LVTOPSUN

LITHIUM BATTERY SOLUTIONS PROVIDER

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广东绿达新能源有限公司 GUANGDONG LVTOPSUN NEW ENERGY CO., LTD

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CONTENTS

COMPANY PROFILE

Established in 2016, Guangdong LVTOPSUN new energy Co., Ltd. is a well-known enterprise, dedicated to providing one-stop solution for new energy storage batteries.

As a professional manufacturer, LVTOPSUN is specializing in R&D, production, sales and services of energy storage bat- teries with over 10 years' experience. We boast a series of world-class production equipment lines with intelligent robotic arms, high precise detection instruments and monitor screen together to ensure the superior quality of batteries.

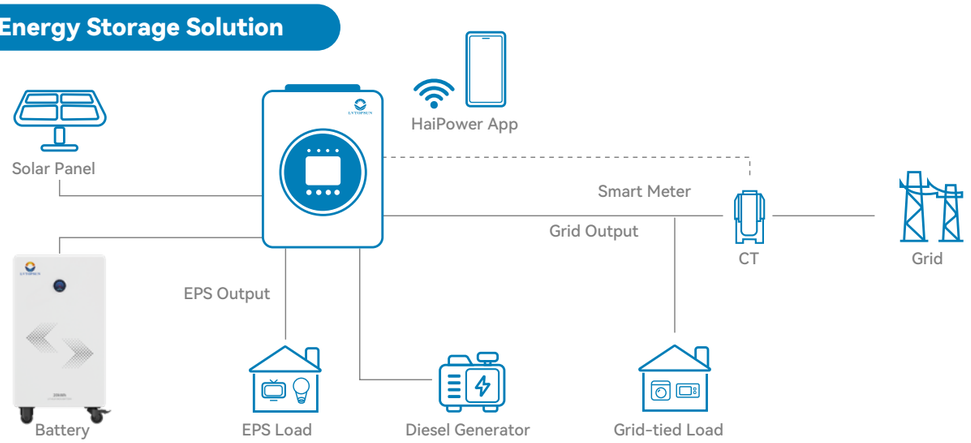
Our energy storage lithium batteries are renowned for their high quality, long lifetime, and excellent safety. We have already developed business in more than 50 countries covering the districts of Southeast Asia, the Middle East and Africa. In the future, we will continue to expand international markets in Europe and North America based on top-notch materials, advanced production technology, and world-class quality combined.

MATCH MAINSTREAM INVERTER

PRODUCTION LINE

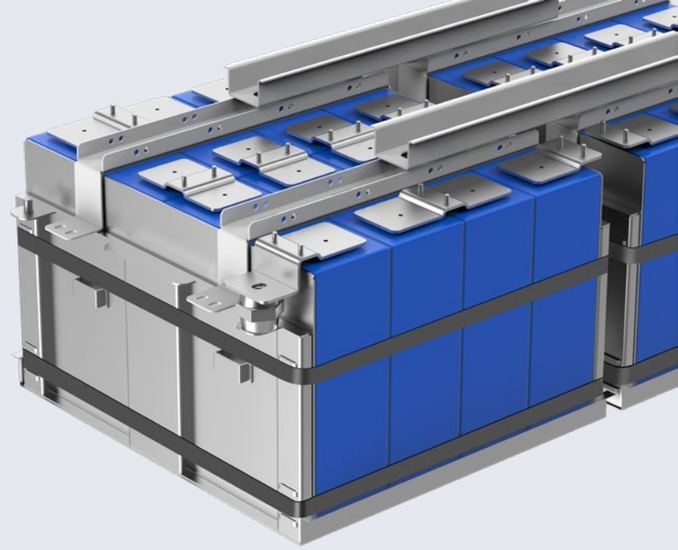
LVTOPSUN possesses strong R&D and production capabilities, world-class automation and automatic production line, and high-tech equipment and advanced technology.

Energy Storage Solution



Durable

Safe and stable



IP65 Heavy-Duty Protection, Non-Stop Energy Storage

LVTS-512392

Nominal Voltage	51.2 Vdc
Nominal Capacity	392 Ah
Battery Energy	20 kWh
Charge Current	196 A
Charge Power	10035.2 W
Discharge Current	300 A
Discharge Power	15360 W
Short Circuit Current	≈900 A
Working Voltage	45.6~56.16 Vdc
Display	LCD Display
Communication	CAN, RS485,RS232
Dimension (WxDxH mm)	500x270x920 mm
Weight (Kg)	155 kg
Installation	Floor Stand
Working Temperature	Charge : 0~45°C / Discharge : -20~55°C
Operating/Storage Humidity	≤95%RH
Max Operating Altitude	≤2000m
IP Rating	IP65
Cell Technology	$LiFePO_4$, Lithium Iron Phosphate
Cycle life	8000 Cycles @ 90% DOD/25°C/0.5C
Scalability	Max 63 batteries in parallel
Warranty	10 years
Certificates	CE, UN38.3

