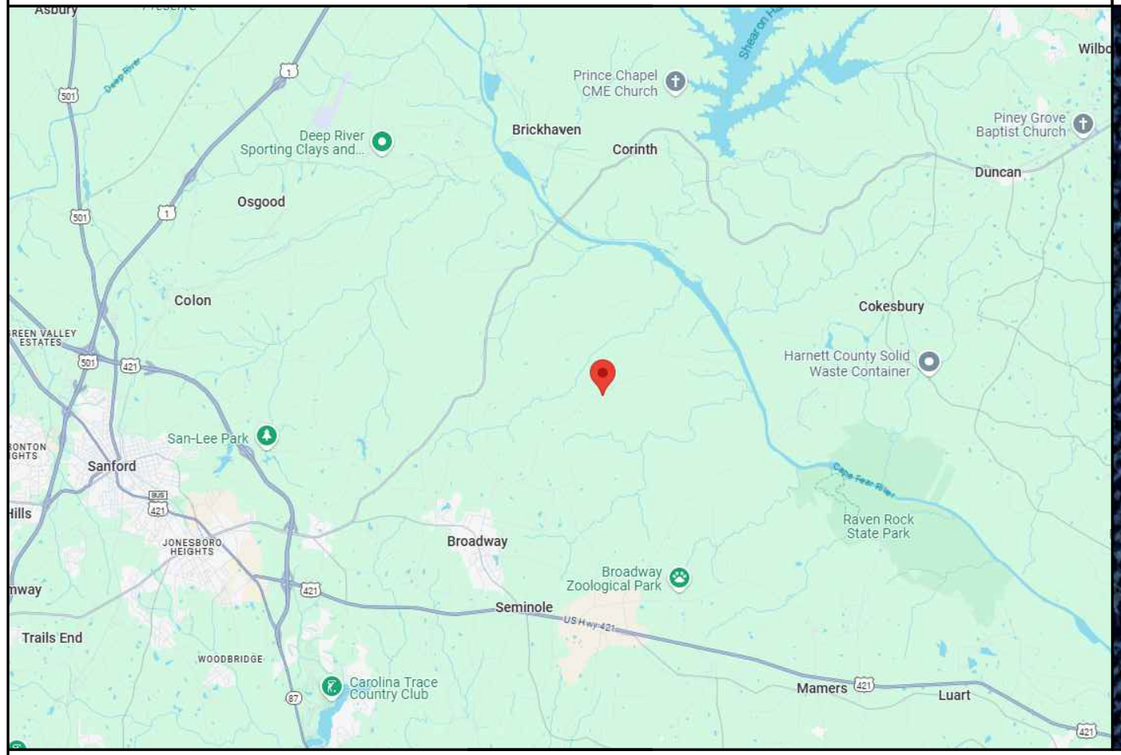
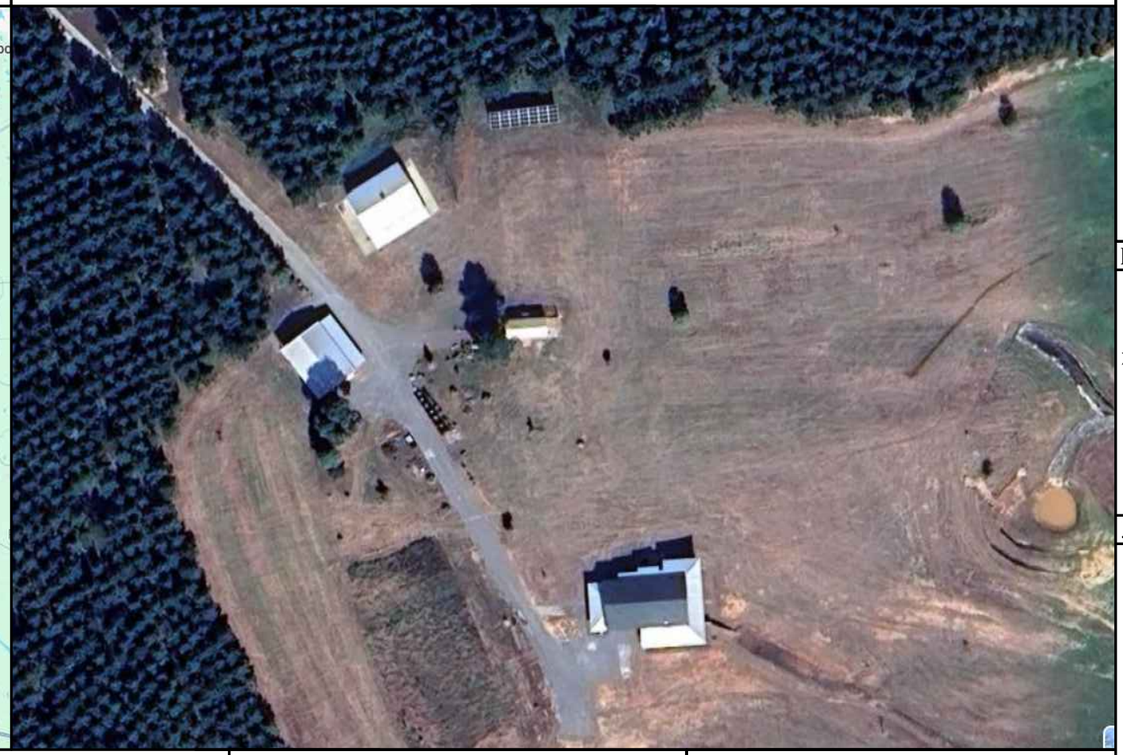
VICINITY MAP



PROPERTY MAP



SEAL:

NORTH CAROLINA PROFESSIONAL SEAL 035699 ENGINEER ANDREW W. KING
05-12-2025

ENGINEER:

MODEL ENERGY
300 FAYETTEVILLE ST.
#1430
RALEIGH, NC 27602
919-274-9905
MODELENERGY.COM
P-1194

JOB TITLE:

NEW SOLAR PV SYSTEM
11.920 kW DC INPUT
10.000 kW AC EXPORT

DAVID KRAKOWSKI
2248 BUCKHORN ROAD
SANFORD, NC 27330

CLIENT:

SOUTHERN ENERGY MANAGEMENT
ENERGY EFFICIENCY & SOLAR POWER

ISSUED FOR:	DATE:
CONSTRUCTION	05/12/25

PROJECT INFORMATION

PV1.1

CONSTRUCTION NOTES

1. ALL WORK AND EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST NATIONAL, STATE, AND LOCAL CODES AND ORDINANCES
2. FOLLOW MANUFACTURER'S INSTALLATION INSTRUCTIONS, BEST PRACTICES, AND SPECIFICATIONS
3. WIRES SHALL BE RATED AND LABELED "SUNLIGHT RESISTANT" WHERE EXPOSED TO AMBIENT CONDITIONS
4. THE PHOTOVOLTAIC SYSTEM SHALL NOT EXCEED 600 VOLTS OR 800 AMPS
5. EACH ELECTRICAL APPLIANCE SHALL BE PROVIDED WITH A NAMEPLATE GIVING THE IDENTIFYING NAME AND THE RATING IN VOLTS AND AMPERES, OR VOLTS AND WATTS. IF THE APPLIANCE IS TO BE USED ON A SPECIFIC FREQUENCY OR FREQUENCIES, IT SHALL BE SO MARKED. WHERE MOTOR OVERLOAD PROTECTION EXTERNAL TO THE APPLIANCES IS REQUIRED, THE APPLIANCE SHALL BE SO MARKED
6. WHERE APPLICABLE, GROUNDING ELECTRODE CONDUCTOR TO BE CONTINUOUS. GROUNDING CRIMPS TO BE IRREVERSIBLE
7. IN ONE- AND TWO-FAMILY DWELLINGS, LIVE PARTS IN PHOTOVOLTAIC SOURCE CIRCUITS AND PHOTOVOLTAIC OUTPUT CIRCUITS OVER 150 VOLTS TO GROUND, SHALL ONLY BE ACCESSIBLE TO QUALIFIED PERSONS WHILE ENERGIZED.
8. PHOTOVOLTAIC SYSTEMS SHALL BE PERMANENTLY MARKED AT VARIOUS EQUIPMENT LOCATIONS TO IDENTIFY THAT A PHOTOVOLTAIC SYSTEM IS INSTALLED AND THAT VARIOUS DANGERS ARE PRESENT.
9. EACH PHOTOVOLTAIC SYSTEM DISCONNECTING MEANS SHALL BE PERMANENTLY MARKED TO IDENTIFY IT AS A PHOTOVOLTAIC SYSTEM DISCONNECT
10. WHERE ALL TERMINALS OF A DISCONNECTING MEANS MAY BE ENERGIZED IN THE OPEN POSITION, A WARNING SIGN SHALL BE MOUNTED ON OR ADJACENT TO THE DISCONNECT
11. A PERMANENT LABEL FOR THE DIRECT-CURRENT PHOTOVOLTAIC POWER SOURCE SHALL BE PROVIDED BY THE INSTALLED AT THE DC DISCONNECT MEANS
12. A PERMANENT PLAQUE OR DIRECTORY, DENOTING ALL ELECTRIC POWER SOURCES SERVING THE PREMISES, SHALL BE INSTALLED AT EACH SERVICE EQUIPMENT LOCATION AND AT LOCATIONS OF ALL POWER PRODUCTION SOURCES.
13. A PERMANENT PLAQUE OR DIRECTORY SHALL BE PROVIDED DENOTING THE LOCATIONS OF THE SERVICE DISCONNECT MEANS AND THE PHOTOVOLTAIC SYSTEM DISCONNECT MEANS IF THEY ARE NOT LOCATED AT THE SAME LOCATION.
14. ALL MODULE GROUND CONNECTIONS SHALL BE MADE IN ACCORDANCE WITH NEC SECTION 690.4 (C)

