



PRODUCT CATALOG

2023



POWERING FAMILIES
THROUGH LIFE™





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NORTH AMERICAN HYBRID INVERTERS



8K-2P



12K-2P



5K-1P-N
NEW



15K-2P
NEW

NEW

LATAM HYBRID INVERTERS



5K-1P-L [120V]
8K-1P-L [230V]



8K-2P-L



12K-3P-L

S INSTALLATIONS
SIMPLIFIED

Do not spend time piecing multiple parts for basic functions. A Sol-Ark All-in-One system does it all, and does it better.

POWERING FAMILIES THROUGH LIFE™

15K-2P-N



19.5 KW SOLAR INPUT POWER

x3 built-in MPPTs for max DC coupled power of 19,500 W
Max AC coupled solar input of 19,200 W
Max combined solar input of 38,400 W

French Cleat for easy installation

Outdoor rated NEMA 3R

Built-in solar array disconnect

Remote WIFI / Ethernet and local monitoring

15 KW OUTPUT POWER OFF-GRID

Continuous AC power of 15,000 W with PV
Continuous AC power of 12,000 W with from batteries
Max Grid sell output of 34,200 W
Supports 120/240/208V connections

BATTERY AGNOSTIC

Lead Acid or Li-ion battery chemistry support
Any battery with nominal DC voltage of 48V
275A continuous battery charging output
Closed loop communication w/ most High-End Li Batteries

FULL GENERATOR COMPATIBILITY

Supports 220/240/208V generators on GRID breaker
Up to 24 KW 240V generators on GEN breaker
Standby generator connection for whole-home backup
Two Wire for automatic generator start



15K-2P-N

**UL Model:
"Limitless 15K-LV"**



Solar Input Power 19,500W	
Max Allowed PV Power	19,500W
Max PV Power → to Battery / AC Outputs	15,000W
Max DC Voltage (Voc)	500V @ 26A
MPPT Voltage Range	125-425V
Starting Voltage	125V
Number of MPPT	3
Max Solar Strings Per MPPT	2
Max DC Current per MPPT (Self Limiting)	26A
Max AC Coupled Input (Micro/String Inverters)	19,200W

AC Output Power 15kW On-Grid & Off-Grid	
Connections	120/240/208V Split Phase
Continuous AC Power with PV	15,000W 62.5A-L (240V)
Continuous AC Power from Batteries	12,000W 50A-L (240V)
Total Harmonic Distortion (THD)	≤ 3%
Surge AC Power 10sec	24,000VA L-L (240V)
Surge AC Power 100ms	30,000VA L-L (240V)
Fault Current 5sec	94A w/ PV 75A w/o PV
Fault Current 100ms	120A
Parallel Stacking	Yes - Up to 12
Frequency	60/50Hz
Continuous AC Power with Grid or Generator	48,000W 200A L-L (240V) 24,000W 200A L-N (120V)
CEC Efficiency	96.5% (Peak 97.5%)
Idle Consumption Typical—No Load	90W
Sell Back Power Modes	Limited to Household/Fully Grid-Tied
Design (DC to AC)	Transformerless DC
Response Time (Grid-Tied to Off-Grid)	5ms
Power Factor	+/- 0.9 - 1.0

Battery (optional) Output Power 12,000W	
Type	Lead-Acid or Li-Ion
Nominal DC Input	48V
Capacity	50 — 9900Ah
Voltage Range	43.0 — 63.0V
Continuous Battery Charging Output	275A
Charging Curve	3-Stage w/ Equalization
Grid to Batt Charging Efficiency	96.0%
External Temperature Sensor	Included
Current Shunt for Accurate % SOC	Integrated
External Gen Start Based on Voltage or %SOC	Integrated
Communication to Lithium Battery	CanBus & RS485

General	
Dimensions (H x W x D) in	31.8 x 18.3 x 10.9 in
Weight (package)	135 lbs
Enclosure	IP65 / NEMA 3R
Ambient Temperature	-40~60°C, >45°C Derating
Installation Style	Wall-Mounted
Wi-Fi & LAN Communication	Included
Standard Warranty (verified by HALT Testing)	10 Years

Protections & Certifications	
Electronics Certified Safety by SGS Labs to NEC & UL Specs - NEC 690.4B & NEC 705.4/6	Yes
Grid Sell Back — UL1741-2010/2018, IEEE1547a -2003/2014, FCC 15 Class B, UL1741SB, CA Rule 21, HECO Rule 14H	Yes
PV DC Disconnect Switch — NEC 240.15	Integrated
Ground Fault Detection — NEC 690.5	Integrated
PV Rapid Shutdown Control — NEC 690.12	Integrated
PV Arc Fault Detection — NEC 690.11	Integrated
PV Input Lightning Protection	Integrated
PV String Input Reverse Polarity Protection	Integrated
AC Output Breakers - 200A	Integrated
200A x 2 Battery Breaker / Disconnect	Integrated
Surge Protection	DC Type II / AC Type II

12K-2P-N



13 KW SOLAR INPUT POWER

x2 built-in MPPTs for max DC coupled power of 13,000 W
Max AC coupled solar input of 9,600 W
Max combined solar input of 16,000 W