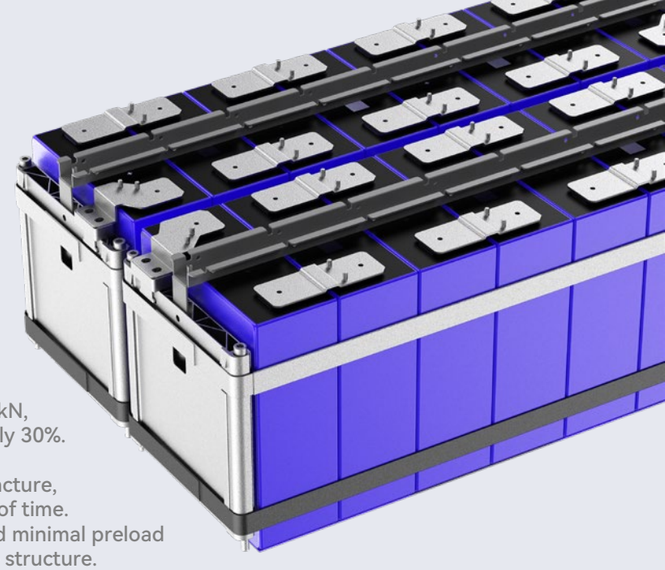
Guardian of Safety

24/7 Real-Time Temperature Monitoring
and Integrated Automatic Fire-Suppression System

Durable

Safe and stable

Metal fixation system



Core advantages of the bonding process:

1. Strong constraint and structural stability:
   When the bonding force is controlled between 20-40 kN, the battery cycle life can be extended by approximately 30%.
2. Anti-fatigue and long-term reliability:
   The steel strip is resistant to plastic deformation or fracture, maintaining a stable preload force over a long period of time. Furthermore, it exhibits good dimensional stability and minimal preload decay, ensuring the long-term integrity of the module structure.

The core advantages of aluminum end plates are:

1. Corrosion resistance and long lifespan.
2. High strength and reliable protection:
   The tensile strength of aluminum alloys such as 6061 and 6063 exceeds 310MPa, capable of withstanding pressures exceeding 300 kilograms, effectively resisting external impacts and vibrations, and protecting the internal cell structure from destabilization.

LVTS-512314-G4

Nominal Voltage	51.2 Vdc
Nominal Capacity	314 Ah
Battery Energy	16.07 kWh
Working Voltage	45.6~56.16V
Charge Current	150 A
Charge Power	7680 W
Discharge Current	200 A
Discharge Power	10240 W
Short Circuit Current	540 A
Display	SOC status indicator, LCD Display
Communication	RS232、RS485、CAN
Product Features	Automatic sensing fire extinguishing device/Bluetooth/WiFi
Dimension (WxDxH mm)	480x235x874 mm
Weight (Kg)	120 kg
Installation	Floor stand
Working Temperature	Charge : 0~45℃ / Discharge : -20~55℃
Operating/Storage Humidity	≤95%RH
Max Operating Altitude	≤2000m
IP Rating	IP65
Cell Technology	$LiFePO_4$, Lithium Iron Phosphate
Cycle life	8000 Cycles @ 90% DOD/25℃/0.5C
Scalability	Max 63 batteries in parallel
Warranty	10 years

MODEL	LVTS-48100-NS	LVTS-512100-NS
Nominal Voltage	48 Vdc	51.2 Vdc
Nominal Capacity	100 Ah	100 Ah
Battery Energy	4.8 kwh	5.12 kwh
Working Voltage	42.75~52.65 Vdc	45.6~56.16 Vdc
Max Charge Power	2400 W	2560 W
Max Discharge Power	4800 W	5120 W
Weight (Kg)	40.5 kg	47.3 kg
Dimension (WxDxH mm)	1440x500x132 mm	
Max Charge Current	50 A	
Max Discharge Current	100 A	
Short circuit current	350 A	
Display	SOC statusindicator, LED indicator	
Communication	RS232、RS485、CAN	
Installation	Rack mounted or wall mounted	
WorkingTemperature	Charge : 0~45°C / Discharge : -20~55°C	
Storage Temperature	≤25°C,12 months; ≤35°C,6 months; ≤45°C,3 months	
Operating /Storage /humidity	≤95%RH	
Max Operating Altitude	≤2000m	
IP Rating	IP20	
Cell Technology	$LiFePO_4$, Lithium Iron Phosphate	
Cycle life	6000 Cycles @ 90% DOD/25°C/0.5C	
Warranty	5 years	
Scalability	Max 15 batteries in parallel	