NOTICE TO CONTRACTOR
All construction must comply with current NC Building Codes and is subject to field inspection and verification.
APPROVED
Limited building only review
Permit holder responsible for full compliance with the code
06/24/2025
Harnett COUNTY NORTH CAROLINA

ABBREVIATIONS

A	AMPERE
AC	ALTERNATING CURRENT
DC	DIRECT CURRENT
EGC	EQUIPMENT GROUNDING CONDUCTOR
EMT	ELECTRICAL METAL TUBING
GALV	GALVANIZED
GEC	GROUNDING ELECTRODE CONDUCTOR
GND	GROUND
I	CURRENT
IMP	CURRENT AT MAXIMUM POWER
ISC	SHORT-CIRCUIT CURRENT
KVA	KILOVOLT AMPERE
KW	KILOWATT
MAX	MAXIMUM
MIN	MINIMUM
MCB	MAIN CIRCUIT BREAKER
MLO	MAIN LUG ONLY
NOM	NOMINAL
NTS	NOT TO SCALE
PNOM	NOMINAL POWER
PV	PHOTOVOLTAIC
PVC	POLYVINYL CHLORIDE
SN	SOLAR NOON
STC	STANDARD TEST CONDITIONS
TYP	TYPICAL
V	VOLT
VMP	VOLTAGE AT MAXIMUM POWER
VOC	OPEN-CIRCUIT VOLTAGE
W	WATT

CODE REFERENCES

2017 NATIONAL ELECTRIC CODE
2018 NORTH CAROLINA BUILDING CODE
2018 NORTH CAROLINA RESIDENTIAL CODE
2018 NORTH CAROLINA FIRE CODE

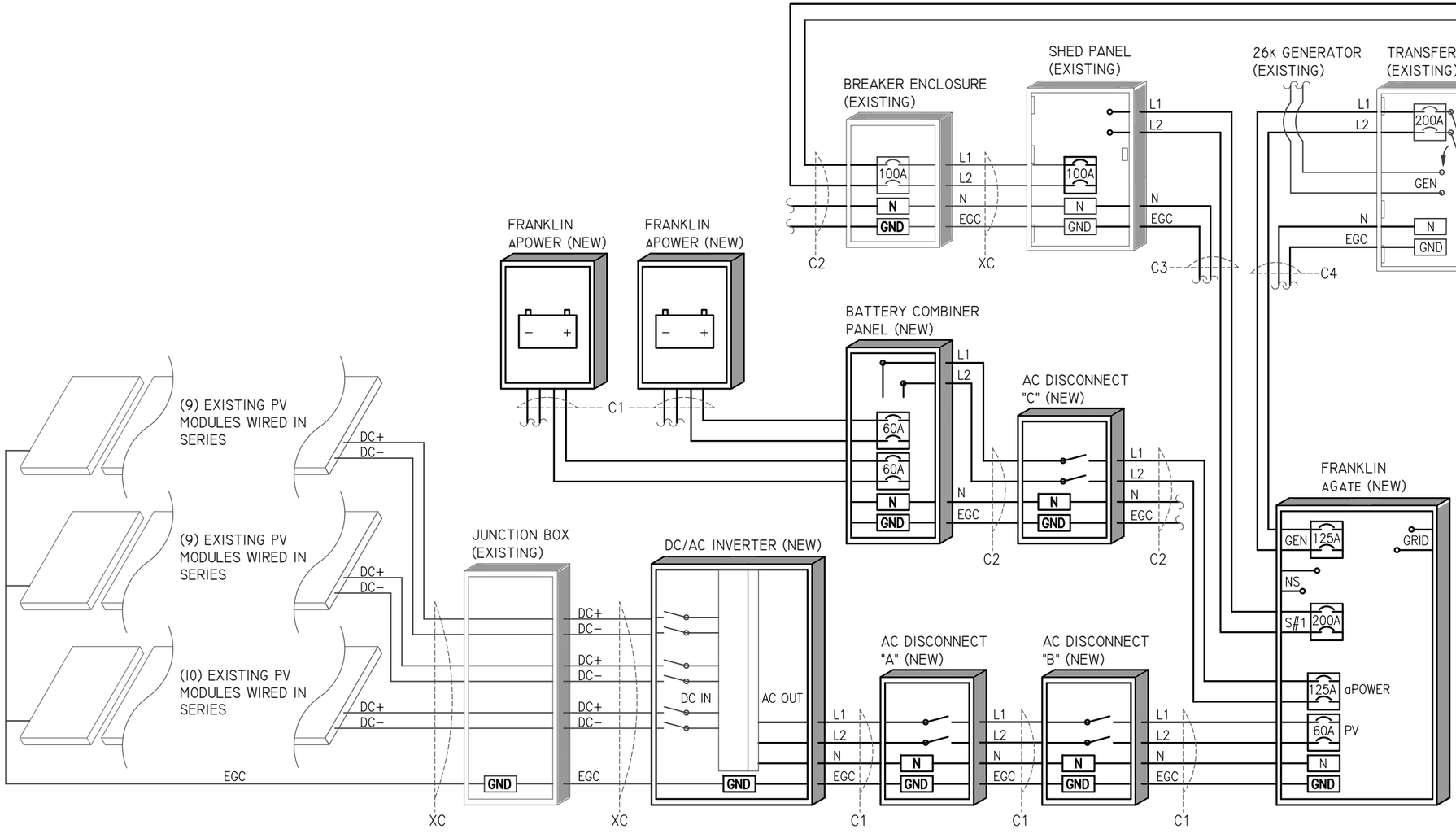
SHEET INDEX

SITE CONDITIONS

ASCE 7-10 WIND SPEED - 115 MPH
EXPOSURE CATEGORY - B
RISK CATEGORY - II

LEGEND

- DISCONNECT SWITCH
- FUSE
- CIRCUIT BREAKER
- GND — EQUIP. GROUND



1 | PV SYSTEM ELECTRICAL WIRING SCHEMATIC

SCALE : NTS

SEAL:

NORTH CAROLINA PROFESSIONAL SEAL 035699 ENGINEER ANDREW W. KING 05-12-2025

ENGINEER:

MODEL ENERGY
300 FAYETTEVILLE ST.
#1430
RALEIGH, NC 27602
919-274-9905
MODELENERGY.COM
P-1194

JOB TITLE:

NEW SOLAR PV SYSTEM
11.920 kW DC INPUT
10.000 kW AC EXPORT

DAVID KRAKOWSKI
2248 BUCKHORN ROAD
SANFORD, NC 27330

CLIENT:

SOUTHERN ENERGY MANAGEMENT
ENERGY EFFICIENCY & SOLAR POWER

ISSUED FOR:	DATE:
CONSTRUCTION	05/12/25

ELECTRICAL INFORMATION

PV2.1

PV MODULES (EXISTING)	
MAKE	ASTRONERGY
MODEL	CHSM72M-HC 415
TECHNOLOGY	MONO-CRYST.
NOM. POWER (Pnom)	415 WATTS
NOM. VOLT. (Vmp)	42.11 VOLTS
O.C. VOLT. (Voc)	50.6 VOLTS
MAX. SYS. VOLT.	1500 V (UL)
TEMP. COEF. (Vtc)	-0.28 %/°C
NOM. CURR. (Imp)	9.86 AMPS
S.C. CURR. (Isc)	10.45 AMPS
MAX. SERIES FUSE	20 AMPS

