01
07	03-306	01
08	05-215	02
09	05-230	02
10	03-230	01
11	05-372	01
12	05-216	01
13	05-342	01
14	07-111	01
15	8M-001	03
16	8M-002	03
17	03-395	01
18	04-304	01
19	8M-004	03
20	03-511	01



RAILS AND MOUNTING SYSTEM

- 34 x PSR-B84: Pegasus Rail, Black, 84" (7 Feet)
- 22 x PSR-SPLS: Pegasus Bonded, Structural Splice
- 40 x PSR-MCB: Pegasus Multiclamp, Mid/End, 30 to 40 mm, Black
- 24 x PSR-HEC: Pegasus Hidden End Clamp
- 08 x PSR-LUG: Pegasus Grounding Lug
- 39 x PSR-WMC: Pegasus Wire Management Clip
- 05 x PSR-CBG: Pegasus Cable Grip
- 24 x PSR-CAP: Pegasus End Cap
- 48 x PIF2-BDT: Pegasus InstaFlash2 Deck or Rafter Attach with Dovetail T-Bolt
- 288 x PF-DRW85: Pegasus Fastener Deck-Rafter 85mm
- 52 x Heyco Wire Clips
- 05 x GEOC GC66100: SEALANT 2300 10.30Z CLEAR (20) GEOCEL 230 TRIPOLY CLEAR
- 15 x MULTI 32.0017P0001-UR: PV MC4 MALE (10) [1000]
- 15 x MULTI 32.0016P0001-UR: PV MC4 FEMALE (10) [1000]

SOLAR MODULES

• 26 x Canadian Solar CS6.1-54TM-450H

INVERTER & SUPPORTING ITEMS

- 01 x 1707000-00-J :Tesla Powerwall3
- 09 x 1879359-15-B: Tesla MCI-2 High Current
- 01 x 1841000-01-C: Backup GateWay 3
- 01 x 1549184-00-X: 02" Conduit Hub Kit

