

All In One Energy Storage System

»»» Three Phase Storage Solution (HV)

TNE
BATTERIES



IP65

IP65 Outdoor Design



Modular Design
Plug & Play

AFCI

AFCI Standard



Scalable Design
Up To 25.6kWh

UPS

UPS function
switch time \approx 10ms



RSD Ready
VPP Ready

Lithium Valley ATH Series is an all-in-one solar and storage solution that integrates the inverter, battery charger, UPS-level switching, and battery enclosure into a pre-wired modular system for easier and faster installation. The compact, elegantly designed, and robust unit is IP65 rated, so it can be mounted either inside or outside withstanding all weather conditions and brings a reduction of installation time of up to 50%.

FOR SOLAR + ENERGY STORAGE SYSTEM

POWER 3 / 4 / 5 / 6 / 8 / 10 / 12 / 15 kW

CAPACITY 7.68kWh - 25.6kWh Battery Capacity

■ Technical Data LV3K-ATH LV4K-ATH LV5K-ATH LV6K-ATH LV8K-ATH LV10K-ATH LV12K-ATH LV15K-ATH

PV input

Max. DC Input Power (kW)	5	6	7.5	9	12	15	18	22.5
Max. PV Voltage (V)	1000							
Rated DC Input Voltage (V)	620							
DC Input Voltage Range (V)	150-1000							
MPPT Voltage Range (V)	150-850							
Full MPPT Range (V)	200-850		250-850		300-850		500-850	
Start-up Voltage (V)	160							
Max. DC Input Current (A)	20x 2							
Max. Short Current(A)	30x 2							
No. of MPPT Tracker/Strings	2/2							

Battery Port

Battery Nominal Voltage (V)	150	200	200	250	300	350	450	500
Battery Voltage Range (V)	80-600							
Max. Charge/Discharge Current (A)	30							
Max. Charge/Discharge Power (kw)	3	4	5	6	8	10	12	15
Charging Curve	3 Stages							
Compatible Battery Type	Li-ion/Sodium-ion battery							

AC Grid

Nominal AC Output Power (kW)	3	4	5	6	8	10	12	15
Max. AC Input/Output Power (kVA)	4.5/3.3	6/4.4	7.5/5.5	9/6.6	12/8.8	15/11	18/13.2	22.5/16.5
Max. AC Output Current (A)	5.3	7	8.5	10.5	13.5	17	21.5	27
Nominal AC Voltage (V)	230/400							
Nominal AC Frequency (Hz)	50 / 60							
Power Factor	1(-0.8-0.8)adjustable							
Current THD (%)	< 3%							

AC Load Output (Back-up)

Nominal Output Power (VA)	3000	4000	5000	6000	8000	10000	12000	15000
Nominal Output Voltage (V)	230/400							
Nominal Output Frequency (Hz)	50/60							
Nominal Output Current (A)	4.4	5.8	7.3	8.7	11.6	14.5	17.4	21.8
Peak Output Power	3300VA,60s	4400VA,60s	5500VA,60s	6600VA, 60s	8800VA, 60s	11000VA,60s	13200VA,60s	16500VA,60s
THDV (with linear load)	< 3%							
Switching Time (ms)	< 10							

Efficiency

CEC Efficiency	97.50%							
Max. Efficiency	98.00%				98.20%		98.30%	
PV to Bat. Efficiency	98.00%							



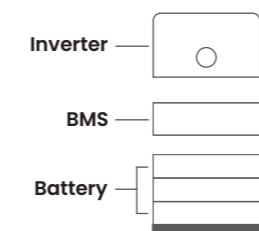
Factory Address: No. 11, Yinyang Road, Zhangyang Community, Zhangmutou Town, Dongguan

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Protection	
Reverse Polarity Protection	✓
Over Current /Voltage Protection	✓
Anti-islanding Protection	✓
AC Short-circuit Protection	✓
Leakage Current Detection	✓
Ground Fault Monitoring	✓
Grid Monitoring	✓
Enclosure Protect Level	IP65

General Data	
Dimensions (W x H x D, mm)	600 x 432 x 210
Weight (kg)	25
Topology	Transformerless
Cooling Concept	Natural Convection Intelligent Fan
Relatively Humidity	0 - 100 %
Operating Temperature Range (°C)	- 25 to 60
Operating Altitude (m)	< 4000
Noise Emission (dB)	< 40
Standby Consumption (W)	< 5
Display & Communication Interfaces	LCD, LED, RS485, CAN, Wi-Fi, GPRS, 4G
Certification & Approvals	NRSO97, G98/G99, EN50549-1, C10/C11, AS4777.2, VDE-AR-N4105, VDE0126, IEC62109-1, IEC62109-2
EMC	EN61000-6-2, EN61000-6-3



3 Packs | 4 Packs | 5 Packs | 6 Packs | 7 Packs | 8 Packs | 9 Packs | 10 Packs

7.68kWh | 10.24kWh | 12.8kWh | 15.36kWh | 17.29kWh | 20.48kWh | 23.04kWh | 25.6kWh

Model LV2500W-HB

Parameter	
Nominal Voltage(Vdc)	51.2
Nominal Capacity(Wh)	2560
Working Voltage Range(Vdc)	129.6-516.6
Charge Voltage(Vdc)	56.16
Nominal Charge/Discharge Current(A)	25
Max.Charge/Discharge Current(A)	50
Peak Current(A)	100@3sec
Series Connection	3-10 pcs
Cycle Life	6000 @ 80% DOD, 25°C / 0.5C

Structure

Power Module Dimensions(mm)/Weight(kg)	600*210*250 /14
BaNery Module Dimensions(mm)/Weight(kg)	600*210*160 /27
Lampstand Module Dimensions(mm)/Weight(kg)	600*210*90 /5
Top Cap Module Dimensions(mm)/Weight(kg)	600*210*50 /2.5
IP Rating	IP65
Installation	Stacked

Working Environment

Charge Working Temperature(°C)	0-55
Discharge Working Temperature(°C)	-20~60
Altitude(M)	<2500
Humidity(RH)	5-95% (w/o condensing)

Communication

Communication Port	RS485, CAN
Display	SOC status indicator, LED indicator

Certification

CB, IEC62619, CE-EMC, CE-GPSP, UKCA, UL1973, UL9540A, EN62040, IEC62040; UN38.3, MSDS