DC/AC INVERTER (NEW)	
MAKE	FRONIUS
MODEL	GEN24 10.0
TECHNOLOGY	TRANS-LESS
DC INPUT:	
MAX. POWER	10360 WATTS
MAX. VOLT	600 VOLTS
NOM. VOLT.	400 VOLTS
MAX. CURRENT	22 AMPS
MAX. SCC	36 AMPS
STRINGS INPUTS	2 STRINGS
AC OUTPUT:	
RATED POWER	10000 WATTS
MAX. POWER	10000 WATTS
NOM. VOLT.	240 VOLTS
MAX. CURR.	45 AMPS
GFP (Y/N)	YES
RPP (Y/N)	YES
GFCI (Y/N)	YES
AFCI (Y/N)	YES
DC DISC. (Y/N)	YES
RAPID SHUTDOWN	AUTOMATIC
PROTECT. RATING	NEMA 4X

JUNCTION BOX"A"&"B"(EXISTING)	
MAKE	GENERIC
MODEL	N/A
PRO. RATING	NEMA 3R
VOLT. RATING	600 VOLTS
AMP RATING	120 AMPS
UL LISTING	UL 50

FRANKLIN aGATE (NEW)	
MAKE	FRANKLIN WH
MODEL #	aGATE
GRID TERMINAL AC OUTPUT:	
MAX CONT. AC OUTPUT:	38.4 kWATTS
NOM. VOLT.	240 VOLTS
MAX OCP CIRCUIT BREAKER	200 AMPS
GENERATOR/NON-BACKUP/ BACK-UP TERMINALS RATINGS	
NOM. AC INPUT CURRENT (A)	160 AMPS
NOM. AC INPUT POWER (kW)	38.4 kW
PV INVERTER INPUT:	
NOM. AC INPUT CURRENT (A)	64 AMPS
NOM. AC INPUT POWER (kW)	15.36 kW
MAX OCP CIRCUIT BREAKER	80 AMPS
SMART CIRCUIT 1 & 2	
MAX OCP CIRCUIT BREAKER	
SINGLE POLE	40 AMPS
DOUBLE POLE	50 AMPS
BUSBAR MAX AC CURRENT (A)	280 AMPS
GFP (Y/N)	YES
RPP (Y/N)	YES
GFCI (Y/N)	YES
AFCI (Y/N)	YES
DC DISC. (Y/N)	YES
RAPID SHUTDOWN	AUTOMATIC
PROTECT. RATING	NEMA 3R

NOTES:

- CONNECT CRITICAL LOADS PANEL VIA (1) 200A BREAKER ON SECURE LUGS
- BACK-FEED EXISTING INVERTER OUTPUT VIA (1) 60A BREAKER IN FRANKLIN aGATE PANEL.
- PROVIDE (1) 125 AMP BREAKER FOR BATTERY COMBINER OUTPUT
- CONNECT AUTOMATIC TRANSFER SWITCH VIA (1) 125A GENERATOR BREAKER

FRANKLIN aPOWER (NEW)	
MAKE	FRANKLIN WH
MODEL #	aPOWER 2
NOMINAL BATTERY ENERGY	15.0 kWh
AC OUTPUT:	
NOMINAL VOLTAGE	240 VOLTS
NOMINAL OUTPUT CURRENT	42 AMPS
MAX CONT. OUTPUT CURRENT	48 AMPS
AC INPUT:	
NOMINAL AC INPUT CURRENT	34 AMPS
MAX CONT. INPUT CURRENT	38 AMPS
MAX OCP CIRCUIT BREAKER	60 AMPS
GFP (Y/N)	YES
RPP (Y/N)	YES
GFCI (Y/N)	YES
AFCI (Y/N)	YES
DC DISC. (Y/N)	YES
RAPID SHUTDOWN	AUTOMATIC
PROTECT. RATING	NEMA 4X

CONDUCTOR SCHEDULE

TAG	CURRENT CARRYING CONDUCTORS				GROUNDING CONDUCTORS				CONDUIT/RACEWAY				NOTES
	QTY.	SIZE	MATERIAL	INSULATION	QTY.	SIZE	MATERIAL	INSULATION	QTY.	SIZE	MATERIAL	LOCATION	
C1	3	6 AWG	COPPER	THWN	1	10 AWG	COPPER	THWN	1	3/4"	NOTE 5	EXT/INT	2,4,5
C2	3	1 AWG	COPPER	THWN	1	10 AWG	COPPER	THWN	1	1-1/4"	NOTE 5	EXT/INT	2,4,5
C3	3	4/0	ALUMINUM	THHN	1	2 AWG	ALUMINUM	THHN	1	⅝,⅝,⅝,⅝	SER	EXT/INT	2,4,5
C4	3	1/0	COPPER	THWN	1	6 AWG	COPPER	THWN	1	6 AWG	NOTE 5	EXT/INT	2,4,5
XC	-	-	-	-	-	-	-	-	-	-	-	-	3

NOTES:

1. MANUFACTURER PROVIDED, UL LISTED WIRING HARNESS FOR USE ON EXPOSED ROOFS
2. CONDUIT SIZE SHOWN IS CODE MINIMUM. LARGER SIZES ARE ALLOWED.
3. EXISTING CONDUCTORS, FIELD VERIFY
4. EQUIPMENT TERMINAL RATING SHALL BE A MINIMUM OF 75°C AT BOTH END OF CONDUCTOR
5. PVC, EMT, ROMEX, LFNMC & FMC ARE ACCEPTABLE WHEN USED IN ACCORDANCE WITH ARTICLES 330, 334, 348, 350, 352, 356, & 358 OF THE 2017 NEC

AUTOMATIC TRANSFER SWITCH (EXISTING)	
MAKE	GENERAC
MODEL	RXSC200A3
ENCL. RATING	NEMA 3R
VOLT. RATING	240 VOLTS
BUS RATING	200 AMPS
UL LIST. (Y/N)	YES
MAIN BREAKER (Y/N)	YES
BREAKER RATING	200 AMPS

MD PANEL (EXISTING)	
MAKE	N/A
MODEL	N/A
ENCL. RATING	NEMA 3R
VOLT. RATING	240 VOLTS
BUS RATING	200 AMPS
UL LIST. (Y/N)	YES
MAIN BREAKER (Y/N)	NO
BREAKER RATING	N/A

CRITICAL LOADS PANEL (EXISTING)	
MAKE	N/A
MODEL	N/A
ENCL. RATING	NEMA 3R
VOLT. RATING	240 VOLTS
BUS RATING	200 AMPS
UL LIST. (Y/N)	YES
MAIN BREAKER (Y/N)	YES
BREAKER RATING	200 AMPS

NOTES:

- REMOVE SERVICE DISCONNECT LABEL
- REMOVE N/G BOND
- REMOVE GEC

AC DISCONNECT "A" & "B" (NEW)	
MAKE	GENERIC
MODEL	N/A
ENCL. RATING	NEMA 3R
VOLT. RATING	240 VOLTS
AMP RATING	60 AMPS
UL LIST. (Y/N)	YES
FUSED (Y/N)	NO
FUSE RATING	N/A

NOTES:

- LOAD-BREAK RATED
- VISIBLE OPEN
- LOCKABLE IN OPEN POSITION
- INSTALL ADJACENT TO METER
- DISCONNECT TO BE READILY ACCESSIBLE TO UTILITY COMPANY PERSONNEL AT ALL TIMES

AC DISCONNECT "C" (NEW)	
MAKE	GENERIC
MODEL	N/A
ENCL. RATING	NEMA 3R
VOLT. RATING	240 VOLTS
AMP RATING	200 AMPS
UL LIST. (Y/N)	YES
FUSED (Y/N)	NO
FUSE RATING	N/A

NOTES:

- LOAD-BREAK RATED
- VISIBLE OPEN
- LOCKABLE IN OPEN POSITION
- INSTALL ADJACENT TO METER
- DISCONNECT TO BE READILY ACCESSIBLE TO UTILITY COMPANY PERSONNEL AT ALL TIMES

SEAL:

NORTH CAROLINA PROFESSIONAL SEAL 035699 ENGINEER ANDREW W. KING 05-12-2025

ENGINEER:

MODEL ENERGY
300 FAYETTEVILLE ST.
#1430
RALEIGH, NC 27602
919-274-9905
MODELENERGY.COM
P-1194

JOB TITLE:

NEW SOLAR PV SYSTEM
11.920 kW DC INPUT
10.000 kW AC EXPORT

DAVID KRAKOWSKI
2248 BUCKHORN ROAD
SANFORD, NC 27330

CLIENT:

SOUTHERN ENERGY MANAGEMENT
ENERGY EFFICIENCY & SOLAR POWER

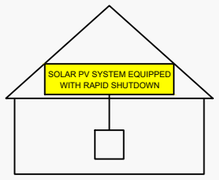
ISSUED FOR:	DATE:
CONSTRUCTION	05/12/25

ELECTRICAL INFORMATION

PV2.2

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



NEC 690.56 (C)(1)(a)
PLACE WITHIN 3FT OF SERVICE DISCONNECTING MEANS TO WHICH THE PV SYSTEMS ARE CONNECTED AND SHALL INDICATE THE LOCATIONS OF RAPID SHUTDOWN SWITCHES

WARNING: PHOTOVOLTAIC POWER SOURCE

NEC 690.31 (G)(3)&(4)
PLACE ON ALL JUNCTION BOXES, EXPOSED RACEWAYS, AND OTHER WIRING METHODS EVERY 10' AND ON EVERY SECTION SEPARATED BY ENCLOSURES, WALLS, PARTITIONS, CEILINGS, OR FLOORS.

