POWER
-ING●
TOMO-
RROW●

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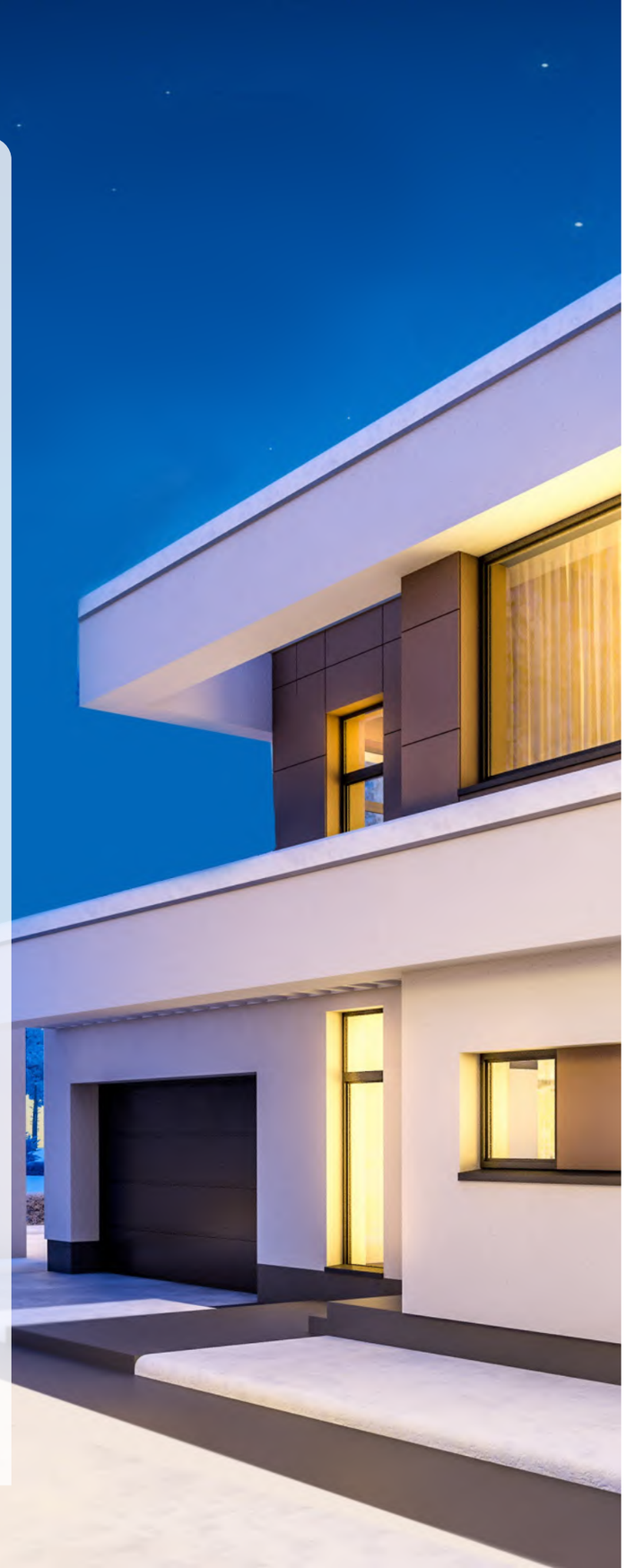
Smart
Photovoltaic
Inverter
Series

2023

helia®

MINI
3000~7600W



- Battery Ready for DC Coupled and AC Coupled systems
- With backup power and dark start operations
- Support RSD and AFCI
- Support multiple energy management modes: Self-consumption, Zero Export,TOU and Off-grid
- Comply with UL1741SA, CA Rule 21 & HECO
- Integrate diesel generator to charge battery for optimal energy management