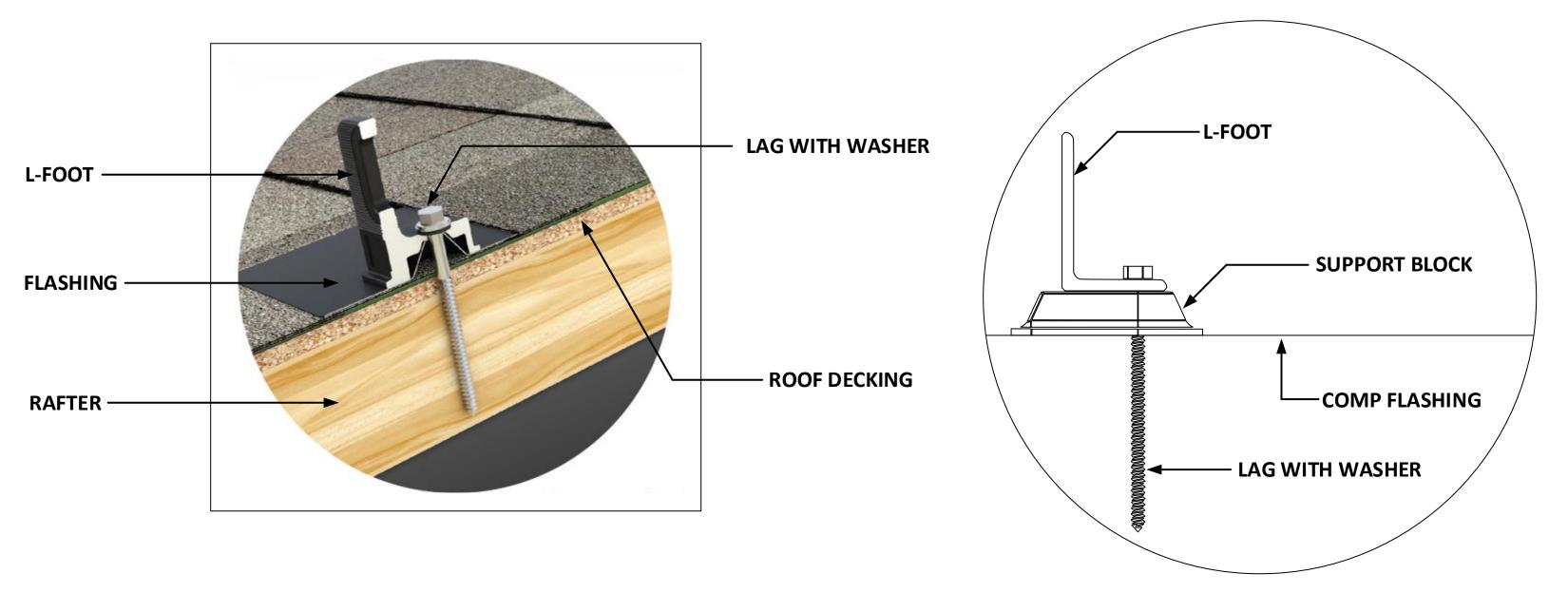
WIRE

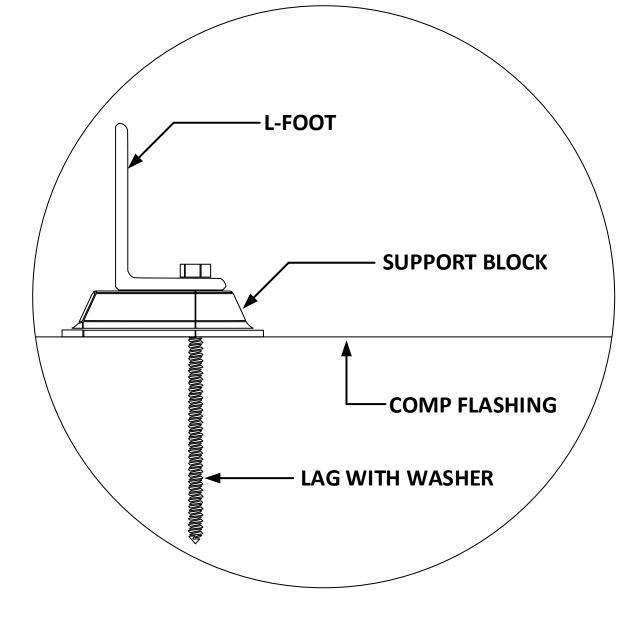
• 01 x WIRPV 2KVPV10STRBLK500: #10 PV WIRE BLK (Cu) 500ft

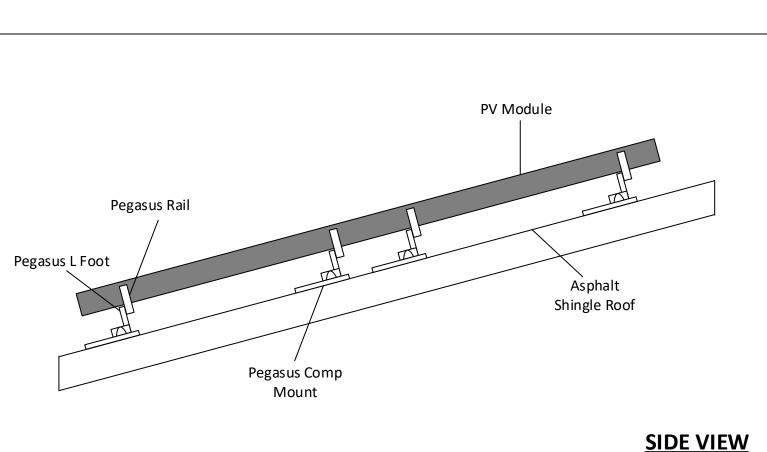
ELECTRICAL ITEMS

- 01 x BW2200: Gateway Main Breaker-Eaton BW2200
- 01 x BR260: Eaton BR 60/2
- 01 x DG222URB: 250volt/60amp/2pole non fusible disconnect (NEMA 3R)
- 01 x EATON UTRS213BE: Eaton 200A Meter Base
- 01 x HOM2040M200PRB: Homeline HOM type 200A Load Center
- 01 x EATON M22PVK01: 22.5MM PB EMG STOP W/ CONTACTOR
- 01 x Eaton M22I1PG: SFC MTG ENC Emergency Stop Enclosure
- 01 x EZSLR JB-1.2: SolaDeck

6in setback from sides of the roof









PV Dead Load PV System Dead Load (Panel + Racking weight) / PV System Area Roof A (26 panels x 47.2 lbs./panel + 15 ft. of racking x 1.17 lb.ft) / (26 panels x 5.65' x 3.71') = 2.70 psf



5112 Departure Drive, Raleigh NC 27616 O: 919.948.6474 E: info@8msolar.com

Customer Information:

William Griffith

460 Red Cedar Way Fuquay Varina, NC 27526

Customer Signature:

Sheet Name:

Attachment Details

JOB NUMBER:

25-167-WG

Date:	Revision:
04/16/2025	А
Sheet Size:	Sheet Number:
ANSI C 17" X 22"	PV8







TOPHiKu6 (All-Black)

N-type TOPCon Technology

445 W ~ 470 W

CS6.1-54TM-445 | 450 | 455 | 460 | 465 | 470H

MORE POWER



Module power up to 470 W Module efficiency up to 23.0 %



Excellent anti-LeTID & anti-PID performance. Low power degradation, high energy yield



Lower temperature coefficient (Pmax): -0.29%/°C, increases energy yield in hot climate



Lower LCOE & system cost

MORE RELIABLE



Minimizes micro-crack impacts



Heavy snow load up to 8100 Pa, wind load up to 6000 Pa*



Industry Leading Product Warranty on Materials and Workmanship*

Assembled in the US



Linear Power Performance Warranty*

1st year power degradation no more than 1% Subsequent annual power degradation no more than 0.4%

*Subject to the terms and conditions contained in the applicable Canadian Solar Limited Warranty Statement. Also this 25-year limited product warranty is available only for products installed and operating on rooftops in certain regions.

MANAGEMENT SYSTEM CERTIFICATES*

ISO 9001:2015 / Quality management system ISO 14001:2015 / Standards for environmental management system ISO 45001: 2018 / International standards for occupational health & safety IEC62941: 2019 / Photovoltaic module manufacturing quality system

PRODUCT CERTIFICATES*

IEC 61215 / IEC 61730 IEC 61701 / IEC 62716 / IEC 60068-2-68 Take-e-way





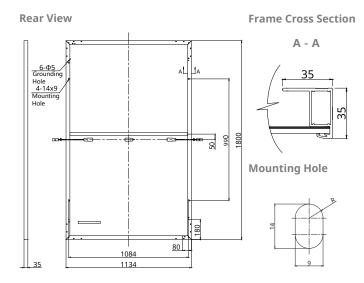


* The specific certificates applicable to different module types and markets will vary, and therefore not all of the certifications listed herein will simultaneously apply to the products you order or use. Please contact your local Canadian Solar sales representative to confirm the specific certificates available for your Product and applicable in the regions in which the products will be used.