RAPID SHUTDOWN SWITCH FOR SOLAR PV SYSTEM

NEC 690.56 (C)(3)
PLACE ON RAPID SHUTDOWN SWITCH OR EQUIPMENT WITH INTEGRATED RAPID SHUTDOWN *REFLECTIVE*

WARNING
MULTIPLE POWER SOURCES ONSITE
UTILITY SERVICE DISCONNECT LOCATED

NEC 705.10
PLACE AT SERVICE EQUIPMENT AND PV SYSTEM DISCONNECT MEANS

PV SYSTEM DISCONNECT

NEC 690.13 (B)
PLACE ON PV SYSTEM DISCONNECTING MEANS.

WARNING
THREE POWER SUPPLY
SOURCES: UTILITY GRID, BATTERY, AND PV SOLAR ELECTRIC SYSTEM

NEC 705.12 (B)(3)
PLACE ON ALL EQUIPMENT THAT IS SUPPLIED BY BOTH POWER SOURCES

PCS CONTROLLED
CURRENT SETTING: 200 AMPS
THE MAXIMUM OUTPUT CURRENT FROM THIS SYSTEM TOWARDS THE MAIN PANEL IS CONTROLLED ELECTRICALLY. REFER TO THE MANUFACTURER'S INSTRUCTIONS FOR MORE INFORMATION.

NEC 705.13
PLACE ON PANELS CONNECTED TO GATEWAY

WARNING
FED BY MULTIPLE POWER SOURCES
TOTAL RATING OF ALL OVERCURRENT DEVICES EXCLUDING UTILITY OVERCURRENT DEVICE SHALL NOT EXCEED AMPACITY OF BUSBAR

NEC 705.12 (B)(2)(3)(c)
PLACE ADJACENT TO BACK-FED BREAKER

EQUIPMENT LABEL NOTES

1. LABELS SHOWN ARE 1/2 THEIR ACTUAL REQUIRED SIZE.
2. LABEL MATERIAL SHALL BE SUITABLE FOR THE EQUIPMENT ENVIRONMENT.
3. CONDUIT SHALL BE MARKED WITH REQUIRED LABEL EVERY 10 FEET.

WARNING
ELECTRIC SHOCK HAZARD
TERMINALS ON THE LINE AND LOAD SIDES MAY BE ENERGIZED IN THE OPEN POSITION

NEC 690.13 (B)
PLACE ON PV SYSTEM DISCONNECTING MEANS.

WARNING
POWER SOURCE OUTPUT CONNECTION
DO NOT RELOCATE THIS OVERCURRENT DEVICE

NEC 705.12 (B)(2)(3)(b)
PLACE ADJACENT TO BACK-FED BREAKER

DIRECT CURRENT
PHOTOVOLTAIC POWER SOURCE

MAXIMUM VOLTAGE	600	VDC
MAX CIR. CURRENT	31.4	AMPS

NEC 690.53
PLACE ON ALL DC DISCONNECTING MEANS

PHOTOVOLTAIC POWER SOURCE

OPERATING AC VOLT.	240	VAC
MAXIMUM OPERATING AC OUTPUT CURRENT	45.0	AMPS

NEC 690.54
PLACE ON INTERCONNECTION DISCONNECTING MEANS

SEAL:

NORTH CAROLINA PROFESSIONAL SEAL 035699 ENGINEER ANDREW W. KING 05-12-2025

ENGINEER:

MODEL ENERGY
300 FAYETTEVILLE ST.
#1430
RALEIGH, NC 27602
919-274-9905
MODELENERGY.COM
P-1194

JOB TITLE:

NEW SOLAR PV SYSTEM
11.920 kW DC INPUT
10.000 kW AC EXPORT

DAVID KRAKOWSKI
2248 BUCKHORN ROAD
SANFORD, NC 27330

CLIENT:

SOUTHERN ENERGY MANAGEMENT
ENERGY EFFICIENCY & SOLAR POWER

ISSUED FOR:	DATE:
CONSTRUCTION	05/12/25

EQUIPMENT LABELS

PV3.1

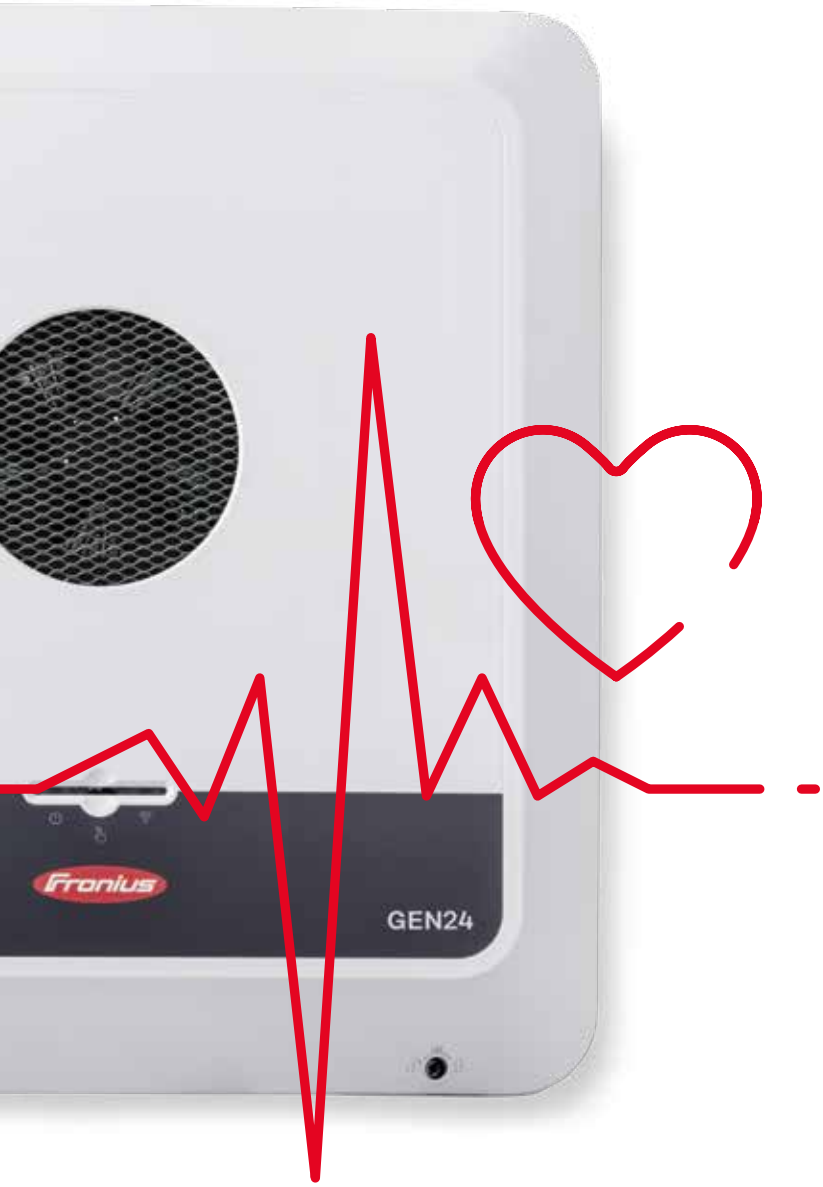
Designed to empower.

Fronius Primo GEN24

Product advantages

01 Integrated shade management
02 Backup power right from the start
03 Built-in longevity
04 Flexibility for greater potential
05 Sustainably future-proof

The heart of the photovoltaic system



01 Integrated shade management

Highest yields even in shade: That's what the Fronius GEN24 achieves with the Dynamic Peak Manager. The intelligent algorithm optimizes PV yields at the string level, eliminating the need for expensive module level optimization components.

02 Backup power right from the start

Harness backup power directly from the sun with the Fronius GEN24 equipped with PV Point. In the event of a power failure, energy is supplied via a designated socket with no need for a battery as long as the sun is shining.

03 Built-in longevity

The Active Cooling Technology effectively safeguards the electrical components, protecting them from heat development, therefore extending the service life of our inverters and securing the longevity of customers' investment.