French Cleat for easy installation

Built-in solar array disconnect

Remote WIFI / Ethernet and local monitoring

Outdoor rated NEMA 3R



9 KW OUTPUT POWER OFF-GRID

Continuous AC power of 9,000 W
Supports 120/240/208V connections



BATTERY AGNOSTIC

Lead Acid or Li-ion battery chemistry support
Any battery with nominal DC voltage of 48V
185A continuous battery charging output
Closed loop communication w/ most High-End Li Batteries



FULL GENERATOR COMPATIBILITY

Supports 220/240/208V generators on GRID breaker
Up to 10 KW 240V generators on GEN breaker
Standby generator connection for whole-home backup
Two Wire for automatic generator start



12K-2P-N

UL Model:

“Sol-Ark-12K-P”



Solar Input Power 13,000W	
Max Allowed PV Power	6,500W + 6,500W = 13,000W
Max PV Power Delivered to Battery &	12,000W
Max DC Voltage (Voc)	500V @ 18A, 450V @ 20A
MPPT Voltage Range	150-425V
Starting Voltage	125V
Number of MPPT	2
Max Solar Strings Per MPPT	2
Max DC Current per MPPT (Self Lim-	20A
Max AC Coupled Input (Micro/String	9,600W

AC Output Power 9kW On-Grid & Off-Grid	
Connections	120/240/208V Split Phase
Continuous AC Power to Grid (On-Grid)	9,000W 37.5A-L (240V)
Continuous AC Power to Load (Off-Grid)	9,000W 37.5A-L (240V)
Surge AC Power 10sec	16,000VA L-L (240V)
Surge AC Power 100ms	25,000VA L-L(240V)
Fault Current 100ms	104A L-L (240V)
Parallel Stacking	Yes
Frequency	60/50Hz
Continuous AC Power with Grid or Generator	15,120W 63A L-L (240V) 7,560W 63A L-N (120V)
CEC Efficiency	96.5% (Peak 97.5%)
Idle Consumption Typical—No Load	60W
Sell Back Power Modes	Limited to Household/Fully Grid-Tied
Design (DC to AC)	Transformerless DC
Response Time (Grid-Tied to Off-Grid)	4ms
Power Factor	+/- 0.9 - 1.0

Battery (Optional) Output Power 9,000W	
Type	Lead-Acid or Li-Ion
Nominal DC Input	48V
Capacity	50 — 9900Ah
Voltage Range	43.0 — 63.0V
Continuous Battery Charging Output	185A
Charging Curve	3-Stage w/ Equalization
Grid to Batt Charging Efficiency	96.0%
External Temperature Sensor	Included
Current Shunt for Accurate % SOC	Integrated
External Gen Start Based on Voltage	Integrated
Communication to Lithium Battery	CanBus & RS485

General	
Dimensions (H x W x D)	30.0" x 18.3" x
Weight	78 lbs
Enclosure	NEMA 3R
Ambient Temperature	-25-55°C, >45°C
Installation Style	Wall-Mounted
Wi-Fi & LAN Communication	Included
Standard Warranty (verified by HALT Testing)	10 Years

Protections & Certifications	
Electronics Certified Safety by SGS Labs to NEC	Yes
Grid Sell Back — UL1741-2010/2018, IEE-E1547a-2003/2014, FCC 15 Class B, UL1741SA, CA Rule 21, HECO Rule 14H	Yes
PV DC Disconnect Switch — NEC 240.15	Integrated
Ground Fault Detection — NEC 690.5	Integrated
PV Rapid Shutdown Control — NEC 690.12	Integrated
PV Arc Fault Detection — NEC 690.11	Integrated
PV Input Lightning Protection	Integrated
PV String Input Reverse Polarity Protection	Integrated
AC Output Breakers - 63A	Integrated
250A Battery Breaker / Disconnect	Integrated
Surge Protection	DC Type II / AC Type

8K-2P-N



11 KW SOLAR INPUT POWER

x2 built-in MPPTs for max DC coupled power of 11,000 W
Max AC coupled solar input of 9,600 W
Max combined solar input of 16,000 W

French Cleat for easy installation

Outdoor rated NEMA 3R

Built-in solar array disconnect

Remote WIFI / Ethernet and local monitoring

8 KW OUTPUT POWER OFF-GRID

Continuous AC power of 8,000 W
Supports 120/240/208V connections

BATTERY AGNOSTIC

Lead Acid or Li-ion battery chemistry support
Any battery with nominal DC voltage of 48V
185A continuous battery charging output
Closed loop communication w/ most High-End Li Batteries

FULL GENERATOR COMPATIBILITY

Supports 220/240/208V generators on GRID breaker
Up to 10 KW 240V generators on GEN breaker
Standby generator connection for whole-home backup
Two Wire for automatic generator start



8K-2P-N

UL Model:

"Sol-Ark-8K-48-ST"



Solar Input Power 11,000W	
Max Allowed PV Power	5,500W + 5,500W = 11,000W
Max PV Power Delivered to Battery &	8,000W
Max DC Voltage (Voc)	500V @ 18A, 450V @ 20A
MPPT Voltage Range	150-425V
Starting Voltage	125V
Number of MPPT	2
Max Solar Strings Per MPPT	2
Max DC Current per MPPT (Self Lim-	20A
Max AC Coupled Input (Micro/String	9,600W