LVTS-512100-G3	
Nominal Voltage	51.2 Vdc
Nominal Capacity	100 Ah
Battery Energy	5.12 kWh
Working Voltage	45.6~56.16 Vdc
Charge Current	50 A
Charge Power	2560 W
Discharge Current	100 A
Discharge Power	5120 W
Short Circuit Current	350 A
Display	LCD Display
Communication	CAN, RS485,RS232
Dimension (WxDxH mm)	440x138x600 mm
Weight (Kg)	47.3 kg
Installation	Floor Stand or Wall Mount
Working Temperature	Charge : 0~45°C / Discharge : -20~55°C
Operating/Storage Humidity	≤95%RH
Max Operating Altitude	≤2000m
IP Rating	IP20
Cell Technology	$LiFePO_4$, Lithium Iron Phosphate
Cycle life	6000 Cycles @ 90% DOD/25°C/0.5C
Scalability	Max 15 batteries in parallel
Warranty	5 years
Certificates	CE, UN38.3, RoHS

LVTS-512200-G3

Nominal Voltage	51.2 Vdc
Nominal Capacity	200 Ah
Battery Energy	10.24 kWh
Working Voltage	45.6~56.16 Vdc
Maximum Charge Current	100 A
Maximum Discharge Current	170 A
Maximum Charge Power	5120 W
Max Discharge Power	8704 W
Short circuit current	≈300 A
Display	LCD Display
Communication	CAN, RS485,RS232
Dimension (WxDxH mm)	450x230x680 mm
Weight (Kg)	83.5 kg
Installation	Floor Stand or Wall Mount
WorkingTemperature	Charge : 0~45°C / Discharge : -20~55°C
Storage Temperature	≤25°C,12 months; ≤35°C,6 months; ≤45°C,3 months
Operating /Storage /humidity	≤95%RH
Max Operating Altitude	≤2000m
IP Rating	IP20
Cell Technology	$LiFePO_4$, Lithium Iron Phosphate
Cycle life	6000 Cycles @ 90% DOD/25°C/0.5C
Warranty	5 years
Scalability	Max 63 batteries in parallel

LVTS-512314-G3

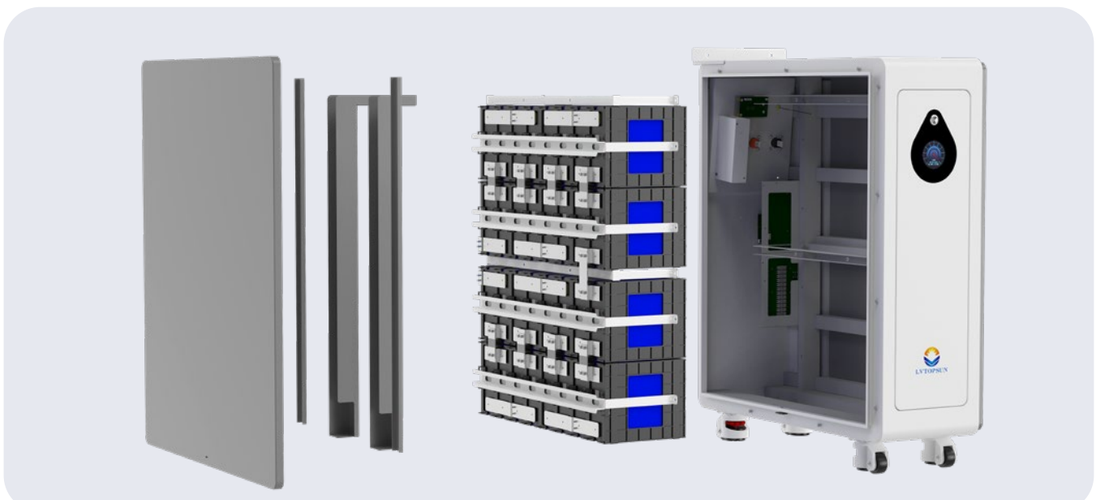
Nominal Voltage	51.2 Vdc
Nominal Capacity	314 Ah
Battery Energy	16.07KWh
Working Voltage	56.16 V
Maximum Charge Curr	150 A
Maximum Discharge Current	200 A
Charge Power	7680W
Discharge Power	10240W
Short Circuit Curr	≈540 A
Display	LCD Display
Communication	CAN, RS485,RS232
Dimension (WXDXH mm)	450x230x866 mm
Weight (Kg)	119 kg
Working Temperature	Charge 0°C~45°C / Discharge-20°C~55°C
Storage Temperature	Short Term(within 1 month) -10°C~45°C
	LongTerm(within 1 year)0°C~35°C
Storage Humidity	≤ 95%RH
Max Operating Altitude	≤2000m
IP Rating	IP20
Cell Type	$LiFePO_4$, Lithium Iron Phosphate
Warranty	5 years
Cycle life	8000 Cycles @ 90% DOD/25°C/0.5C
Certificates	CE, UN38.3