04 Flexibility for greater potential

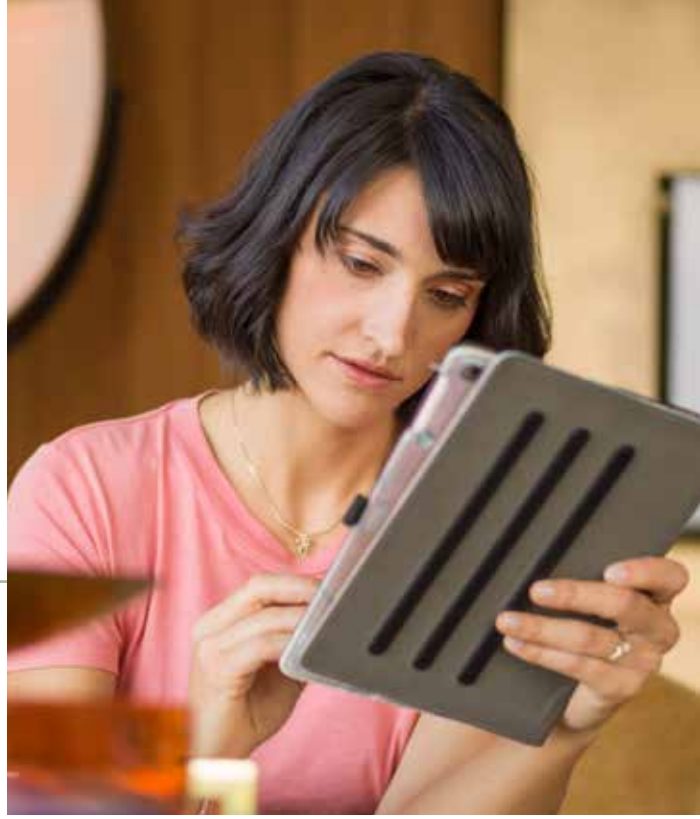
Thanks to the SuperFlex Design, the Fronius GEN24 is ideally equipped for complex roof situations. With the ability to align PV modules in different orientations and strings from 3 modules on, installers have the flexibility to design solar systems tailored to their customers' individual needs.

05 Sustainably future-proof

For those seeking a hybrid inverter solution, there's good news: Through an upcoming software upgrade, your device can be retrofitted with a battery connection, enabling the Full Backup power option so you have power even during a grid outage.

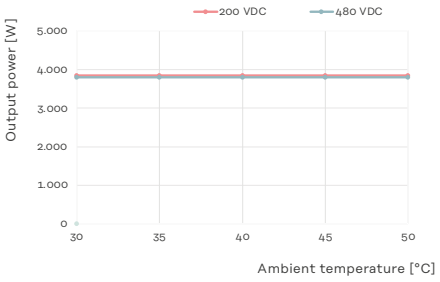
Impressive power data

The Fronius GEN24 impresses with maximum power at high temperatures.



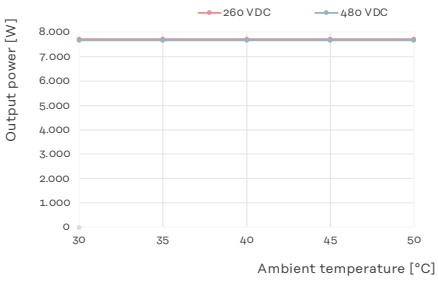
Fronius Primo GEN24 3.8 208-240

Temperature derating (240VAC)



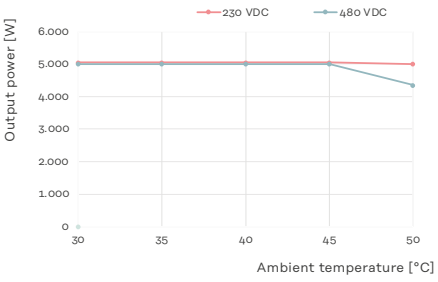
Fronius Primo GEN24 7.7 208-240

Temperature derating (240VAC)



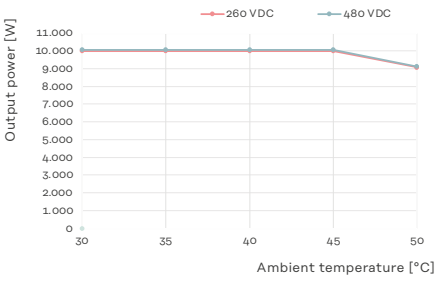
Fronius Primo GEN24 5.0 208-240

Temperature derating (240VAC)



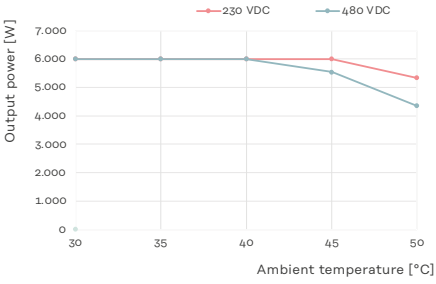
Fronius Primo GEN24 10.0 208-240

Temperature derating (240VAC)



Fronius Primo GEN24 6.0 208-240

Temperature derating (240VAC)



Technical data

3.8/5.0/6.0 kW

			Primo GEN24 208-240								
			3.8			5.0			6.0		
Input data	Number of MPP trackers		2			2			2		
	DC input voltage range ($U_{dc\ min}$ - $U_{dc\ max}$)	V	65 - 600								
			208 V_{ac}	220 V_{ac}	240 V_{ac}	208 V_{ac}	220 V_{ac}	240 V_{ac}	208 V_{ac}	220 V_{ac}	240 V_{ac}
	Nominal input voltage ($U_{dc,r}$)	V	360	380	400	360	380	400	360	380	400
	Feed-in start voltage ($U_{dc\ start}$)	V	80			80			80		
	Usable MPP voltage range	V	65–530			65–530			65–350		
	MPP voltage range (at rated power)	V	200–480			200–480			200–480		
			MPPT1		MPPT2	MPPT1		MPPT2	MPPT1		MPPT2
	Max. usable input current ($I_{dc\ max}$)	A	22		12	22		12	22		12
	Max. short circuit current per MPPT ($I_{sc\ pv}$) [1]	A	36		19	36		19	36		19
	Number of DC connections		2		2	2		2	2		2
			MPPT1	MPPT2	Total	MPPT1	MPPT2	Total	MPPT1	MPPT2	Total
	Max. usable DC power	W	3,940	3,940	3,940	5,150	5,150	5,150	6,190	6,190	6,190
	Max. PV generator output	Wpeak	5,700	5,700	5,700	7,500	6,800	7,500	8,000	6,800	9,000
Output data			208 V_{ac}	220 V_{ac}	240 V_{ac}	208 V_{ac}	220 V_{ac}	240 V_{ac}	208 V_{ac}	220 V_{ac}	240 V_{ac}
	AC rated power ($P_{ac,r}$)	W	3,800	3,800	3,800	5,000	5,000	5,000	5,740	6,000	6,000
	Apparent power	VA	3,800	3,800	3,800	5,000	5,000	5,000	5,740	6,000	6,000
	Max. Output power	VA	3,800	3,800	3,800	5,000	5,000	5,000	5,740	6,000	6,000
	Nom. AC output current	A	18.13	17.3	15.8	24	22.7	20.8	27.6	27.3	25
	Mains connection ($U_{ac,r}$)	V	1~NPE 208 V / 220 V / 240 V (+ 10 % / - 12 %)								
	Frequency (frequency range fmin - fmax)	Hz	50 Hz / 60 Hz (45 Hz – 66 Hz)								
	Distortion factor	%	< 3.5								
	Power factor (cos φac,r)		0.8 - 1 ind. / cap.								
Output data PV Point			120 V_{ac}	220 V_{ac}	240 V_{ac}	120 V_{ac}	220 V_{ac}	240 V_{ac}	120 V_{ac}	220 V_{ac}	240 V_{ac}
	Nom. Output power PV Point	VA	1,560	2,860	3,120	1,560	2,860	3,120	1,560	2,860	3,120
	Nominal AC voltage PV Point	V	1~NPE 120 V / 220 V / 240 V								
	Switching time	sec.	< 23								

The Fronius GEN24 can be upgraded to a Fronius GEN24 Plus hybrid inverter **in the future** through the UP.storage software upgrade. This upgrade activates battery functionality, enabling the possibility of a Full Backup power solution. However, external grid switching devices are required for this functionality. The technical specifications for battery operation and Full Backup operation are detailed below:

Full Backup power and battery function only available with GEN24 Plus

			Primo GEN24 208-240 Plus					
			3.8		5.0		6.0	
Output data Full Backup [2]			220 V_{ac}	240 V_{ac}	220 V_{ac}	240 V_{ac}	220 V_{ac}	240 V_{ac}
	Nom. Output power Full Backup	VA	3,800	3,800	5,000	5,000	6,000	6,000
	Mains connection Full Backup	V	1~NPE 220 V / 240 V					
	Switching time	sec.	< 35					
Battery connection	Number of DC inputs		1					
	Max. Input current (Idc max)	A	22					
	DC input voltage range (Udc min - Udc max)[3]	V	150–455					
	Connection technology DC battery		1x DC+ and 1x DC- spring-type terminals for solid: copper AWG 12-8					
	Max. Charging power with AC coupling [4]	W	3,800		5,000		6,000	