AC Output Power 8kW On-Grid & Off-Grid	
Connections	120/240/208V Split Phase
Continuous AC Power to Grid (On-Grid)	8,000W 33.3A-L (240V)
Continuous AC Power to Load (Off-Grid)	8,000W 33.3A-L (240V)
Surge AC Power 10sec	16,000VA L-L (240V)
Surge AC Power 100ms	25,000VA L-L(240V)
Fault Current 100ms	104A L-L (240V)
Parallel Stacking	No
Frequency	60/50Hz
Continuous AC Power with Grid or Generator	15,120W 63A L-L (240V) 7,560W 63A L-N (120V)
CEC Efficiency	96.5% (Peak 97.5%)
Idle Consumption Typical—No Load	60W
Sell Back Power Modes	Limited to Household/Fully Grid-Tied
Design (DC to AC)	Transformerless DC
Response Time (Grid-Tied to Off-Grid)	4ms
Power Factor	+/- 0.9 - 1.0

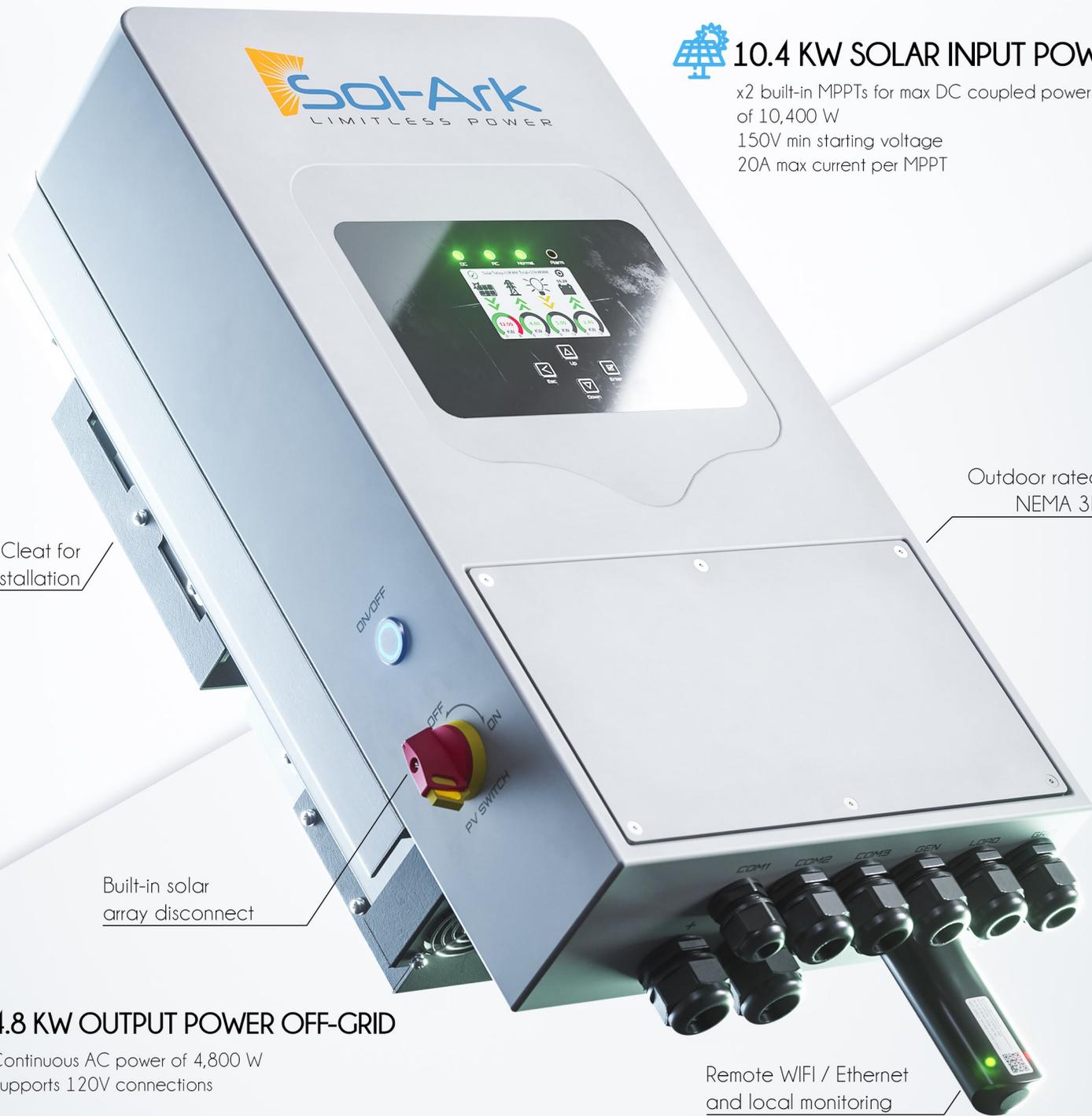
Battery (optional) Output Power 8,000W	
Type	Lead-Acid or Li-Ion
Nominal DC Input	48V
Capacity	50 — 9900Ah
Voltage Range	43.0 — 63.0V
Continuous Battery Charging Output	185A
Charging Curve	3-Stage w/ Equalization
Grid to Batt Charging Efficiency	96.0%
External Temperature Sensor	Included
Current Shunt for Accurate % SOC	Integrated
External Gen Start Based on Voltage	Integrated
Communication to Lithium Battery	CanBus & RS485