LVTS-512100-G2

- Grade A Battery Cells
- Vertical fixed stacking
- 6000 Cycles
- Smart BMS

MODEL	LVTS-512100 -1-G2	LVTS-512100 -2-G2	LVTS-512100 -3-G2	LVTS-512100 -4-G2
Nominal Capacity	100 Ah	200 Ah	300 Ah	400 Ah
Battery Energy	5.12 kWh	10.24 kWh	15.36 kWh	20.48 kWh
Max Charge Current	50 A	100 A	150 A	200 A
Max Charge Power	2500 W	5000 W	7500 W	10000 W
Max Discharge Current	100 A	200 A	200 A	200 A
Max Discharge Power	5000 W	10000 W	10000 W	10000 W
Dimension (WxDxH mm)	620X145X435 MM	620X145X816 MM	620X145X1197 MM	620X145X1578 MM
Weight (kg)	45 kg	87.5 kg	130 kg	172.5 kg
Nominal Voltage	51.2 Vdc			
Working Voltage	45.6~56.16 Vdc			
Short circuit current	350 A			
Installation	Ground mounted or wall mounted			
Working Temperature	Charge : 0~45°C / Discharge : -20~55°C			
Storage Temperature	≤25°C,12 months; ≤35°C,6 months; ≤45°C,3 months			
Operating/Storage /humidity	≤95%RH			
Max Operating Altitude	≤2000m			
IP Rating	IP20			
Cell Technology	$LiFePO_4$, Lithium Iron Phosphate			
Cycle life	6000 Cycles @ 90% DOD/25°C/0.5C			
Scalability	Max 15 batteries in parallel			
Warranty	10 years			
Display	SOC statusindicator, LED indicator			
Communication	RS232、RS485、CAN			

MODEL	LVTS-5220 -HV2	LVTS-5220 -HV4	LVTS-5220 -HV6	LVTS-5220 -HV8	LVTS-5220 -HV10	LVTS-5220 -HV12
Nominal Voltage(Vdc)	102.4	204.8	307.2	409.6	512	614.4
Operating Voltage(Vdc)	83.2-113.6	166.4-227.2	249.6-340.8	332.8-454.4	416-568	499.2-681.6
Battery Energy(kWh)	10.44	20.88	31.32	41.76	52.20	62.64
Charge Power(W)	5120	10240	15360	20480	25600	30720
Discharge Power(W)	8192	16384	24576	32768	40960	49152
Dimension (WxDxH mm)	620x380x506	620x380x783	620x380x1060	620x380x1337	620x380x1614	620x380x1891
Weight (Kg)	110 kg	200 kg	290 kg	380 kg	470 kg	560 kg
Nominal Capacity(Ah)	102					
Charge Current(A)	50					
Discharge Current(A)	80					
Display	4.3 inch (16:9) Touch Screen					
Communication	CAN					
Installation	Floor Stand					
Working Temperature	Charge:0~45°C/Discharge: -20°C~55°C					
Storage humidity	≤95% RH					
Warranty	5 years					
Max Operating Altitude	≤2000m					
IP Rating	IP65					
Cell Technology	$LiFePO_4$, Lithium Iron Phosphate					
Cycle life	6000 Cycles @ 90% DOD/25°C/0.5C					
Scalability	Max 6 piles in parallel					
Certificates	CE, UN38.3					



STORE ENERGY BY DAY, GUARD HOME
BY NIGHT—LIGHT IS ALWAYS ON.

LVTS-512628

Nominal Voltage	51.2 Vdc
Nominal Capacity	628 Ah
Battery Energy	32 kWh
Charge Current	150 A
Charge Power	7680 W
Discharge Current	200 A
Discharge Power	10240 W
Short circuit current	540 A
Display	LCD Display
Communication	CAN, RS485,RS232
Dimension (WxDxH mm)	800x325x900 mm
Weight (kg)	240 kg
Installation	Floor Stand
Operating Temperature	Charge:0~45°C / Discharge: -20°C~55°C
Operating /Storage	≤95% RH
Max Operating Altitude	≤2000 m
IP Rating	IP20
Cell Technology	$LiFePO_4$, Lithium Iron Phosphate
Cycle life	8000 Cycles @ 90% DOD/25°C/0.35C
Scalability	Max 63 batteries in parallel
Warranty	5 years
Certificates	CE, UN38.3

LVTS-256100	
Nominal Voltage	25.6 Vdc
Nominal Capacity	100 Ah
Battery Energy	25.6V,100Ah,2.56 kWh
Charge Current	50 A
Charge Power	1280 W
Discharge Current	100 A
Discharge Power	2560 W
Short Circuit Current	≈350 A
Dimension (WxDxH mm)	330x135x420 mm
Weight (Kg)	26 kg
Installation	Wall Mount
Display	LCD Display
Working Temperature	Charge:0~45°C / Discharge: -20°C~55°C
Operating/Storage	≤ 95%RH
Max Operating Altitude	≤2000m
IP Rating	IP20
Cell Technology	$LiFePO_4$, Lithium Iron Phosphate
Cycle life	6000 Cycles @ 80% DOD/25°C/0.5C
Scalability	Max 2 batteries in series Max 4 batteries in parallel
Warranty	5 years
Certificates	CE, UN38.3