[1] *I_{sc} (STC) of the strings multiplied by 1.25 must be less or equal than ISC PV according to NEC 2023. This value needs to be divided by the amount of strings connected to the MPPT.*

[2] *For Full Backup, additional external components are required for grid separation.*

[3] *AC power derating of the inverter occurs with a DC battery input voltage of 419.7 V and higher.*

[4] *Depending on the connected battery.*

			Primo GEN24 208-240		
			3.8	5.0	6.0
General data	Dimensions (height × width × depth)	inch/mm	20.4 x 18.7 x 6.5 / 518 x 474 x 164		
	Weight (inverter)	lbs./kg	33.24 lbs. / 15.08 kg		
	Protection class		Type 4X		
	Protection class		1		
	Night consumption	W	< 10		
	Overvoltage category (DC/AC) [5]		2/4		
	Cooling		Active Cooling Technology		
	Installation		Indoor and outdoor installation		
	Ambient temperature range	°F/°C	-40 to +140 / -40 to +60		
	Permissible humidity	%	0–100		
	Noise emissions	dB (A)	< 42		
	Max. altitude	ft/m	13,123 / 4,000		
	Connection technology DC PV		2x DC+1, 2x DC+2 and 4x DC- spring-type terminals for solid: copper AWG 14-8		
	Connection technology AC		Spring-type terminals for solid: copper stranded / fine stranded: copper: AWG 14-8 Backup power spring-type terminals: AWG 16-8		
	Certificates and standard compliance		UL 1741 Third Edition (incl. UL1741 Supplement SA and SB), UL CRD - Non-Isolated EPS Interactive PV Inverters Rated Less Than 30kVA UL1998 (for functions: AFCI, RCMU, PVRSE and isolation monitoring), IEEE 1547:2018 incl. IEEE 1547a:2020, IEEE 1547.1:2020, IEEE 1547:2003 incl. IEEE 1547.1:2005 ANSI/IEEE C62.41, FCC Part 15 A & B, CSA C22. 2 No. 107.1-16 (reaffirmed 2021), CSA C22.2 No.290-19, CSA C22.2 No.330-23, CSA C22.3 No.9:20 UL1699B:2021		
	Country of manufacture		Austria		

			208 V_{ac}	220 V_{ac}	240 V_{ac}	208 V_{ac}	220 V_{ac}	240 V_{ac}	208 V_{ac}	220 V_{ac}	240 V_{ac}
Efficiency	Max. Efficiency	%	97.4	97.4	97.6	97.4	97.4	97.6	97.4	97.4	97.6
	CEC (ηCEC)	%	96.5	96.5	96.5	97	97	97	97	97	97
	MPP adjustment efficiency	%	> 99.9								

Protective equipment	DC insulation measurement		Integrated
	DC disconnector		Integrated
	Reverse polarity protection		Integrated
	Arc Fault Circuit Interruption (Arc Guard)		Integrated

Interfaces	WLAN / 2 × Ethernet LAN		Fronius Solar.web, Modbus TCP, Fronius Solar API (JSON)
	6 digital inputs		Connection to ripple control receiver, energy management
	6 digital inputs/outputs		Integrated
	Emergency shutdown (WSD)		Integrated
	Data logger and web server		Modbus RTU (third-party) / Fronius Smart Meter

[5] *According to UL 1741.*

Technical data

7.7/10.0 kW

			Primo GEN24 208-240					
			7.7			10.0		
Input data	Number of MPP trackers		2					
	DC input voltage range ($U_{dc\ min}$ - $U_{dc\ max}$)	V	65–600					
			208 V_{ac}	**220 V_{ac}**	**240 V_{ac}**	**208 V_{ac}**	**220 V_{ac}**	**240 V_{ac}**
	Nominal input voltage ($U_{dc,r}$)	V	365	365	385	365	365	385
	Feed-in start voltage ($U_{dc\ start}$)	V	80					
	Usable MPP voltage range	V	65–480			65–480		
	MPP voltage range (at rated power)	V	260–480			260–480		
			MPPT1	**MPPT2**		**MPPT1**	**MPPT2**	
	Max. usable input current ($I_{dc\ max}$)	A	22	22		22	22	
	Max. short circuit current per MPPT ($I_{sc\ pv}$) [1]	A	41.25	36		41.25	36	
	Number of DC connections		2	2		2	2	
			MPPT1	**MPPT2**	**Total**	**MPPT1**	**MPPT2**	**Total**
	Max. usable DC power	W	8,000	8,000	8,000	10,250	10,250	10,250
	Max. PV generator output	Wpeak	11,520	11,520	11,520	13,500	13,000	15,000
Output data			**208 V_{ac}**	**220 V_{ac}**	**240 V_{ac}**	**208 V_{ac}**	**220 V_{ac}**	**240 V_{ac}**
	AC rated power ($P_{ac,r}$)	W	7,680	7,680	7,680	9,450	10,000	10,000
	Apparent power	VA	7,680	7,680	7,680	9,450	10,000	10,000
	Max. Output power	VA	7,680	7,680	7,680	9,450	10,000	10,000
	Nom. AC output current	A	36.9	34.9	32.0	45.45	45.45	41.7
	Mains connection ($U_{ac,r}$)	V	1~NPE 208 V / 220 V / 240 V (+ 10 % / - 12 %)					
	Frequency (frequency range fmin - fmax)	Hz	50 Hz / 60 Hz (45 Hz–66 Hz)					
	Distortion factor	%	< 3.5					
	Power factor (cos φac,r)		0.8–1 ind. / cap.					
Output data PV Point			**120 V_{ac}**	**220 V_{ac}**	**240 V_{ac}**	**120 V_{ac}**	**220 V_{ac}**	**240 V_{ac}**
	Nom. Output power PV Point	VA	1,560	2,860	3,120	1,560	2,860	3,120
	Nominal AC voltage PV Point	V	1~NPE 120 V / 220 V / 240 V					
	Switching time	sec.	< 35					

The Fronius GEN24 can be upgraded to a Fronius GEN24 Plus hybrid inverter **in the future** through the UP.storage software upgrade. This upgrade activates battery functionality, enabling the possibility of a Full Backup power solution. However, external grid switching devices are required for this functionality. The technical specifications for battery operation and Full Backup operation are detailed below:

Full Backup power and battery function only available with GEN24 Plus

			Primo GEN24 208-240 Plus			
			7.7		10.0	
Output data Full Backup [2]			**220 V_{ac}**	**240 V_{ac}**	**220 V_{ac}**	**240 V_{ac}**
	Nom. Output power Full Backup	VA	7,680	7,680	10,000	10,000
	Mains connection Full Backup	V	1~NPE 220 V / 240 V			
	Switching time	sec.	< 45			
Battery connection	Number of DC inputs		1			
	Max. Input current (Idc max)	A	22			
	DC input voltage range (Udc min - Udc max)[3]	V	150–455			
	Connection technology DC battery		1x DC+ and 1x DC- spring-type terminals for solid: copper AWG 12-8			
	Max. Charging power with AC coupling [4]	W	7,680		10,000	

[1] *I_{sc} (STC) of the strings multiplied by 1.25 must be less or equal than ISC PV according to NEC 2023. This value needs to be divided by the amount of strings connected to the MPPT.*

[2] *For Full Backup, additional external components are required for grid separation.*

[3] *AC power derating of the inverter occurs with a DC battery input voltage of 419.7 V and higher.*