CSI Solar Co., Ltd. is committed to providing high quality solar photovoltaic modules, solar energy and battery storage solutions to customers. The company was recognized as the No. 1 module supplier for quality and performance/price ratio in the IHS Module Customer Insight Survey. Over the past 22 years, it has successfully delivered over 100 GW of premium-quality solar modules across the world.

^{*} For detailed information, please refer to the Installation Manual.

ENGINEERING DRAWING (mm)



ELECTRICAL DATA | STC*

CS6.1-54TM	445H	450H	455H	460H	465H	470H
Nominal Max. Power (Pmax)	445 W	450 W	455 W	460 W	465 W	470 W
Opt. Operating Voltage (Vmp)	32.8 V	33.0 V	33.2 V	33.4 V	33.6 V	33.8 V
Opt. Operating Current (Imp)	13.59 A	13.66 A	13.72 A	13.78 A	13.85 A	13.91 A
Open Circuit Voltage (Voc)	38.7 V	38.9 V	39.1 V	39.3 V	39.5 V	39.7 V
Short Circuit Current (Isc)	14.48 A	14.55 A	14.61 A	14.69 A	14.77 A	14.86 A
Module Efficiency	21.8%	22.0%	22.3%	22.5%	22.8%	23.0%
Operating Temperature	-40°C ~	+85°C				
Max. System Voltage	1500V (IEC/UL)	or 1000\	√ (IEC/U	L)	
Module Fire Performance			30 1500\ S C (IEC		E 2 (UL (61730
Max. Series Fuse Rating	25 A					
Application Classification	Class A					
Power Tolerance	0 ~ + 10	W				
* Under Standard Test Conditions (STC)	of irradian	co of 1000	W//m2 cnc	ctrum AM	1 5 and co	II tompo

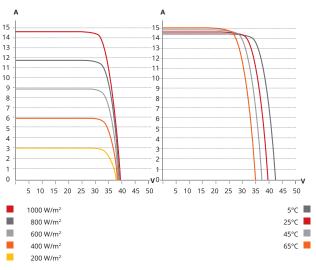
^{*} Under Standard Test Conditions (STC) of irradiance of 1000 W/m2, spectrum AM 1.5 and cell temperature of 25°C.

ELECTRICAL DATA | NMOT*

CS6.1-54TM	445H	450H	455H	460H	465H	470H
Nominal Max. Power (Pmax)	335 W	339 W	343 W	347 W	351 W	354 W
Opt. Operating Voltage (Vmp)	30.9 V	31.1 V	31.3 V	31.5 V	31.7 V	31.9 V
Opt. Operating Current (Imp)	10.85 A	10.91 A	10.96 A	11.02 A	11.07 A	11.12 A
Open Circuit Voltage (Voc)	36.5 V	36.7 V	36.9 V	37.1 V	37.3 V	37.5 V
Short Circuit Current (Isc)	11.68 A	11.74 A	11.79 A	11.85 A	11.92 A	11.99 A

^{*} Under Nominal Module Operating Temperature (NMOT), irradiance of 800 W/m² spectrum AM 1.5, ambient temperature 20°C, wind speed 1 m/s.

CS6.1-54TM-455H / I-V CURVES



MECHANICAL DATA

Specification	Data	
Cell Type	TOPCon cells	
Cell Arrangement	108 [2 X (9 X 6)]	
D: .	1800 × 1134 × 35 mm	
Dimensions	(70.9 × 44.6 × 1.38 in)	
Weight	23 kg (50.7 lbs)	
Front Cover	3.2 mm tempered glass with anti-reflective coating	
Frame	Anodized aluminium alloy	
J-Box	IP68, 3 bypass diodes	
Cable	4 mm ² (IEC), 12 AWG (UL)	
Connector	T6, MC4, MC4-EVO2 or MC4- EVO2A	
Cable Length	1550 mm (61.0 in) (+) /	
(Including Connector)	1100 mm (43.3 in) (-)	
Per Pallet	30 pieces	
Per Container (40' HQ)720 pieces		

TEMPERATURE CHARACTERISTICS

Specification	Data
Temperature Coefficient (Pmax)	-0.29 % / °C
Temperature Coefficient (Voc)	-0.25 % / °C
Temperature Coefficient (Isc)	0.05 % / °C
Nominal Module Operating Temperature	42 ± 3°C

PARTNER SECTION

^{*} The specifications and key features contained in this datasheet may deviate slightly from our actual products due to the on-going innovation and product enhancement. CSI Solar Co., Ltd. reserves the right to make necessary adjustment to the information described herein at any time without further notice. Please be kindly advised that PV modules should be handled and installed by qualified people who have professional skills and please carefully read the safety and installation instructions before using our PV modules.

Powerwall 3

Power Everything

Powerwall 3 is a fully integrated solar and battery system, designed to accelerate the transition to sustainable energy. Customers can receive whole home backup, cost savings, and energy independence by producing and consuming their own energy while participating in grid services. Once installed, customers can manage their system using the Tesla App to customize system behavior to meet their energy goals.

Powerwall 3 achieves this by supporting up to 20 kW DC of solar and providing 11.5 kW AC of continuous power per unit. It has the ability to start heavy loads up to 150 A LRA, meaning a single unit can support the power needs of most homes. Powerwall 3 is designed for mass production, fast and efficient installations, easy system expansion, and simple connection to any electrical service.