MODEL	LVTS-256200	LVTS-256314
Nominal Capacity	200 Ah	314 Ah
Battery Energy	5120 Wh	8038.4 Wh
Charge Current	100 A	150 A
Discharge Current	160 A	200 A
Weight (Kg)	50 kg	62.5 kg
Dimension (WxDxH mm)	580x430x230 mm	
Nominal Voltage	25.6 Vdc	
Discharge Voltage Range	22.8 V~28.4 V	
Display	Button Screen	
Communication	CAN,RS485,RS232	
Installation	Wall Mount	
Display	LCD Display	
Working Temperature	Charge:0~45°C / Discharge: -20°C~55°C	
Operating/Storage	≤ 95%RH	
Max Operating Altitude	≤2000m	
IP Rating	IP20	
Cell Technology	$LiFePO_4$, Lithium Iron Phosphate	
Cycle life	6000 Cycles @ 80% DOD/25°C/0.5C	
Scalability	Max 63 batteries in parallel	
Warranty	5 years	
Certificates	CE, UN38.3	

MODEL	LVTS-128100	LVTS-128200	LVTS-128314
Nominal Ratings	12.8 V,100 Ah, 1.28kWh	12.8 V,200 Ah, 2.56kWh	12.8 V,314 Ah, 4.02kWh
Charge Current	50 A	100 A	150 A
Discharge Current	100 A	200 A	200 A
Short Circuit Current	≈1000 A	≈2000 A	≈1500 A
Dimension (WxDxH mm)	260X168X210 MM	520X168X210 MM	387X206X269 MM
Weight (Kg)	9.85 kg	26 kg	27 kg
Bulk Charge Voltage	14 V		
Float Charge Voltage	13.8 V		
Low Voltage	12.8 V		
Cutoff Voltage	11.6 V		
Working Temperature	Charge:0~45°C / Discharge: -20°C~55°C		
Operating/Storage	≤ 95%RH		
Max Operating Altitude	≤2000m		
IP Rating	IP54		
Cell Technology	$LiFePO_4$, Lithium Iron Phosphate		
Cycle life	6000 Cycles @ 80% DOD/25°C/0.5C		
Warranty	5 years		
Scalability	Max 4pcs in series	Max 4pcs in parallel	
Certificates	CE, UN38.3		

MODEL	LVTS-256100	LVTS-256200
Nominal Ratings	25.6 V,100 Ah,2.56 kWh	25.6 V,200 Ah,5.12 kWh
Charge Current	50 A	100 A
Discharge Current	100 A	200 A
Short Circuit Current	≈1000 A	≈2000 A
Dimension (WxDxH mm)	491X182X232 mm	580X430X230 mm
Weight (Kg)	19 kg	51 kg
Bulk Charge Voltage	28 V	
Float Charge Voltage	27.6 V	
Low Voltage	25.6 V	
Cutoff Voltage	23.2 V	
Working Temperature	Charge:0~45°C / Discharge: -20°C~55°C	
Operating/Storage	≤ 95%RH	
Max Operating Altitude	≤2000m	
IP Rating	IP54	
Cell Technology	$LiFePO_4$, Lithium Iron Phosphate	
Cycle life	6000 Cycles @ 80% DOD/25°C/0.5C	
Warranty	5 years	
Scalability	Max 2pcs in series	Max 4pcs in parallel
Certificates	CE, UN38.3	

Features

Oversizing Ratio
Higher PV/AC ratio up to 1.5, allowing greater energy harvest

Exceptional Load-carrying Capability
Support battery discharge current of up to 280A
Support higher loads powered by battery only

Parallel Connection
Support parallel connection up to 9 units

Powerful Instant Overload Capacity
Support 2 times the rated power for 5 seconds in off-grid mode

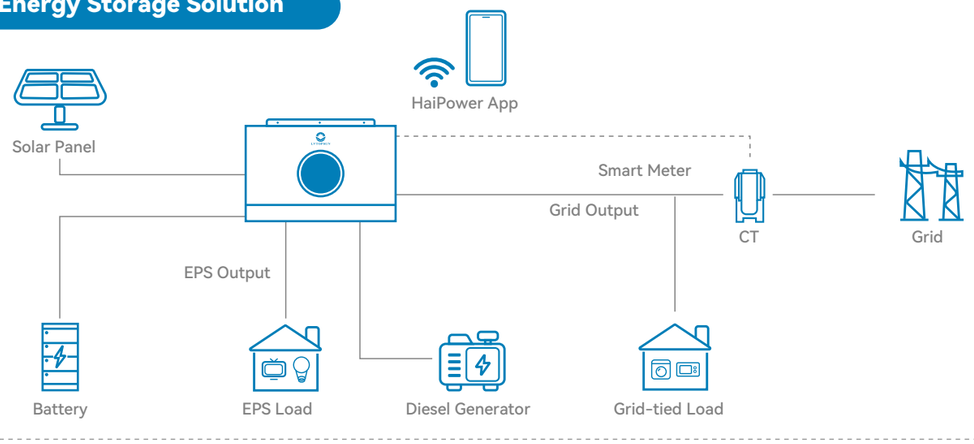
Smart Load Management
Dual AC outputs to power loads on demand priority