[4] *Depending on the connected battery.*

			Primo GEN24 208-240					
			7.7			10.0		
General data	Dimensions (height × width × depth)	inch/mm	23.0 x 20.8 x 7.1 / 583 x 529 x 180					
	Weight (inverter)	lbs./kg	45.97 lbs. / 20.85 kg					
	Protection class		Type 4X					
	Protection class		1					
	Night consumption	W	< 10					
	Overvoltage category (DC/AC) [5]		2/4					
	Cooling		Active Cooling Technology					
	Installation		Indoor and outdoor installation					
	Ambient temperature range	°F/°C	-40 to +140 / -40 to +60					
	Permissible humidity	%	0–100					
	Noise emissions	dB (A)	< 52					
	Max. altitude	ft/m	13,123 / 4,000					
	Connection technology DC PV		2x DC+1, 2x DC+2 and 4x DC- spring-type terminals for solid: copper stranded / fine stranded: copper AWG 14-8					
	Connection technology AC		Spring-type terminals for solid: copper stranded / fine stranded: copper: AWG 12-6 Backup power spring-type terminals: AWG 16-8					
	Certificates and standard compliance		UL 1741 Third Edition (incl. UL1741 Supplement SA and SB), UL CRD - Non-Isolated EPS Interactive PV Inverters Rated Less Than 30kVA UL1998 (for functions: AFCI, RCMU, PVRSE and isolation monitoring), IEEE 1547:2018 incl. IEEE 1547a:2020, IEEE 1547.1:2020, IEEE 1547:2003 incl. IEEE 1547.1:2005 ANSI/IEEE C62.41, FCC Part 15 A & B, CSA C22. 2 No. 107.1-16 (reaffirmed 2021), CSA C22.2 No.290-19, CSA C22.2 No.330-23, CSA C22.3 No.9:20 UL1699B:2021					
	Country of manufacture		Austria					
Efficiency			208 V_{ac}	220 V_{ac}	240 V_{ac}	208 V_{ac}	220 V_{ac}	240 V_{ac}
	Max. Efficiency	%	97.2	97.2	97.5	97.2	97.2	97.5
	CEC (ηCEC)	%	96.5	96.5	97	96.5	96.5	97
	MPP adjustment efficiency	%	> 99.9					
Protective equipment	DC insulation measurement		Integrated					
	DC disconnector		Integrated					
	Reverse polarity protection		Integrated					
	Arc Fault Circuit Interruption (Arc Guard)		Integrated					
Interfaces	WLAN / 2 × Ethernet LAN		Fronius Solar.web, Modbus TCP, Fronius Solar API (JSON)					
	6 digital inputs		Connection to ripple control receiver, energy management					
	6 digital inputs/outputs		Integrated					
	Emergency shutdown (WSD)		Integrated					
	Data logger and web server		Modbus RTU (third-party) / Fronius Smart Meter					

[5] *According to UL 1741.*

Fronius
Primo GEN24

Designed to empower.

For more information about the product, visit:
www.fronius.us/gen24

Fronius USA LLC
Headquarters
6797 Fronius Drive
Portage, IN 46368
USA
sales.usa@fronius.com
www.fronius.us

Fronius International GmbH
Froniusplatz 1
4600 Wels
Austria
pv-sales-austria@fronius.com
www.fronius.com

EN V02 Juni 2024

Franklin Home Power

The Franklin Home Power (FHP) system integrates the grid, solar generation, batteries and even generators, into a robust energy control system that is managed via a simple mobile app. The FHP provides real time monitoring and control for a home's day-to-day energy usage, and supplies energy from multiple power sources during grid outages.

The FHP's energy management is provided by the aGate X, an intelligent controller that integrates all power sources and automatically detects grid outages to seamlessly transition a home to backup power within 16ms.

An aGate X Smart Circuits Module is available for controlling of and automated load shedding for heavy energy loads during an outage. It provides custom scheduling of unique loads for more efficient use. A Generator Module can also be added to the aGate X for standby generator integration, providing maximum energy resilience and independence. The FHP is designed for daily cycling and emergency backup power. The aGate X complies with NEC 2017, NEC 2020, and UL1741 PCS Certification for main panel upgrade (MPU) avoidance.

The FHP system pairs the aGate X with the aPower X, a lithium iron phosphate (LFP) battery designed by FranklinWH. A single battery has large 13.6kWh capacity with continuous power of 5kW, and its peak power 10kW can last for 10s. Up to 15 aPower X batteries can be connected to a single aGate X.

One aGate X															
aPower X Units	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Capacity(kWh)	13.6	27.2	40.8	54.4	68	81.6	95.2	108.8	122.4	136	149.6	163.2	176.8	190.4	204
Cont. power(kW)	5	10	15	20	25	30	35	38.4	38.4	38.4	38.4	38.4	38.4	38.4	38.4
Peak power(kW)	10	20	30	40	50	60	70	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8

For FHP system >8 units, please reach out to info@franklinwh.com

Safe

- Lithium iron phosphate battery
- Automotive grade lithium cells
- Advanced Battery Management System (BMS) with Sate of Heath (SOH) pro-active battery technology.

Intelligent

- Micro-grid interconnect device (MID) functionality
- Auto-detect grid outages, seamless power transfer
- Black-start functionality; daily PV restart capabilities

Reliable

- 12-year warranty
- NEMA 3R enclosure
- Corrosion-proof

Scalable

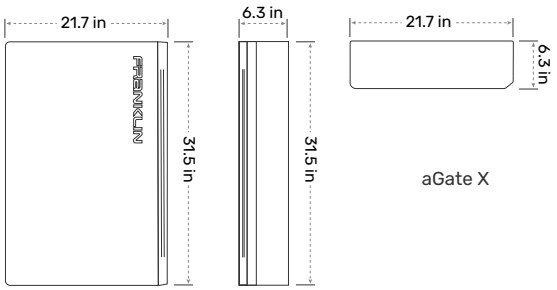
- Up to 15 aPower X units can be used with a single aGate X
- Usable energy expandable from 13.6kWh to 204kWh
- Continuous output power ranges from 5kW to 38.4kW

Easy & Flexible

- Compatible with any solar inverter/standby generator
- Generator monitoring and controls via the FranklinWH app
- Pre-assembled, indoor/outdoor/wall/floor installation
- Multiple conduit entries
- App-based, remote commissioning

The **aGate X** is available with two optional accessories that can be added to customize the homeowner's FHP experience:

- **Smart Circuits Module:** manual and scheduled control for unique electric circuits, via the FranklinWH app.
- **Generator Module:** standby generator integration, redundant power source to the aPower X.



aGate X

Performance

Switch Over Time (grid to micro-grid)	<16ms
User Interface	FranklinWH app
Warranty	12 years
Maximum Supply Fault Current	20 kA
Communications	Ethernet / 4G / Wifi

Electrical Connections

aPower Over Current Protection Device	100A Max
Solar Input Over Current Protection Device	80A Max
Backup Load Port Over Current Protection Device	200A Max
Generator Over Current Protection Device[1]	200A Max
Smart Circuits Over Current Protection Device[2]	Option A: (1) × 80A Max @240V & (2) × 50A Max @120V Option B: (1) × 80A Max @240V & (1) × 50A Max @240V

Electrical Interface

Coupling	AC Coupled
Feed-in Phase	Split Phase
Split Phase	L1 / L2 / N / PE

Mechanical

Dimensions (W*H*D)	aGate X: 21.7 x 31.5 x 6.3 in (550 x 800 x 160 mm)
Weight	aGate X: 50 lb (23 Kg)
Installation	Wall mount

Compliance & Certificates

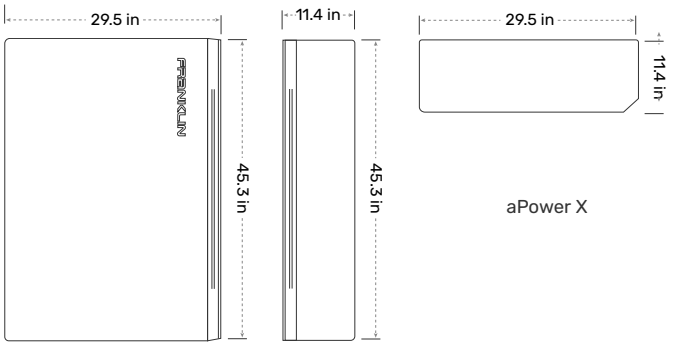
aGate X	UL1741 PCS, UL 67[3], UL 869A[3], UL 916[3]
Seismic	AC156, OSHPD, IEEE 693-2005 (high)
Environmental	California Proposition 65 RoHS Directive 2011 / EU
Emissions	FCC Part 15 Class B, ICES 003

Environmental

Operating Temperature	-4°F to 122°F (-20°C to 50°C)
Operating Humidity (RH)	Up to 100% RH, condensing
Altitude	Maximum 9,843 ft (3,000 m)
Storage Condition	14°F to 113°F (-10°C to 45°C) Up to 95% RH, non-condensing
Enclosure Type	NEMA 3R
Environment	Indoor and outdoor rated

1: Generator Module is optional.
2: Smart Circuit Module is optional.
3: Sections from these standards were used during the safety evaluation and included in the UL 1741 listing.

The **aPower X** is a lithium iron phosphate (LFP), AC-coupled battery that is proprietary to the FHP system. With an all-in-one form factor, the aPower X battery is self-contained with battery cells, a battery management system, and an AC inverter.