Powerwall 3 Technical Specifications

System Technical Specifications

1707000-xx-y
120/240 VAC
Split phase
60 Hz
Configurable up to 60 A
89% 1,2
97% ³
Backup Gateway 2, Backup Switch
Wi-Fi (2.4 and 5 GHz), Dual-port switched Ethernet, Cellular (LTE/4G 4)
Dry contact relay, Rapid Shutdown (RSD) certified switch and 2-pin connector, RS-485 for meters
Revenue Grade (+/- 0.5%)
Integrated arc fault circuit interrupter (AFCI), Isolation Monitor Interrupter (IMI), PV Rapid Shutdown (RSD) using Tesla Mid-Circuit Interrupters
Tesla Mobile App
10 years

Solar Technical Specifications

Maximum Solar STC Input	20 kW
Withstand Voltage	600 V DC
PV DC Input Voltage Range	60 – 550 V DC
PV DC MPPT Voltage Range	150 — 480 V DC
MPPTs	6
Maximum Current per MPPT (I _{mp})	13 A ⁵
Maximum Short Circuit Current per MPPT (I _{sc})	15 A ⁵

Battery Technical Specifications

13.5 kWh AC ²
11.5 kW AC
5 kW AC
0 - 1 (Grid Code configurable)
48 A
10 kA
150 A LRA
Up to 4 Powerwall 3 units supported

¹Typical solar shifting use case.

 $^{^2\,\}mbox{Values}$ provided for 25°C (77°F), at beginning of life. 3.3 kW charge/discharge power.

³ Tested using CEC weighted efficiency methodology.

⁴ Cellular connectivity subject to network service coverage and signal strength.

 $^{^{5}}$ Where the DC input current exceeds the MPPT rating, a jumper can be used to combine two MPPTs into a single input to intake DC current up to 26 A I $_{\rm MP}$ / 30 A I $_{\rm SC}$.

Powerwall 3 Technical Specifications

Environmental Specifications

Operating Temperature	-20°C to 50°C (-4°F to 122°F) 6
Operating Humidity (RH)	Up to 100%, condensing
Storage Temperature	-20°C to 30°C (-4°F to 86°F), up to 95% RH, non-condensing, State of Energy (SOE): 25% initial
Maximum Elevation	3000 m (9843 ft)
Environment	Indoor and outdoor rated
Enclosure Rating	NEMA 3R
Ingress Rating	IPX7 (Battery & Power Electronics) IPX5 (Wiring Compartment)
Pollution Rating	PD3
Operating Noise @ 1 m	<50 db(A) typical <62 db(A) maximum

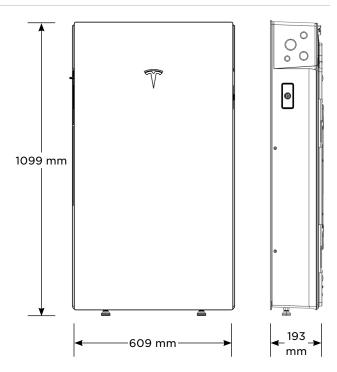
⁶ Performance may be de-rated at operating temperatures above 40°C (104°F).

Compliance Information

Certifications	UL 1642, UL 1699B, UL 1741, UL 1741 SA, UL 1741 SB, UL 3741, UL 1973, UL 1998, UL 9540, IEEE 1547-2018, IEEE 1547.1, UN 38.3
Grid Connection	United States
Emissions	FCC Part 15 Class B
Environmental	RoHS Directive 2011/65/EU
Seismic	AC156, IEEE 693-2005 (high)
Fire Testing	Meets the unit level performance criteria of UL 9540A

Mechanical Specifications

Dimensions	1099 x 609 x 193 mm (43.25 x 24 x 7.6 in)
Weight	130 kg (287 lb)
Mounting Options	Floor or wall mount



Solar Shutdown Device Technical Specifications

The Solar Shutdown Device is a Mid-Circuit Interrupter (MCI) and is part of the PV system rapid shutdown (RSD) function in accordance with Article 690 of the applicable NEC. When paired with Powerwall 3, solar array shutdown is initiated by any loss of AC power.

Electrical	Model	MCI-1	MCI-2
Specifications	Nominal Input DC Current Rating (I _{MP})	12 A	13 A
	Maximum Input Short Circuit Current (I _{sc})	19 A	17 A
	Maximum System Voltage (PVHCS)	600 V DC	1000 V DC ⁷
	⁷ Maximum System Voltage is limited by Powerwall t	o 600 V DC.	
RSD Module	Maximum Number of Devices per String	5	5
Performance	Control	Power Line Excitation	Power Line Excitation
	Passive State	Normally Open	Normally Open
	Maximum Power Consumption	7 W	7 W
	Warranty	25 years	25 years
Environmental Specifications	Operating Temperature	-40°C to 50°C (-40°F to 122°F)	-45°C to 70°C (-49°F to 158°F)
Specifications	Storage Temperature	-30°C to 70°C (-22°F to 158°F)	-30°C to 70°C (-22°F to 158°F)
	Enclosure Rating	NEMA 4X / IP65	NEMA 4X / IP65
Mechanical	Electrical Connections	MC4 Connector	MC4 Connector
Specifications	Housing	Plastic	Plastic
	Dimensions	125 x 150 x 22 mm (5 x 6 x 1 in)	173 x 45 x 22 mm (6.8 x 1.8 x 1 in)
	Weight	350 g (0.77 lb)	120 g (0.26 lb)
	Mounting Options	ZEP Home Run Clip M4 Screw (#10) M8 Bolt (5/16") Nail / Wood screw	Wire Clip
Compliance Information	Certifications	UL 1741 PVRSE, UL 3741, PVRSA (Photovoltaic Ra	
	RSD Initiation Method	External System Shutdown Switch or Powerwall 3 Enable Switch	

UL 3741 PV Hazard Control (and PVRSA) Compatibility

The following categories of solar module meet the UL 3741 PVHCS listing when installed with Powerwall 3 and Solar Shutdown Devices.