Generator Input
Equipped with GEN port to connect with diesel generator

Seamless Switchover
UPS-level switching time≤4ms

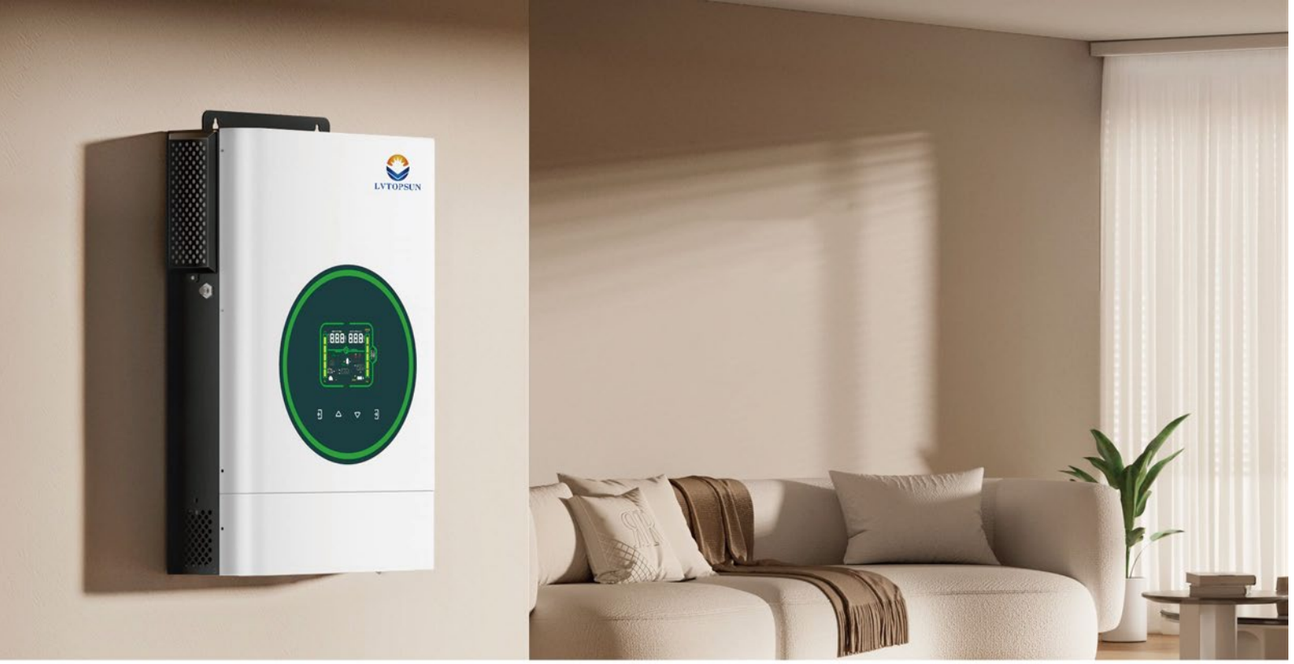
Superior High-Temperature Stability
Allow full-power output up to 12kW under high-temperature conditions