General	
Dimensions (H x W x D)	30.0" x 18.3" x
Weight	78 lbs
Enclosure	NEMA 3R
Ambient Temperature	-25-55°C, >45°C
Installation Style	Wall-Mounted
Wi-Fi & LAN Communication	Included
Standard Warranty (verified by HALT Testing)	5 Years (10 yr ext)

Contact Sales@sol-ark.com for 10 year extension

Protections & Certifications	
Electronics Certified Safety by SGS Labs to NEC	Yes
Grid Sell Back — UL1741-2010/2018, IEE-E1547a-2003/2014, FCC 15 Class B, UL1741SA, CA Rule 21, HECO Rule 14H	Yes
PV DC Disconnect Switch — NEC 240.15	Integrated
Ground Fault Detection — NEC 690.5	Integrated
PV Rapid Shutdown Control — NEC 690.12	Integrated
PV Arc Fault Detection — NEC 690.11	Integrated
PV Input Lightning Protection	Integrated
PV String Input Reverse Polarity Protection	Integrated
AC Output Breakers - 63A	Integrated
250A Battery Breaker / Disconnect	Integrated
Surge Protection	DC Type II / AC Type

5K-1P-N



 **10.4 KW SOLAR INPUT POWER**

x2 built-in MPPTs for max DC coupled power of 10,400 W
150V min starting voltage
20A max current per MPPT

French Cleat for easy installation

Outdoor rated NEMA 3R

Built-in solar array disconnect

 **4.8 KW OUTPUT POWER OFF-GRID**

Continuous AC power of 4,800 W
Supports 120V connections

Remote WIFI / Ethernet and local monitoring

 **BATTERY AGNOSTIC**

Lead Acid or Li-ion battery chemistry support
Any battery with nominal DC voltage of 48V
120A continuous battery charging output
Closed loop communication w/ most High-End Li Batteries

 **FULL GENERATOR COMPATIBILITY**

Supports 120V generators on GRID terminal
Up to 3.6 KW 120V generators on GEN terminal
Standby generator connection for whole-home backup
Two Wire for automatic generator start



5K-1P-N

UL Model:

**“5K-120V/
8K-230V-1P”**



Battery Input Data (Optional)

Type	Lead-Acid or Li-Ion
Nominal DC Input	48V
Capacity	50 — 9900Ah
Voltage Range	40V-60V
Continuous Battery Charging Output	120A
Charging Curve	3-Stage w/ Equalization
Grid to Batt Charging Efficiency	96.0%
External Temperature Sensor	Included
Current Shunt for Accurate % SOC	Integrated
External Gen Start Based on Voltage or %SOC	Integrated
Communication to Lithium Battery	CanBus & RS485

Solar String Input Data

Max Allowed PV Power	10,400W
PV Input Voltage	370V (100~500V)
PV Input Current	20A + 20A
Starting Voltage / Min Voltage	150V
Number of MPPT / Range (V)	2 125-425V
Solar Strings Per MPPT	2 + 2
MPPT Efficiency	99.90%

General

Dimensions (H x W x D)	22.8 x 13 x 9.1 in
Weight	51lbs (62lbs package)
Enclosure	IP65 / NEMA 3R
Ambient Temperature	-25~60°C, >45°C De-rating
Noise	<30 dB
Installation Style	Wall-Mounted
Wi-Fi & LAN Communication	Included
Standard Warranty	5 Years

AC Output Data

Grid Type (Single Phase only)	120V 1P
Rated AC Output	4,800W
Peak Power (Off-Grid)	10,000W 10S
Rated AC Output Current (A)	40 A
Parallel Stacking	Yes - Up to 8
Frequency	60/50Hz
Max continuous AC passthrough (A)	50A
Max Efficiency	97.6%
Idle Consumption Typical—No Load	60W
Sell Back Power Modes	Limited to Household/Fully Grid-Tied
Design (DC to AC)	Transformerless DC
Response Time (Grid-Tied to Off-Grid)	5ms
Power Factor	+/- 0.8 - 1.0

Protections & Certifications

PV Input Lightning Protection	Yes
Grid Sell Back — UL1741-2010/2018, IEE-E1547a-2003/2014, FCC 15 Class B	Yes
Anti-Islanding Protection	Integrated
PV String Input Reverse Polarity Detection	Integrated
PV Arc Fault Detection — NEC 690.11	Integrated
Insulation Resistor Detection	Integrated
Residual Current Monitoring Unit	Integrated
Output Over Current Protection	Integrated
Output shorted Protection	Integrated
Surge Protection	DC Type II / AC Type II

12K-3P-L



15.6 KW SOLAR INPUT POWER

x2 built-in MPPTs for max DC coupled power of 15,600 W
Max AC coupled solar input of 3,000 W
Max combined solar input of 18,600 W

French Cleat for easy installation

Outdoor rated NEMA 3R

Built-in solar array disconnect



12 KW OUTPUT POWER OFF-GRID

Continuous AC power of 12,000 W
Supports 380/400/420V (L-L) connections
*Supports 208/230V (L-L) at half output power

Remote WIFI / Ethernet and local monitoring



BATTERY AGNOSTIC

Lead Acid or Li-ion battery chemistry support
Any battery with nominal DC voltage of 48V
240A continuous battery charging output
Closed loop communication w/ most High-End Li Batteries