Tesla Solar Roof	PV Hazard Control System: BIPV compliance document
Tesla or Hanwha (Q.Peak Duo BLK or BLK-G6+) Modules certified for use with ZEP racking	PV Hazard Control System: ZS PVHCS compliance document
Other module and racking combinations	PV Hazard Control System: Generic PV Array compliance document

Backup Switch

_

The Tesla Backup Switch controls connection to the grid in a Powerwall system, and can be easily installed behind the utility meter or in a standalone meter panel downstream of the utility meter.

The Backup Switch automatically detects grid outages, providing a seamless transition to backup power. It communicates directly with Powerwall, allowing home energy usage monitoring from any mobile device with the Tesla app.

Performance Specifications

1624171-xx-y
200 A, 120/240 V split phase
22 kA with breaker ¹⁰
CAN
Revenue accurate (+/- 0.5%)
21 years
10 years

¹⁰ Breaker maximum supply short circuit current rating must be equal to or greater than the available fault current.

Environmental Specifications

Operating Temperature	-40°C to 50°C (-40°F to 122°F)
Storage Temperature	-40°C to 85°C (-40°F to 185°F)
Enclosure Rating	NEMA 3R
Pollution Rating	PD3

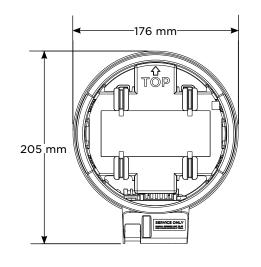
Compliance Information

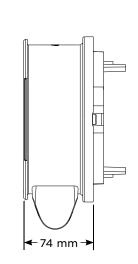
Safety Standards	USA: UL 414, UL 2735, UL 916, CA Prop 65
Emmissions	FCC, ICES

Mechanical Specifications

176 x 205 x 74 mm (6.9 x 8.1 x 2.9 in)
2.8 lb
ANSI Type 2S, ringless or ring type
Contactor manual override 11
Reset button
1/2-inch NPT

 $^{^{\}rm 11}$ Manually overrides the contactor position during a service event.

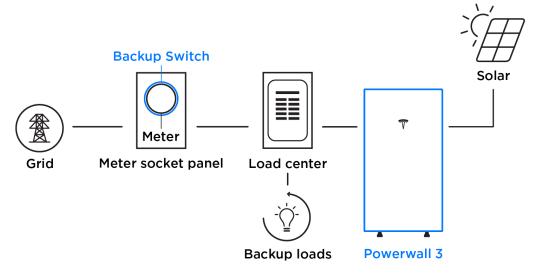




Powerwall 3 Example System Configurations

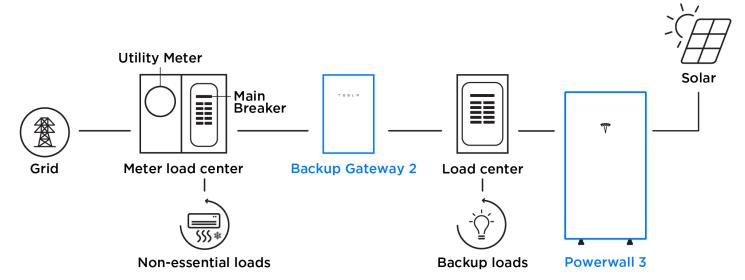
Powerwall 3 with Backup Switch

Whole Home Backup



Powerwall 3 with Backup Gateway 2

Partial Home Backup



Gateway 3

Tesla Gateway 3 controls connection to the grid in a Powerwall system, automatically detecting outages and providing seamless transition to backup power. It provides energy monitoring that is used by Powerwall for solar self-consumption, time-based control, and backup operation.

Performance Specifications

Model Number	1841000-01-y
Nominal Grid Voltage	120/240 V AC
Grid Configuration	Split phase
Grid Frequency	60 Hz
Continuous Current Rating	200 A
Maximum Supply Short Circuit Current	22 kA with Square D or Eaton main breaker 25 kA with Eaton main breaker ¹
IEC Protective Class	Class I
Overvoltage Category	Category IV
¹ Only Eaton CSR or BWH ma	ain breakers are 25 kA rated

AC Meter	Revenue accurate (+/- 0.5%)
Communication	CAN
User Interface	Tesla App
Backup Transition	Automatic disconnect for seamless backup
Overcurrent Protection Device	100–200 A Service entrance rated Eaton CSR, BWH, or BW, or Square D QOM breakers
Internal Panelboard	200 A 8-space/16 circuit breakers Eaton BR, Siemens QP, or Square D HOM breakers rated to 10–125A
Warranty	10 years

Environmental Specifications

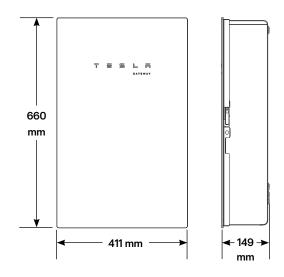
Operating Temperature	-20°C to 50°C (-4°F to 122°F)
Operating Humidity (RH)	Up to 100%, condensing
Maximum Elevation	3000 m (9843 ft)
Environment	Indoor and outdoor rated
Enclosure Type	NEMA 3R

Compliance Information

Certifications	UL 67, UL 869A, UL 916, UL 1741 PCS, CSA 22.2 107.1, CSA 22.2 29
Emmissions	FCC Part 15, ICES 003