Energy Storage Solution



Specifications

Model	LVTS-12KW-HYD
Solar Input Data	
Recommended Max. PV Array Size	24000W
Max. PV Input Power	18000W
Max. Input Voltage	500V
Start-up Voltage	90V
MPPT Voltage Range	90~450V
Max. Input Current per MPPT	30+30A
Max. Short Circuit Current per MPPT	44+44A
Number of MPPT	2
Number of Strings per MPPT	2
Battery Data	
Battery Type	Li-Ion / Lead-acid
Nominal Battery Voltage	48V
Battery Voltage Range	40~60V
Max. Discharge Current	280A
Max. Charge / Discharge Power	12000W
Li-Ion Battery Activation	Yes
Li-Ion Battery Communication	CAN / RS485
Max. Solar Charge Current	250A
Max. AC Charge Current	210A
Max. Charge Current (PV+AC)	250A
AC Input Data (Grid / GEN)	
Nominal Input Voltage	230Vac, L / N / PE
Input Voltage Range	90~280(APL) / 170-265(UPS)
Max. AC Current From Utility Grid	70A
Max. Apparent Power from Utility Grid	12000VA
Max AC Current From Generator	60A
Max. Apparent Power From Generator	12000VA
AC Frequency Range	50 / 60Hz (Auto sensing)
Inverter Output Data	
Nominal Output Power	12000W
Peak Apparent AC Power	24000VA
Nominal AC Voltage	230Vac
Nominal Grid Frequency	50 / 60Hz
Voltage Waveform	Pure Sine wave
Transfer Time	4ms
Max. Output Current	52.2A
Overload Protection	30s@102%-110% load; 10s@110%-130% load; 5s@130%-200% load
THDv (@linear load)	<5%
Efficiency	
Peak Efficiency	94%
MPPT Efficiency	≥99.9%
Protection	
PV Reverse Polarity Protection	yes
AC Short-circuit Current Protection	yes
Grid Monitoring	yes
Over-current Protection	yes
Over-voltage Protection	yes
AC Surge Protection	yes
DC Surge Protection	yes
System Parameters	
Dimension (W*H*D)	625*400*120mm
Weight	17.9kg
Relative Humidity	5%~95% (Non-condensing)
Operating Temperature Range	-10℃~60℃
Noise Emission	≤50dB
Altitude	2000m
Cooling Method	Fan Cooling
Ingress Protection	IP21
Characteristic	
Number of AC Output	2
Display	LCD & APP
Communication Interface	RS485 / USB / CAN / Wi-Fi (built-in) Dry-Contact
Parallel Capability	9



Features

Support Independent Grid/Generator Input
Dual AC inputs and integrated grid-generator switching system

Parallel Connection
Parallel connection with up to 9 units

Smart Load Management
Dual AC outputs design

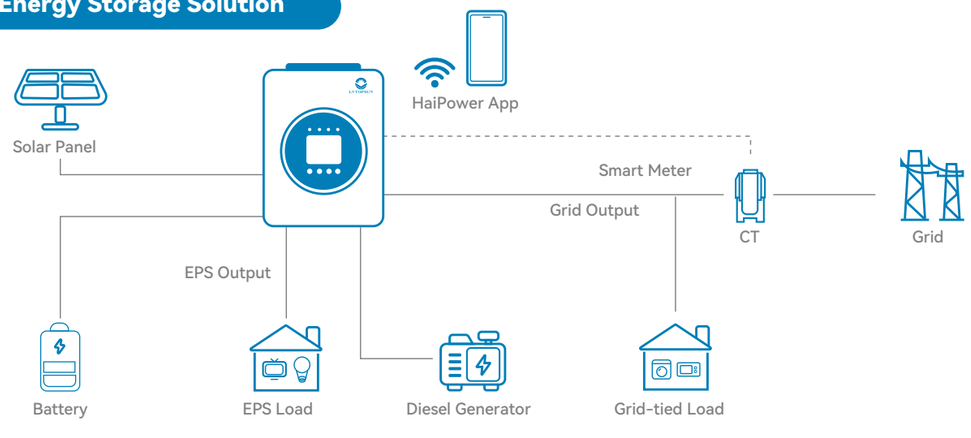
Faster On/Off-grid Switching
UPS-level switching time: 10ms

Remote Monitoring
Built-in WiFi module for HaiPower App monitoring

Efficient Battery Charge/Discharge
Max. 120A charge current
Max. 137A discharge current

Stylish Design
Larger screen with touch keys and LED ring lights

Energy Storage Solution



Specifications

Model	LVTS-4KW-HYD	LVTS-6KW-HYD
Solar Input Data		
Max. PV Input Power	4400W	7800W
Max. Input Voltage	500V	550V
Start-up Voltage	90V	120V
MPPT Voltage Range	60V~450V	90V~500V
Max. Input Current per MPPT	18A	27A
Max. Short Circuit Current per MPPT	23A	32A
Number of MPPT	1	
AC Input Data (Grid&Generator)		
Nominal Input Voltage	230Vac, L/N/PE	
Input Voltage Range	90~280V	90~280Vac (APL); 170~265Vac (UPS)
Max. Input Current	25A	35A
Nominal Input Power	5700W	8050W
AC Frequency Range	50/60Hz(Auto sensing)	40~65Hz
Battery Data		
Battery Type	Li-Ion/Lead-acid	
Nominal Battery Voltage	24V	48V
Battery Voltage Range	20~30V	42~60V
Max. Discharge Current	137A	
Max. Charge/Discharge Power	3300W	6000W
Li-Ion Battery Activation	Yes	
Li-Ion Battery Communication	CAN/RS485	
Max. Solar Charge Current	120A	
Max. AC Charge Current	100A	
Max. Charge Current (PV+AC)	120A	
Inverter Output Data		
Nominal Output Power	4000 with PV&battery 3300W with battery only	6000W
Peak Apparent AC Power	8000VA	12000VA
Nominal AC Voltage	230V	
Nominal Grid Frequency	50/60Hz	50/60Hz (Auto Sensing)
Voltage Waveform	Pure Sine Wave	
Transfer Time	4ms	4ms
Max. Output Current	17.4A	27A
Overload Protection	30s@102%-110% load; 10s@110%-130% load; 5s@130%-200% load	
THDv (@linear load)	<3%	
Efficiency		
Peak Efficiency	94%	
MPPT Efficiency	≥99.9%	
Protect		
DC Surge Protection	Yes	
AC Surge Protection	Yes	
AC Short Circuit Protection	Yes	
System Parameters		
Dimension (W*H*D)	290*424*120mm	333*505*120mm
Weight	7.1kg	10.6kg
Relative Humidity	5%~95% (Non-condensing)	
Operating Temperature Range	-10℃-60℃	-10℃-50℃
Noise Emission	≤50dB	
Altitude	2000m	4000m
Cooling Method	Fan Cooling	
Ingress Protection	IP20	IP21
Characteristic		
Number of AC Output	2	
Display	LCD&APP	LCD&LED&APP
Communication Interface	RS485/ USB /CAN/ Wi-Fi	
Parallel Capability	9	