FULL GENERATOR COMPATIBILITY

Full generator compatibility on both GRID & GEN terminals
Up to 12 KW generators on GEN terminal
Standby generator connection for battery backup
Two Wire for automatic generator start



12K-3P-L

Spec Sheet

**South America
& Caribbean**



Battery Input Data (Optional)	
Type	Lead-Acid or Li-Ion
Nominal DC Input	48V
Capacity	50 — 9900Ah
Voltage Range	40V-60V
Continuous Battery Charging Output	240A
Charging Curve	3-Stage w/ Equalization
Grid to Batt Charging Efficiency	96.0%
External Temperature Sensor	Included
Current Shunt for Accurate % SOC	Integrated
External Gen Start Based on Voltage	Integrated
Communication to Lithium Battery	CanBus & RS485

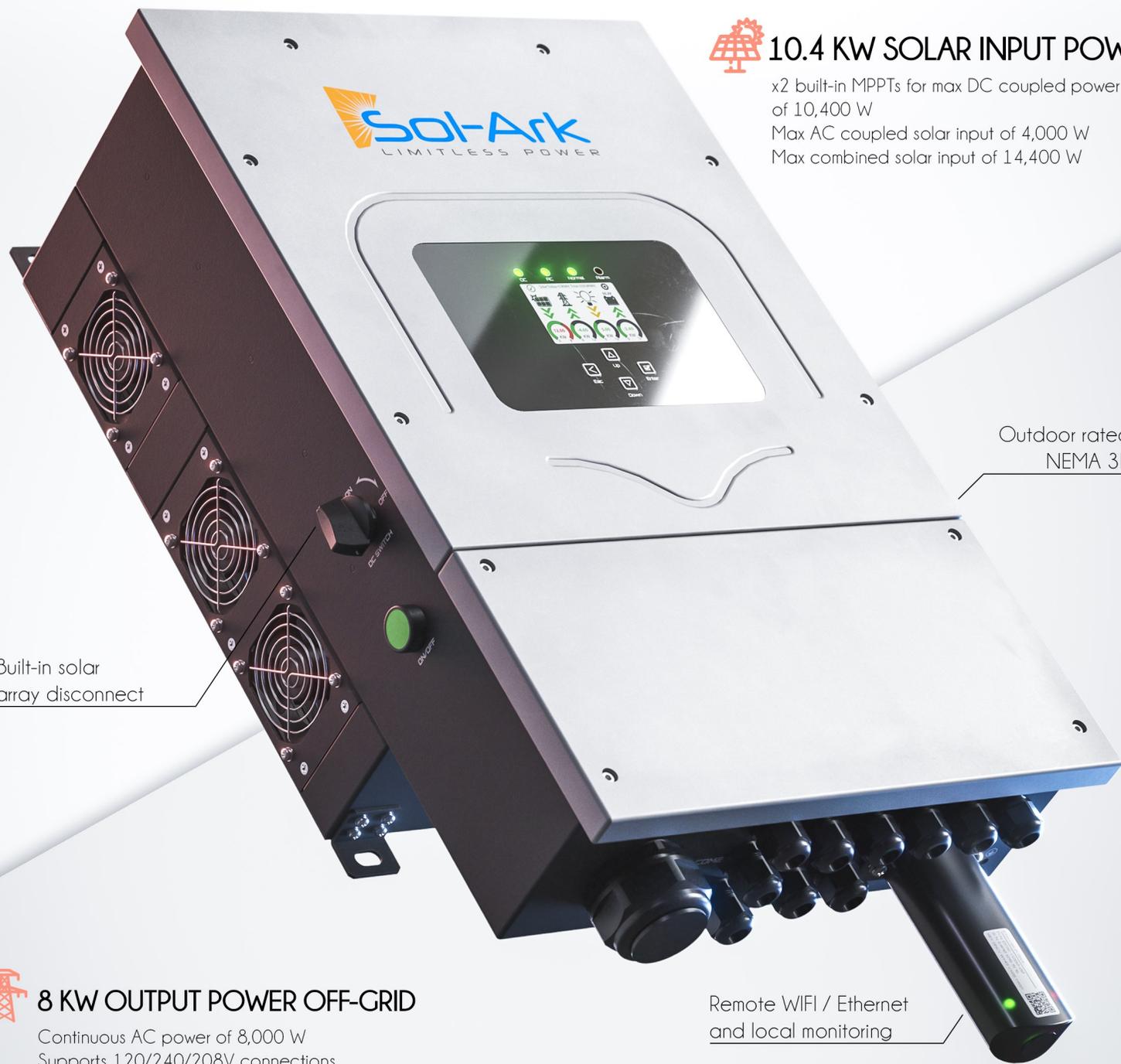
Solar String Input Data	
Max Allowed PV Power	15,600W
Rated DC Voltage / Max	550V / 800V
MPPT Voltage Range	200-650V
Starting Voltage / Min Voltage	160V
Number of MPPT	2
Max Solar Strings Per MPPT	2 + 1
Max DC Current per MPPT (A)	26A + 13A
MPPT Efficiency	99.90%

General	
Dimensions (H x W x D)	27.6 x16.6 x 11.1 in
Weight	76.1 lbs
Enclosure	IP65 / NEMA 3R
Ambient Temperature	-25~60°C, >45°C Derating
Noise	< 45 dB
Installation Style	Wall-Mounted
Wi-Fi & LAN Communication	Included
Standard Warranty	5 Years