Performance

Battery Chemistry	Lithium Iron Phosphate (LFP)
Usable System Energy	13.6 kWh per unit, scalable up to 15 units[4]
Warranted Energy Throughput (12yrs)	43 MWh
Inverter Topology	Isolated
Nominal AC Voltage	120V / 240V, 60 Hz
Maximum Continuous / Peak Discharge Power (10 s)	5 kW / 10 kW
Round Trip Efficiency	89%[5]
Noise Emission (optimal)	<30 dB (A)
User Interface	FranklinWH app
Warranty	12 years

Electrical Interface

Coupling	AC-Coupled
Feed-in Phase	Split Phase
Split Phase	L1 / L2 / N / PE

Application Mode Programming

Self-Consumption
Load Shifting
Backup Standby

Mechanical

Dimensions(W*H*D)	aPower X:29.5 x 45.3 x 11.4 in (750 x 1150 x 290mm)
Weight	aPower X: 408 lb (185 Kg)
Installation	Wall mount or floor mount

Compliance & Certificates

aPower X	UL 9540, UL 1741SA, UL 1741SB, UL 1973, UL 9540A, IEEE 1547, IEEE 1547.1, UN 38.3
Seismic	AC156, OSHPD, IEEE 693-2005 (high)
Environmental	California Proposition 65 RoHS Directive 2011 / EU
Emissions	FCC Part 15 Class B, ICES 003

Environmental

Operating Temperature	-4°F to 122°F (-20°C to 50°C)
Operating Humidity (RH)	Up to 100% RH, condensing
Altitude	Maximum 9,843 ft (3,000 m)
Ingress Rating	IP67 (Battery and power converter system) IP56 (Wiring compartment)
Storage Condition	14°F to 113°F (-10°C to 45°C) Up to 95% RH, non-condensing
Enclosure Type	NEMA 3R
Environment	Indoor and outdoor rated

4: Please contact us for solution design support if you have large capacity requirements.
5: At beginning of life, AC to battery to AC, 50% power rating.

The FranklinWH app allows remote monitoring and management of your whole home energy management system at any time, from anywhere. Homeowners can see historical and real-time energy usage and patterns, can set and choose personalized energy-saving plans for family, and enjoy life with the help of our robust features. Installers can use it for a rapid commissioning and faster debugging.

Smart Energy Management

- Use energy per homeowner's discretion:
  - Self-consumption
  - Backup Standby
  - Load Shifting
- Fully visibility into energy production and consumption
- Remotely control household's energy from anywhere at any time
- Heavy load shedding/controls via Smart Circuits to manage backup energy supply
- Local & remote debugging supported

Simple & Reliable

- Intuitive, easy to use
- Real-time and historic energy activity
- One app to monitor and control all power generation
- Multiple comms: Ethernet/Wifi/4G

APP Features

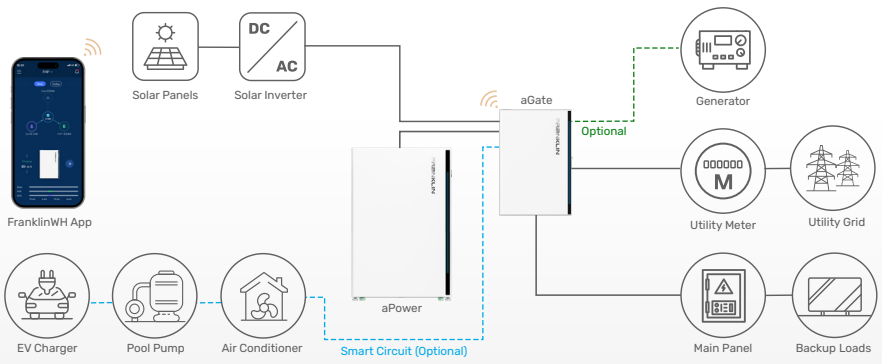
Functionality

Operating System	Android & iOS
Generator Output Setting	Power, current, voltage frequency, time plan
Smart Circuit Setting	Time plan, manual switch, circuits merge, SOC threshold
Emergency Backup Setting	Enable & Disable
SOC Setting	Self-consumption, load shifting
LED Strip Setting	Switch on/off, time plan
Access Point Setting	Modify name and password
Power Sources Monitor	Working status, current flow
Backup Remaining Display	Duration
History Data	Daily, monthly, yearly
Summary Report	Daily, monthly, yearly
Downtime Maintenance	Keep home powered during aPower X maintenance
Grid Compliance	HECO SRD V2.0, CA UL 1741 SA, User Defined
Grid Program	NEM+ / CSS / CGS / CGS+ / NEM 2.0 / BB & NEM / BB & CSS / BB & CGS+ / Smart export
Account Security	Password verification support

Application Mode Programming

Self-Consumption
Load Shifting
Backup Standby

FranklinWH's solution for Whole Home backup



Address: 1731 Technology Dr. Suite 530 San Jose , CA 95110
Telephone: +1 888-837-2655
Email: info@franklinwh.com
Website: www.franklinwh.com

FRANKLINWH

aPower 2

AC-coupled battery

Store solar generated power while the sun is shining. Use the stored energy when needed to lower electric bills. Run heavy loads such as air conditioners and water heaters as usual even during grid outages. Provide homeowner peace of mind by fully charging before severe weather events.

The system is off-grid ready, designed to operate independently from the main power grid to deliver reliable energy in any situation.

- ✓ 10 kW continuous / 15 kW peak for 10s
- ✓ 8 kW charge power
- ✓ 15 kWh AC[1] per unit, up to 225 kWh (15 units) per aGate
- ✓ 60 MWh warranty throughput

PERFORMANCE SPECIFICATIONS

SKU					APR-10K15V2-US
Model Number					aPower 2
Nameplate /Certification					aPower X-20
CEC Listing Name					aPower Xyyy
Battery Chemistry					Lithium Iron Phosphate (LFP)
Usable System Energy					15 kWh AC[1] per unit, up to 15 units per aGate
Aggregate Throughput					60 MWh
Real Power (charge)					8 kW continuous
Nominal Output Power (AC)	2.5 kW	5 kW	6.7 kW	8.4 kW	10 kW[2]
Maximum Apparent Power	2.9 kVA	5.8 kVA	7.7 kVA	9.6 kVA	11.5 kVA
Maximum Continuous Current	12 A	24 A	32 A	40 A	48 A
Nominal AC Voltage					120 / 240 V, 120 / 208 V (single phase), 60 Hz
Coupling					AC-coupled
Phase					2 W+N+PE
Round Trip Efficiency					90%[1]
Maximum Short-Circuit Current Rating					10 kA
Load Start Capability					Up to a 5-ton air conditioner
Work Modes					Self-Consumption Time of Use Emergency Backup
Noise Emission					30 dB(A) Typical / 45 dB(A) Maximum
Flood Resistance					Up to 29" from the aPower 2 base
User Interface					FranklinWH App
Warranty					15 years[3]

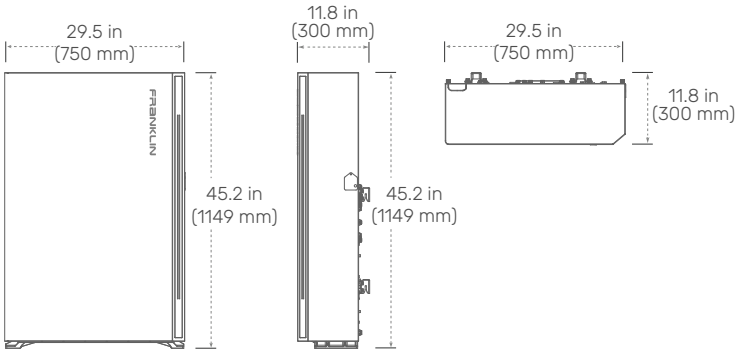
COMPLIANCE INFORMATION

Certifications	UL 9540, UL 9540A, UL 1973, UL 1741, UL1741 SB, UL 1741 PCS, UL 60730-1, IEEE 1547, IEEE 1547.1, UN 38.3, CSA C22.2 No. 107.1
Seismic	AC 156, OSHPD, IEEE 693-2005 (high)
Environmental	California Proposition 65 RoHS Directive 2011 / EU
Emissions	FCC Part 15 Class B, ICES 003

1. At beginning of life, 3 kW charge/discharge power, 77 °F (25 °C).
2. Refer to the installation manual and commissioning guide for proper wire and OCPD sizes.
3. For more details, please refer to the FranklinWH System Limited Warranty for End Users available in the Documentation Center on the FranklinWH website.

MECHANICAL SPECIFICATIONS

Dimensions (H × W × D)	45.2 in × 29.5 in × 11.8 in (1149 mm × 750 mm × 300 mm)
Weight, aPower 2 Complete	357 lb. (162 kg)
Weight, without Cover	335 lb. (152 kg)
Weight, Cover	22 lb. (10 kg)
Mounting	Wall or floor mount
Cooling	Natural air-cooled design



ENVIRONMENTAL SPECIFICATIONS

Enclosure Type	Type 3R
Ingress Protection	IP56 (Wiring) IP67 (Battery Pack & Inverter)
Operating Temperature	-4 °F to 122 °F (-20 °C to 50 °C) Operates up to 131 °F (55 °C) at 5kW derated output
Operating Humidity (RH)	Up to 100% RH, condensing
Altitude	Maximum 9,843 ft (3,000 m)
Environment	Indoor and outdoor rated

Compatibility Notice: At launch, the aPower 2 is compatible with the aGate 1.3 only. Compatibility with earlier aGate and aPower versions is anticipated in Q2 2025.