Mechanical Specifications

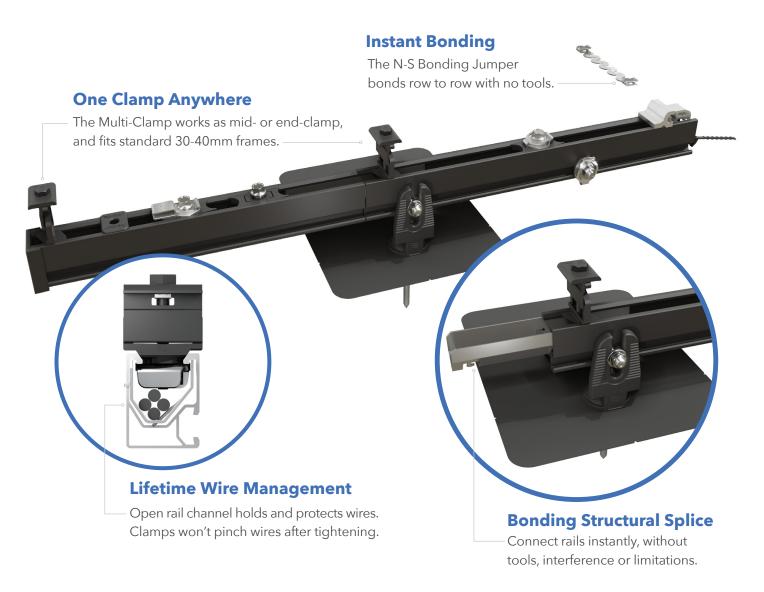
Dimensions	660 x 411 x 149 mm (26 x 16 x 6 in)
Weight	16.3 kg (36 lb)
Mounting options	Wall mount



Gateway 3 Datasheet 2024



RAIL SYSTEM



Next-Level Solar Mounting

A complete system for hassle-free rooftop installation, from watertight mounts to lifetime wire management.



Simplicity

1/2"socket for everything. One clamp for mid or end. No tool splicing and bonding. Easy wire management.



Code Compliant

UL 2703 listed LTR-AE-001-2012 listed Class A fire rating for any slope ASCE 7-16 PE Certified



Premium Aesthetics

The narrowest panel gap available. Optional Hidden End Clamps and End Caps provide a flush look on the edge of the array.



Watertight for Life

Secured on industry-leading Pegasus Mounts, for composite shingle and tile roofs. Backed by a 25-year warranty.



RAIL SYSTEM









Dovetail T-bolt

Pegasus Rail

Available in 14' and 7' lengths for easy layout and shipping.

Open-channel design holds MC4 connectors, PV wire and trunk cables.

Black and Mill finish



Pegasus Max Rail

Maximum-strength design.

Meets specifications for high
snow-load and hurricane zones.

Black and Mill finish



Splice and Max Splice

Installs by hand.
Works over mounts.

Structurally connects and bonds rails automatically; UL2703 listed as reusable.

Dovetail shape for extra strength.
Uses ½" socket.





Multi-Clamp

Fits 30-40mm PV frames, as mid- or end-clamp.

Twist-locks into position; doesn't pinch wires in rail.

Bonds modules to rail; UL2703 listed as reusable



Offers premium edge appearance. Preinstalled pull-tab grips rail edge, allowing easy, one-hand installation. Tucks away for reuse.

Ground Lug

Holds 6 or 8 AWG wire.

Mounts on top or side of rail.

Assembled on MLPE Mount.

UL2703 listed as reusable.

N-S Bonding Jumper

Installs by hand, eliminates row-to-row copper wire.

UL2703 listed as reusable only with Pegasus Rail.









MLPE Mount

Secures and bonds most micro-inverters and optimizers to rail.

Connectors and wires easily route underneath after installation.

UL2703 listed as reusable.

Cable Grip

Secures four PV wires or two trunk cables. Stainless-steel backing provides durable grip.

Eliminates sagging wires.

Wire Clip

Hand operable.
Holds wires in channel.
Won't slip.

End Cap and Max End Cap

Fits flush to PV module and hides raw or angled cuts.

Hidden drain quickly clears water from rail.

Certifications:

- UL 2703, Edition 1
- LTR-AE-001-2012
- ASCE 7-16 PE certified
- Class A fire rating for any slope roof



Quickly calculate the most efficient layout, spans and materials needed to suit your job. Visit the Pegasus Customer Portal. pegasussolar.com/portal

Patents pending. All rights reserved. ©2021 Pegasus Solar Inc.

LO.	AD		SP.	AN	
SNOW (PSF)	WIND (MPH)	32"	4′	6′	8′
	120				
0	160				
	190				
	140				
15	160				
	190				
30	160				
30	190				
45	190				
70	190				
110	190			PEGASUS RAIL	PEGASUS MAX RAIL

For reference only. Spans above are calculated using ASCE 7-16 for a Gable Roof, Exposure Category B, 7-20deg roof angle, 30ft mean roof height with non-exposed modules. For PE certified span tables, visit www.pegasussolar.com/spans.



INSTAFLASH



Effortless Lifetime Roof Protection

The non-hardening sealant completely fills any missed pilot holes, shingle rips, voids, or other potential water ingress points under the entire footprint of the 4.6" wide base.



25-Year Warranty

Manufactured with advanced materials and coatings to outlast the roof itself



Code Compliant

Fully IBC/CBC Code Compliant Exceeds ASCE 7-16 Standards FL Cert of Approval FL41396 UL2703 Certified



Self-Healing

The proprietary non-hardening sealant will flex and reseal over years of thermal expansion and contraction



Larger Spans

The extra-large L-foot and proprietary lag screw result in larger spans between mounts



INSTAFLASH[®]

1 Drill pilot hole in the center of the rafter using a 7/32" bit.



2
Place the InstaFlash
over the pilot hole.
Note: the direction of
the InstaFlash Down
arrows should point
down the roof.