AC Output Data	
Grid Type	Three Phase (3P) [220/380V, 230/400V, 240/420V]
Rated AC Output	12,000W
Peak Power (Off-Grid)	18,000W 5S
Rated AC Output Current (A)	18.2A / 17.4A
Parallel Stacking	Yes - Up to 8
Frequency	60/50Hz
Max continuous AC passthrough (A)	45A
Max Efficiency	97.6%
Idle Consumption Typical—No Load	TBD
Sell Back Power Modes	Limited to Household/Fully Grid-Tied
Design (DC to AC)	Transformerless DC
Response Time (Grid-Tied to Off-Grid)	5ms
Power Factor	+/- 0.8 - 1.0

Protections & Certifications	
PV Input Lightning Protection	Yes
Grid Sell Back — UL1741-2010/2018, IEE-E1547a-2003/2014	Yes
Anti-Islanding Protection	Integrated
PV String Input Reverse Polarity Detection	Integrated
Insulation Resistor Detection	Integrated
Residual Current Monitoring Unit	Integrated
Output Over Current Protection	Integrated
Output shorted Protection	Integrated
Surge Protection	DC Type II / AC Type II

8K-2P-L



 **10.4 KW SOLAR INPUT POWER**

x2 built-in MPPTs for max DC coupled power of 10,400 W
Max AC coupled solar input of 4,000 W
Max combined solar input of 14,400 W

Outdoor rated
NEMA 3R

Built-in solar array disconnect

 **8 KW OUTPUT POWER OFF-GRID**

Continuous AC power of 8,000 W
Supports 120/240/208V connections

Remote WIFI / Ethernet
and local monitoring

 **BATTERY AGNOSTIC**

Lead Acid or Li-ion battery chemistry support
Any battery with nominal DC voltage of 48V
185A continuous battery charging output
Closed loop communication w/ most High-End Li Batteries

 **FULL GENERATOR COMPATIBILITY**

Supports 220/240/208V generators on GRID terminal
Up to 10 KW 240V generators on GEN terminal
Standby generator connection for whole-home backup
Two Wire for automatic generator start



8K-2P-L

Spec Sheet

**Central America
& Caribbean**



Battery Input Data (Optional)

Type	Lead-Acid or Li-Ion
Nominal DC Input	48V
Capacity	50 — 9900Ah
Voltage Range	40V-60V
Continuous Battery Charging Output	185A
Charging Curve	3-Stage w/ Equalization
Grid to Batt Charging Efficiency	96.0%
External Temperature Sensor	Included
Current Shunt for Accurate % SOC	Integrated
External Gen Start Based on Voltage	Integrated
Communication to Lithium Battery	CanBus & RS485

Solar String Input Data

Max Allowed PV Power	10,400W
PV Input Voltage	370V (100~500V)
PV Input Current	26A + 26A
Starting Voltage / Min Voltage	150V
Number of MPPT / Range (V)	2 / 125-425V
Solar Strings Per MPPT	2 + 2
MPPT Efficiency	99.90%

General

Dimensions (H x W x D)	26.4 x 16.5 x 9.2 in
Weight	70.5 lbs
Enclosure	IP65 / NEMA 3R
Ambient Temperature	-25~60°C, >45°C Derating
Noise	<30 dB
Installation Style	Wall-Mounted
Wi-Fi & LAN Communication	Included
Standard Warranty	5 Years

AC Output Data

Grid Type	Split Phase 120V/240V
Rated AC Output	8,000W
Peak Power (Off-Grid)	12,000VA, 5S
Rated AC Output Current (A)	33.3A
Parallel Stacking	Yes - Up to 9
Frequency	60/50Hz
Max continuous AC passthrough (A)	50A
Max Efficiency	97.6%
Idle Consumption Typical—No Load	TBD
Sell Back Power Modes	Limited to Household/Fully Grid-Tied
Design (DC to AC)	Transformerless DC
Response Time (Grid-Tied to Off-Grid)	5ms
Power Factor	+/- 0.8 - 1.0

Protections & Certifications

PV Input Lightning Protection	Yes
Grid Sell Back — UL1741-2010/2018, IEE-	Yes
Anti-Islanding Protection	Integrated
PV String Input Reverse Polarity Detection	Integrated
Insulation Resistor Detection	Integrated
Residual Current Monitoring Unit	Integrated
Output Over Current Protection	Integrated
Output shorted Protection	Integrated
Surge Protection	DC Type II / AC Type



5/8K-1P-L Spec Sheet



Battery Input Data (Optional)	
Type	Lead-Acid or Li-Ion
Nominal DC Input	48V
Capacity	50 — 9900Ah
Voltage Range	40V-60V
Continuous Battery Charging Output	120A (5K) 185A (8K)
Charging Curve	3-Stage w/ Equalization
Grid to Batt Charging Efficiency	96.0%
External Temperature Sensor	Included
Current Shunt for Accurate % SOC	Integrated
External Gen Start Based on Voltage or %SOC	Integrated
Communication to Lithium Battery	CanBus & RS485

Solar String Input Data	
Max Allowed PV Power	10,400W
PV Input Voltage	370V (100~500V)
PV Input Current	20A + 20A
Starting Voltage / Min Voltage	150V
Number of MPPT / Range (V)	2 125-425V
Solar Strings Per MPPT	2 + 2
MPPT Efficiency	99.90%

