

# RESIDENTIAL ENERGY STORAGE BATTERY

**ION-LV-US-8-10KW**

**(NEW GENERATION 5)**

**ion  
ENERGY**



## RESIDENTIAL ENERGY STORAGE BATTERY // ION-LV-US-8-10KW

**Supports up to 10pcs in parallel for on/off grid**

**On/off grid seamless switching**

**2 MPPTs with 4 strings input, Max. PV input 15kW**

- Peak shaving function
- AFCI protection integrated
- Separate port for
- Generator connection
- Auto generator control
- Support generator exercise
- Support generator boost function
- Or smart load connection and auto control
- Breakers (Gen, Load and Battery) are integrated
- Or AC coupling function

# Residential Energy Storage Battery

## ION-LV-US-8-10KW



### Specifications

INPUT (PV DC)	ION-LV-US-8KW	ION-LV-US-10KW
Max. PV array power(W)	12000	15000
Rated PV input voltage(V)		360
Number of independent MPPT inputs		2/(2:2)
PV input voltage range(V)		100~600
MPPT voltage range(V)		120~500
Start-up voltage(V)		140
Max. PV input current per MPPT(A)		25/25
Max. PV short-circuit current input per MPPT(A)		31/31
<b>Battery</b>		
Compatible battery type	Lithium-ion/Lead-Acid	
Rated battery voltage(V)	48	
Battery voltage range(V)	40~60	
Max. charge/discharge current(A)	167	210
Max. charge/discharge power(W)	8000	10000
Force wake up battery from PV function	YES	
<b>Grid</b>		
Rated AC voltage(V)	240/208	
Rated AC frequency(Hz)	60	
Rated AC output current	33.3A@240V/38.5A @208V	41.6A@240V/48A @208V
Rated AC output power(W)	8000	10000
Max. AC input current(A)	63	63
PF	0.99 (Adjustable from 0.8 leading to 0.8 lagging)	
THDI	3%	
<b>UPS</b>		
Rated output power(W)	8000	10000
Rated output voltage(V)	120/240; 120/208	
Rated output current	33.3A@240V/38.5A @208V	41.6A@240V/48A @208V
Rated output frequency(Hz)	60	
Surge power, duration	2Ph, 0.5s	
Switching time	20ms	
Wave form	Sine wave	
THDV	<3%	
<b>Efficiency</b>		
Max. MPPT efficiency	99.9%	
Max. efficiency	97.5%	
Battery charge/discharge efficiency	94.0%	
CEC efficiency	96.4%	
<b>Protection</b>		
PV reverse polarity protection	YES	
Over current/voltage protection	YES	
Anti-islanding protection	YES	
AC short-circuit protection	YES	
Leakage current protection	YES	
DC switch	YES	
AC/DC surge protection Type III	YES	
Rapid shut down	YES	
Grid/AFCI/RSD monitoring	YES	
Grid/GEN breaker(Current/Voltage)	63A/480V	
Load breaker(Current/Voltage)	63A/480V	
Battery breaker(Current/Voltage)	250A/80V	
<b>General</b>		
Dimensions(W*H*D)	520*750*285mm/20.5*29.5*11.2inch	
Weight	50kg/110lbs	
Ingress protection rating	IP65/NAME 4X	
Relative humidity	0~100%	
Operating environment temperature range	-25~60 °C, >45°C Derating	
Storage temperature range( °C)	-25~60 °C	
Display & Communication interface	Touch color screen, RS485/Wi-Fi/CAN	
Warranty	5/10 years	
Cooling method	Smart Cooling	
Topology	Transformer-less	
Altitude	<2000m	
<b>Standards &amp; Certification</b>		
E5000, SA17-18, CSA STD. C22.2 No.107.1 and 330, UL STD.1741, 1741SB, UL1998:2018, IEEE STD.1547 and 1547.1, IEEE STD. HECO SRD-IEEE-1547.1, ETL, cETLus, America CEC List, NEC. section690.12		