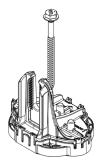


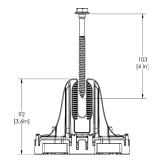
3 Insert the lag screw through the center hole into the pilot hole.

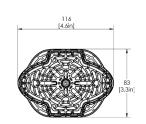


4Drive the lag until the InstaFlash is fully seated to the roof.









SPECIFICATIONS	INSTAFLASH KITS				
	PIF-RB0	PIF-RBDT	PIF-RBSH	PIF-RM0	PIF-RMDT
Finish		Bla	ack	Mill	
Kit Contents	Black InstaFlash, 5/16" x 4.0" SS Lag	Black InstaFlash, 5/16" x 4.0" SS Lag, Dovetail T-bolt w/ Nut	Black InstaFlash, 5/16" x 4.0" SS Lag, M10 Hex Bolt w/ Nut	Mill Insta- Flash, 5/16" x 4.0" SS Lag	Mill InstaFlash, 5/16" x 4.0" SS Lag, Dovetail T-bolt w/ Nut
Attachment Type		Rafter Attached			
Roof Type	Sloped Roof: Composition Shingle, Rolled Asphalt Flat roof: Modified Bitumen Roof, Built-Up Roof				
Sealant Application	Factory Installed				
Installation Temperature	0°F to 170° F				
Cure Time	Instantly Waterproof; Non-hardening				
Service Temperature	-40°F to 195° F				
Certifications	IBC, ASCE/SEI 7-16, FL Cert of Approval FL41396, TAS 100(A), UL2703				
Install Application	Most Railed Systems, Pegasus Tilt Leg Kit				
Kit Quantity	24				
Boxes per Pallet	36				



SCAN FOR INSTALLATION VIDEO



SCAN FOR FREE TRIAL

US Patents Pending. All rights reserved. ©2023 Pegasus Solar Inc.



COMP MOUNT



Simple 3-Piece Design Watertight For Life



Pegasus solar's comp mounts are a cost effective, high-quality option for rail installations on composition shingle roofs. Designed to last decades, the one-piece flashing with elevated cone means there is simply nothing to fail.



25-Year Warranty

Manufactured with advanced materials and coatings to outlast the roof itself



Code Compliant

Fully IBC/CBC Code Compliant Exceeds ASCE 7-16 Standards



Superior Waterproofing

Tested to AC286 without sealant Water seal elevated 0.9" above



All-In-One Kit Packaging

Flashings, L-Feet and SS lags with bonded EPDM washers are included in each 24-pack



COMP MOUNT

1 Drill pilot hole in the center of the rafter.



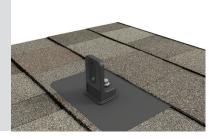
2Optional: Apply a
"u-shape" of sealant to
the underside of the
flashing and position
under 2nd shingle
course, cone over
pilot hole.



3Place L-Foot over cone and install lag with washer through L-Foot.

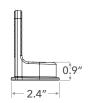


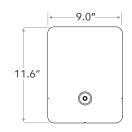
4Drive lag to required depth. Attach rail per rail manufacturer's instructions.



1.5" 3.5"









SPECIFICATIONS	COMP MOUNT INSTALL KITS				
SKU	PSCR-CBB0	PSCR-UBB0	SPCR-CBBH	PSCR-CMM0	PSCR-UMM0
Finish	Blac	k L-Foot And Black Flash	ing	Mill	
L-Foot Type	Closed Slot	Open Slot	Closed Slot	Closed Slot	Open Slot
Kit Contents	L-Foot, Flashing, 5/16" x 4 1/2" SS Lag with metalized EPDM washer	L-Foot, Flashing, 5/16" x 4 1/2" SS Lag with metalized EPDM washer and M10 Hex Bolt	L-Foot, Flashing, 5/16" x 4 1/2" SS Lag with metalized EPDM washer	L-Foot, Flashing, 5/16" x 4 1/2" SS Lag with metalized EPDM washer	L-Foot, Flashing, 5/16" x 4 1/2" SS Lag with metalized EPDM washer
Roof Type	Composition Shingle				
Certifications		IBC, ASCE/SEI 7-16, AC286			
Install Application	Railed Systems				
Compatible Rail	Most				
Kit Quantity	24				
Boxes per Pallet	72				

Protected under US Patent: 10,998,847. Additional patents pending. All rights reserved. ©2021 Pegasus





UL50 Type 3R Enclosure • Stamped 18 gauge gal. steel • Powder coated finish • Weather tight

Enclosure Includes:

- Dual ground lug
- · Universal DIN rail
- 1/2". 3/4" & 1" knockouts
- · Wire strain relief clip
- Complete hardware package



INTRODUCED AT SOLAR POWER 2007





PV Roof-Mount Combiner/Enclosure

Benefits

- •The ability to prep the building is now possible
- Replaces several parts used today
- Provides professional looking install
- · Saves time on install
- Allows for easy access
- Guaranteed seal to roof
- Low profile design

For product information contact us at [866] 367-7782

www.commdeck.com



RSTC Enterprises, Inc 2219 Heimstead Road Eau Claire, WI 54703 1 (866) 367 - 7782





SolaDeck Part # 780

Specifications:

18 Gauge Steel Base (1) and Cover (2)
Pre Punched 7 holes in base (1) for roof deck
Pre Punched 4 holes in base (1) and cover (2) for match
Draw Process both parts
Powder Coated to withstand 1000 hours Salt Spray (Primer Gray)
High UV resistance
15" x 15" flashing dimension
Cavity dimension 8"W x 9" L x 2.5"D
Approx. 162 Cubic inch equipment cavity
Norloked steel base plate (3) to drawn base (2)
Three knockout locations .5", .75" and 1"
3" DIN rail installed
Grounding Lug- Installed (In Equipment Cavity)
Wire Strain Relief Clip –Installed (In Equipment Cavity)
Hardware pack withstands 500 hours Salt Spray

- 7 2" Trusshead Screws
- 4 .5" 8-32 thread cutting screws
- 4 #10 Bonded Seal washers
- 1 Foam closed Cell Seal

ETL Listed UL50 Type 3R

Total Weight 6.9 pounds each

Packaging:

Individually bagged and boxed
Box dimension 15.5"w x 16" L x 3" D
White Carton labeled with Cut out template
Print One Color - Black

Master Cartons of 6 Units each
Master Carton dimension 18.75"x16"x16.375"
Master Carton Weight – 42 pounds
18 Master Cartons per skid Approx 800 pounds with skid

Eaton DG222URB

Catalog Number: DG222URB

Eaton General duty non-fusible safety switch, single-throw, 60 A, NEMA 3R, Rainproof, Painted galvanized steel, Two-pole, Two-wire, 240 V $\,$

Photo is representative

General specifications

Catalog Number

Eaton general duty non-fusible safety

DG222URB

switch

Product Name

UPC

782113144238

Product Length/Depth Product Height

7.38 in 14.38 in

Product Width Product Weight

8.69 in 9 lb

Warranty Compliances

Eaton Selling Policy 25-000, one (1) year NEC 230.62 (C) Compliant Barrier

from the date of installation of the

Product or eighteen (18) months from the Certifications

date of shipment of the Product,

of Shipment of the Product,

whichever occurs first. Catalog Notes

WARNING! Switch is not approved for service entrance unless a neutral kit is

installed.

UL Listed



default Taxonomy Attribute Label

Type

Non-fusible, single-throw

Amperage Rating

60A

Number Of Poles

Two-pole

Product Category

General duty safety switch

Voltage rating

240V

Enclosure

NEMA 3R

Enclosure material

Painted galvanized steel

Fuse configuration

Non-fusible

Number of wires

2

Resources

Catalogs

Eaton's Volume 2—Commercial Distribution

Multimedia

Double Up on Safety

Switching Devices Flex Center

Specifications and datasheets

Eaton Specification Sheet - DG222URB

Warranty guides

Selling Policy 25-000 - Distribution and Control Products and Services



Eaton Corporation plc Eaton House 30 Pembroke Road Dublin 4, Ireland Eaton.com

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Eaton.com/socialmedia





Load center, Homeline, 1 phase, 20 spaces, 40 circuits, 200A convertible main breaker, PoN, NEMA3R

HOM2040M200PRB

Product availability: Stock - Normally stocked in distribution facility

Main

Product Type	Load Center
Marketing Trade Name	Homeline
Load Center Type	PoN Convertible Mains (breaker)
Rated Current	200 A
Number of Spaces	20
Maximum Number of Single Pole Circuits	40
Enclosure Rating	NEMA 3R weatherproof enclosure
Cover Type	Surface cover
Electrical Connection	Lugs
Provided Equipment	Circuit-breaker 1) 2P 200 A 120/240 V AC main supply ready assembled

Complementary

Max Short Circuit Current Rating	22 kA	
Maximum Number of Tandem Breakers	20	
Number of Phases	1 phase 3 wires	
Voltage Rating	120/240 V AC	
Wire Size	AWG 4250 kcmil aluminium/copper	
Ground Bar	Grounding bar (ordered separately)	
Busbar Material	Tin plated aluminium: busbar	
Enclosure Material	Welded galvannealed steel	
Surface Finish	Baked enamel Gray	
Box Number	6R	
Bus Rated Current	225.0 A	
Height	29.8 in (758 mm)	
Width	14.8 in (375 mm)	
Depth	4.5 in (115 mm)	

Environment

Ambient Air Temperature for	23 °F (-5 °C)
Operation	104 °F (40 °C)
Product Certifications	UL listed file E-6294

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

Ordering and shipping details

Category	US1DE3C00145	
Discount Schedule	DE3C	
GTIN	785901977186	
Returnability	Yes	
Country of origin	US	

Packing Units

Unit Type of Package 1	PCE	
Number of Units in Package 1	1	
Package 1 Height	4.90 in (12.446 cm)	
Package 1 Width	15.50 in (39.370 cm)	
Package 1 Length	31.70 in (80.518 cm)	
Package 1 Weight	32.829 lb(US) (14.891 kg)	
Unit Type of Package 2	PAL	
Number of Units in Package 2	24	
Package 2 Height	44.30 in (112.522 cm)	
Package 2 Width	40.00 in (101.600 cm)	
Package 2 Length	48.00 in (121.920 cm)	
Package 2 Weight	817.999 lb(US) (371.038 kg)	



Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing "Use Better, Use Longer, Use Again" campaign to extend product lifetimes and recyclability.

Environmental Data explained >

How we assess product sustainability >

☑ Environmental footprint	
Carbon footprint (kg CO2 eq, Total Life cycle)	78
Environmental Disclosure	Product Environmental Profile

Use Better

⊗ Materials and Substances	
Packaging made with recycled cardboard	No
Packaging without single use plastic	No
EU RoHS Directive	Compliant
California proposition 65	"WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov"

Use Again

○ Repack and remanufacture	
Circularity Profile	No need of specific recycling operations
Take-back	No