General	
Dimensions (H x W x D)	22.8 x 13 x 9.1 in
Weight	51lbs (62lbs package)
Enclosure	IP65 / NEMA 3R
Ambient Temperature	-25~60°C, >45°C De-rating
Noise	<30 dB
Installation Style	Wall-Mounted
Wi-Fi & LAN Communication	Included
Standard Warranty	5 Years

AC Output Data	5K	8K
Grid Type (Single Phase only)	120V 1P	230V/240V 1P
Rated AC Output	4,800W	8,000W
Peak Power (Off-Grid)	10,000W, 10S	TBD
Rated AC Output Current (A)	40 A	34.8 A
Parallel Stacking	Yes - Up to 8	
Frequency	60/50Hz	
Max continuous AC passthrough (A)	50A	50A
Max Efficiency	97.6%	
Idle Consumption Typical—No Load	60W	70W
Sell Back Power Modes	Limited to Household/Fully Grid-Tied	
Design (DC to AC)	Transformerless DC	
Response Time (Grid-Tied to Off-Grid)	5ms	
Power Factor	+/- 0.8 - 1.0	

Protections & Certifications	
PV Input Lightning Protection	Yes
Grid Sell Back — UL1741-2010/2018, IEE-E1547a-2003/2014, FCC 15 Class B	Yes
Anti-Islanding Protection	Integrated
PV String Input Reverse Polarity Detection	Integrated
PV Arc Fault Detection — NEC 690.11	Integrated
Insulation Resistor Detection	Integrated
Residual Current Monitoring Unit	Integrated
Output Over Current Protection	Integrated
Output shorted Protection	Integrated
Surge Protection	DC Type II / AC Type II

COMMERCIAL & INDUSTRIAL HYBRID INVERTERS



NEW
30K-3P

208V

LIGHT COMMERCIAL AND INDUSTRIAL

NEW
60K-3P

480V

COMMERCIAL AND INDUSTRIAL



 **INSTALLATIONS
SIMPLIFIED**

Do not spend time piecing multiple parts
for basic functions.
A Sol-Ark All-in-One system does it all,
and does it better.

POWERING FAMILIES THROUGH LIFE™

30K-3P-N | 208V



 **39 KW SOLAR INPUT POWER**

x4 built-in MPPTs for max DC 500V @ self-limiting 36A *(with 0 W of PVdc)
Max AC coupled solar input of 60,000 W
Max combined solar of 39 KWdc + 30 KWac

Outdoor rated
NEMA 3R

French Cleat for
easy installation

x2 built-in solar
array disconnects

Remote WIFI / Ethernet
and local monitoring

 **30 KW OUTPUT POWER OFF-GRID**

Continuous AC power of 30,000 W
Max Grid sell output of 57,000 W with DC + AC coupling
Supports 120/208V 3-Phase connections

 **BATTERY AGNOSTIC**

Only supports Li-ion batteries with nominal Vdc > 300V
Dual 50A inputs with individual BMS connections
100A of continuous battery charging and discharging
Closed loop communications w/ our battery partners

 **60 KW GENERATOR COMPATIBILITY**

Supports 208V generators on GRID breaker
Recommend up to 60 KW generators on GEN breaker
Standby generator connection for whole-building backup
Two Wire for automatic generator start



30K-3P-208V Spec Sheet



Solar Input Power 39,000W	
Max Allowed PV Power	39,000W
Max PV Power Delivered to Battery & AC Outputs	30,000W
Max DC Voltage (Voc)	500V @ 36A
MPPT Voltage Range	170-500V
Starting Voltage	150V
Number of MPPT	4
Max Solar Strings Per MPPT	2
Max DC Current per MPPT (Self Limiting)	36A
Max AC Coupled Input into GEN terminal (Micro / String Inverters)	54kW w/ no PV _{DC} ** 30kVA w/ 39kW PV _{DC}

AC Output Power 30kW On-Grid & Off-Grid	
Connections	120V / 208V Three Phase
Continuous AC Power with PV	30,000W 83.4A (208V)
Continuous AC Power from Batteries	30,000W 83.4A (208V)
Surge AC Power 7 sec	45,000VA 125A (208V)
Parallel Stacking	Yes—Up to 12
Frequency	60/50Hz
Continuous AC Power with Grid or Generator	72,000W 200A L-L (208V) 36,000W 200A L-N (120V)
CEC Efficiency	96.5% (Peak 97.5%)
Idle Consumption Typical—No Load	60W
Sell Back Power Modes	Limited to Household/Fully Grid-Tied
Design (DC to AC)	Transformerless DC
Response Time (Grid-Tied to Off-Grid)	5ms
Power Factor	+/- 0.8 - 1.0

Battery (optional) Output Power 30,000W	
Type Number of Inputs	Li-Ion 2 Inputs
Nominal DC Input	> 300V
Capacity	50 — 9900Ah
Voltage Range	150V—500V
Continuous Battery Charging Output	100A (50A per Input)
Charging Curve	3-Stage w/ Equalization
Grid to Batt Charging Efficiency	96.0%
Battery Fuse	Integrated
Current Shunt for Accurate % SOC	Integrated
External Gen Start Based on Voltage or %SOC	Integrated
Communication to Lithium Battery*	CanBus & RS485