Datasheet	MINI 3000W	MINI 3800W	MINI 5000W	MINI 6000W	MINI 7600W
Input Data (PV)					
Max. Recommended PV Power(STC)	6000W	7600W	10000W	12000W	15200W
DC/AC Ratio	2				
Max. DC System Voltage	600V				
Startup Voltage	50V				
Full load voltage range	130-500V	160-500V	210-500V	170-500V	210-500V
Nominal Voltage	360V				
Operating Voltage Range	50~550V/LG Battery:50~450V				
No. of MPPT	2	2	2	3	3
No. of PV Strings per MPPT	2/2	2/2	2/2	2/2/2	2/2/2
Max. Input Current per MPPT	13.5A				
Max. Short-circuit Current per MPPT	16.9A				
Input/Output Data (Battery)					
I/O Voltage Range	HEL Battery :360V~550V/LG Battery:350V~450V				
Nominal DC Voltage	400V				
I/O DC Current	9A/9A	11.5A/11.5A	15A/15A	18A/18A	23A/23A
I/O DC Power	3200W	4000W	5200W	6200W	7800W
Battery Technology	LFP / NMC				
Battery Capacity per Module	9.9kWh / 10kWh,16kWh				
Scalability	Up to 4 / Up to 2 in parallel				
Compatible Batterys	**HELIA HEL** HV battery / LG Prime (Gen3) battery				
AC Nominal Power@240V AC	3000W	3800W	5000W	6000W	7600W
AC Nominal Power@208V AC	2600W	3290W	4330W	5200W	6580W
Max. AC Apparent Power	3000VA	3800VA	5000VA	6000VA	7600VA
Nominal AC Voltage	208V/240V				
AC Voltage Range @208V AC @240V AC	183V~229V/211V~264V				
AC Grid Frequency	50/60Hz				
AC Grid Frequency Range	45~65Hz				
Max. Output Current	12.5A	16A	21A	25A	32A
Power Factor(@Nominal Power)	>0.99				
Adjustable Power Factor	0.8 Leading~0.8 Lagging				
THDi	<3%				
AC Grid Connection Type	L1/L2/N/PE				
AC Nominal Power	3000W	3800W	5000W	6000W	7600W
Max. AC Power Output	3600VA	4560VA	6000VA	7200VA	9120VA
Nominal AC Voltage	240V				
Max. Output Current	16A	16.7A	25A	30A	38A
THD	5%				
AC Port-V2 inverter	2AC Ports, 1 for ON Grid, 1 for Backup(EPS) compatible with AUT for Partial Home Backup				
AC Port-V3 Inverter	1AC Port for 1 ON Grid compatible with SY 200A for Whole Home Backup				
Max. Efficiency	98.0%		98.2%	98.4%	98.4%
CEC Efficiency@240V AC	97.0%	97.0%	97.5%	97.0%	97.5%
CEC Efficiency@208V AC	96.5%	97.0%	97.5%	97.0%	97.0%
DC Reverse-polarity Protection	Yes				
DC Switch	Yes				
DC Surge Protection	Type II				
Insulation Resistance Monitoring	Yes				
AC Surge Protection	Type III				
AC Short-circuitS Protection	Yes				
Ground Fault Monitoring	Yes				
Grid Monitoring	Yes				
Anti-islanding Protection	Yes				
Residual-current Monitoring Unit	Yes				
AFCI Protection	Yes				
Dimensions (W / H / D)	15.75/22.41/6.98 inch (400/569/170.5mm)				
Weight	32.3lbs (14.65kg)				
Operating Temperature Range	–13°F~+140°F (–25 °C ~ +60 °C) de-rating above 113°F				
Altitude	9843ft (3000m)				
Internal Consumption at Night	<1W (for PV inverter)/<5W (for storage inverter)				
Cooling	Natural Convection				
Electronics Protection Degree	NEMA4X (IP65)				
Relative Humidity	0~95%				
RS485	Yes				
WIFI/4G Communication	Optional				
Warranty: 10 Years	Yes(optional for extended 15 and 20 years warranty)				
Revenue Grade Meter	ANSI C12.20 (meet 0.5% accuracy)				
	IEEE1547, CA Rule21, Rule14 (HECO Compliant), FCC Part15 Class B, UL1741, UL1741SA,CSA C22.2, UL1699B, UL1741 CRD , UL9540				

MINI
8200~11400W

- Battery Ready for DC Coupled and AC Coupled systems
- With backup power and dark start operations
- Support RSD and AFCI
- Support multiple energy management modes: Self-consumption, Zero Export,TOU and Off-grid
- Comply with UL1741SA, CA Rule 21 & HECO
- Integrate diesel generator to charge battery for optimal energy management