General	
Dimensions (H x W x D)	35.2" x 20.8" x 11.6"
Weight	172 lbs
Enclosure	IP65 / NEMA 3R
Ambient Temperature	-40~60°C, >45°C Derating
Installation Style	Wall-Mounted
Wi-Fi & LAN Communication	Included
Standard Warranty (verified by HALT Testing)	10 years

Protections & Certifications	
Electronics Certified Safety by TÜV Rheinland to NEC & UL Specs	Yes
Grid Sell Back — UL 1741-2021 3rd Edition (incl UL1741SB), CSA C22.2, IEEE 1547-2018 & 1547a-2020 & 1547.1-2020, UL1699B Arc-Fault Circuit-protection Type 1	Yes
PV DC Disconnect Switch — NEC 240.15	Integrated
Ground Fault Detection — NEC 690.5	Integrated
PV Rapid Shutdown Control — NEC 690.12	Integrated
PV Arc Fault Detection — NEC 690.11	Integrated
PV Input Lightning Protection	Integrated
PV String Input Reverse Polarity Protection	Integrated
Surge Protection	DC Type II / AC Type II

60K-3P-N | 480V



78 KW SOLAR INPUT POWER

x4 built-in MPPTs for max DC 1,000V @ self-limiting 36A *(with 0 W of PVdc)
Max AC coupled solar input of 120,000 W
Max combined solar of 78 KWdc + 60 KWac

Outdoor rated
NEMA 3R

French Cleat for
easy installation

x2 built-in solar
array disconnects

Remote WIFI / Ethernet
and local monitoring



60 KW OUTPUT POWER OFF-GRID

Continuous AC power of 60,000 W
Max Grid sell output of 132,00 W with DC + AC coupling
Supports 277/480V 3-Phase connections



BATTERY AGNOSTIC

Only supports Li-ion batteries with nominal Vdc > 300V
Dual 50A inputs with individual BMS connections
100A of continuous battery charging and discharging
Closed loop communications w/ our battery partners



140 KW GENERATOR COMPATIBILITY

Supports 480V generators on GRID breaker
Recommend up to 140 KW generators on GEN breaker
Standby generator connection for whole-building backup
Two Wire for automatic generator start



60K-3P-480V-N Spec Sheet



Solar Input Power 78,000W	
Max Allowed PV Power	78,000W
Max PV Power Delivered to Battery & AC Outputs	60,000W
Max DC Voltage (Voc)	1,000V @ 36A
MPPT Voltage Range	200-850V
Starting Voltage	180V
Number of MPPT	4
Max Solar Strings Per MPPT	2
Max DC Current per MPPT (Self Limiting)	36A
Max AC Coupled Input (Micro / String Inverters)	120kVA w/ no PV ** 60kVA w/ 78kW PVdc

** Software Limitation: 180A x 277V x 3

AC Output Power 60kW On-Grid & Off-Grid	
Connections	277V / 480V Three Phase
Continuous AC Power with PV	60,000W 72.2A (480V)
Continuous AC Power from Batteries	60,000W 72.2A (480V) TBD
Surge AC Power 7 sec	120,000VA 144.4A x 277V x 3
Parallel Stacking	Yes - Up to 12
Frequency	60/50Hz
Continuous AC Power with Grid or Generator	102,000W 160A L-N (277V)
CEC Efficiency	96.5% (Peak 97.5%)
Idle Consumption Typical—No Load	TBD
Sell Back Power Modes	Limited to Household/Fully Grid-Tied
Design (DC to AC)	Transformerless DC
Response Time (Grid-Tied to Off-Grid)	5ms
Power Factor	+/- 0.8 - 1.0

Battery (optional) Output Power 60,000W	
Type Number of Inputs	Li-Ion 2 Inputs
Nominal DC Input	>600V
Capacity	50 — 9,900Ah
Voltage Range	160V ~ 800V
Continuous Battery Charging Output	100A (50A Per Input)
Charging Curve	3-Stage w/ Equalization
Grid to Batt Charging Efficiency	96.0%
Battery Fuse	Integrated
Current Shunt for Accurate % SOC	Integrated
External Gen Start Based on Voltage or %SOC	Integrated
Communication to Lithium Battery	CanBus & RS485

General	
Dimensions (H x W x D)	35.2" x 20.8" x 11.6"
Weight	172 lbs
Enclosure	IP65 / NEMA 3R
Ambient Temperature	-40~60°C, >45°C Derating
Installation Style	Wall-Mounted
Wi-Fi & LAN Communication	Included
Standard Warranty (verified by HALT Testing)	10 years

Protections & Certifications	
Electronics Certified Safety by SGS Labs to NEC & UL Specs - NEC 690.4B & NEC 705.4/6	pending
Grid Sell Back — UL1741-2010/2018, IEE-E1547a-2003/2014, FCC 15 Class B, UL1741SB, CA Rule 21, HECO Rule 14H	pending
PV DC Disconnect Switch — NEC 240.15	Integrated
Ground Fault Detection — NEC 690.5	Integrated
PV Rapid Shutdown Control — NEC 690.12	Integrated
PV Arc Fault Detection — NEC 690.11	Integrated
PV Input Lightning Protection	Integrated
PV String Input Reverse Polarity Protection	Integrated
Surge Protection	DC Type II / AC Type III