Datasheet	MINI 8200W	MINI 9000W	MINI 10000W	MINI 11400W
Input Data (PV)				
Max. Recommended PV Power(STC)	16400W	18000W	20000W	22800W
DC/AC Ratio	2			
Max. DC System Voltage	600V			
Startup Voltage	50V			
Full load voltage range	170-500V	190-500V	210-500V	235-500V
Nominal Voltage	360V			
Operating Voltage Range	50~550V/LG Battery:50~450V			
No. of MPP Trackers	4			
No. of PV Strings per MPP Trackers	2			
Max. Input Current per MPP Trackers	13.5A			
Max. Short-circuit current per MPP trackers	16.9A			
Input/Output Data (DC)				
Battery Voltage Range	HEL Battery :360V~550V/LG Battery:350V~450V			
Nominal DC Voltage	400V			
I/O DC Current	24A/24A	27A/27A	30A/30A	34A/34A*
I/O DC Power	8500W	9300W	10300W	11700W
Battery Technology	LFP / NMC			
Battery Capacity per Module	9.9kWh / 10kWh,16kWh			
Scalability	Up to 4 / Up to 2 in parallel			
Compatible Batterys	**HELIA HEL** HV battery / LG Prime (Gen3) battery			
AC Nominal Power@240V AC	8200W	9000W	10000W	11400W
AC Nominal Power@208V AC	7280W	7900W	8735W	9880W
Max. AC Apparent Power	8200VA	9000VA	10000VA	11400VA
Nominal AC Voltage	208V/240V			
AC Voltage Range @208V AC @240V AC	183V~229V/211V~264V			
AC Grid Frequency	50/60Hz			
AC Grid Frequency Range	45~65Hz			
Max. Output Current	35A	38A	42A	48A
Power Factor(@Nominal Power)	>0.99			
Adjustable Power Factor	0.8 leading~0.8 lagging			
THDI	<3%			
AC Grid Connection Type	L1/L2/N/PE			
Output Data (Backup)				
AC Nominal Power	8200W	9000W	10000W	11400W*
Max. AC Power Output	9840VA	10800VA	12000VA	13680VA
Nominal AC Voltage	240V			
Max. Output Current	41A	45A	50A	57A
THD	5%			
AC Port-V2 inverter	2AC Ports, 1 for ON Grid, 1 for Backup(EPS) compatible with AUT for Partial Home Backup			
AC Port-V3 Inverter	1AC Port for 1 ON Grid compatible with SY 200A for Whole Home Backup			
Max. Efficiency	98.3%	98.3%	98.3%	98.5%
CEC Efficiency@208V AC	97.5%	97.5%	97.5%	97.5%
CEC Efficiency@240V AC	97.5%	97.5%	97.5%	98.0%
DC Reverse-polarity Protection	Yes			
DC Switch	Yes			
DC Surge Protection	Type II			
Insulation Resistance Monitoring	Yes			
AC Surge Protection	Type III			
AC short-circuit Protection	Yes			
Ground Fault Monitoring	Yes			
Grid Monitoring	Yes			
Anti-islanding Protection	Yes			
Residual-current Monitoring Unit	Yes			
AFCI Protection	Yes			
Dimensions (W / H / D)	15.8/25.2/7.4inch(400/638/187mm)			
Weight	45.2 lbs /20.5kg			
Operating Temperature Range	-13°F~+140°F (-25 °C ~ +60 °C)de-rating above 113°F			
Altitude	9843ft (3000m)			
Internal Consumption at Night	<1W (for PV inverter)/ <5W (for storage inverter)			
Cooling	Natural Convection			
Electronics Protection Degree	NEMA4X (IP65)			
Relative Humidity	0~95%			
RS485	Yes			
WIFI/4G Communication	Optional			
Warranty: 10 Years	Yes(optional for extended 15 and 20 years warranty)			
Revenue Grade Meter	ANSI C12.20 (meet 0.5% accuracy)			
	IEEE1547, CA Rule21, Rule14(HECO Compliant), FCC Part15 Class B, UL1741,UL1741SA,CSA C22.2, UL1699B, UL1741 CRD, UL9540			

* 34A/34A can only be achieved with LG battery, HEL battery is 30A/30A.
* 11700W can only be achieved with LG battery, HEL battery is 10300W.
* 11400W when using HEL battery,11400W off-grid output requires both PV and battery power supply, and HEL battery itself has a rated off-grid power of 10kW.