LVTSG-125kS(PV250k)(261kWh)

LVTOPSUN ESS

5 Unique Advantages

★ Uses advanced 314Ah cells, delivering outstanding performance with long-term durability

★ Patented Liquid-cooling design at pack level, ensure high consistent thermal management at cell level

★ Multi-layers of escalating protection – from the cell, through the pack, to the entire system

★ Zero heat transfer between inverter and cells improves stability and extends lifespan

★ LVTOPSUN StorgeCloud: Smart remote control, AI optimisation, and instant troubleshooting – all in one platform

3 Leading Advantages

- <10ms transfer from on-grid to off-grid for uninterrupted power supply ①
- Flexible system expansion, up to 1.25MW/15.66MWh, to meet growing energy needs ②
- Supports remote monitoring and OTA upgrades on the StorageCloud app

① Transfers between on-grid and off-grid in under 20 milliseconds when using multiple inverters in parallel.
② When inverters in parallel >6 units, use of a LVTOPSUN power distribution cabinet is recommended.

DATASHEET

Models	LVTSG-125kS(PV250k)(261kWh)
System	
Rated energy capacity	261 kWh
Max. cycle rate	0.5 P
Max. cycle efficiency	90%
Usable energy capacity	235 kWh
Dimensions (W × H × D)	1500 × 1400 × 2250 mm
Dimensions (without inverter) (W × H × D)	1060 × 1400 × 2250 mm
Weight	2500 kg (Cabinet) + 170 kg (Inverter)
Operating temperature range	-25 ~ +55°C
Storage temperature range	0 ~ +40°C
Operating humidity range	⩽95% (non-condensing)
Max. operation altitude	3000 m
System temperature control mode	Industrial-grade air-conditioning (Cabinet); Liquid-cooling (Pack); Intelligent fan-cooling (Inverter)
Fire suppression mode	Default: Aerosol, Explosion relief valve, Fire water inlet Optional: Flammable gas detector, Explosion relief panel, Explosion-proof exhaust fan, Audible and visual alarm
Ingress protection	IP54 (Cabinet) + IP66 (Inverter)
Anti-corrosion class (Battery)	C4/C5 (Optional)
Anti-corrosion class (Inverter)	C5
Noise (rated operating condition)	75 dB @ 1 m
Lightning protection	Type II (AC port), Type II (PV&Battery)
Protection mode	Anti-islanding protection, residual current detection, insulation resistance detection, AC overcurrent protection, and AC cable connection protection
Certification standards	IEC62619, IEC61000-6/2/4, IEC62040, IEC63056, IEC62477, UN38.3
Battery	
Cell type	LFP 3.2 V / 314 Ah
Cell cycle life	6000
System battery configuration	1P260S
Rated voltage	832 V
Operating voltage range	728 ~ 936 V
Rated DC current	157 A
Number of battery packs	5
Battery pack capacity	52.25 kWh
Battery pack weight	340 kg
Inverter	
Inverter model	S6-EH3P125K10-NV-YD-H
Rated output power	125 kW
Max. apparent output power@On-grid	125 kVA
Rated grid voltage	3/N/PE, 220 V / 380 V; 3/N/PE, 230 V / 400 V
Rating grid frequency	50 Hz / 60 Hz
AC grid frequency range	45 - 55 Hz / 55-65 Hz
Rated output current	189.9 A / 180.4 A
Max. apparent output power@Off-grid	1.6 times of rated power, 200 ms
Back-up switch time	< 10ms
Power factor	> 0.99 (0.8 leading - 0.8 lagging)
THDi / THDv (@linear load)	<2% / < 3%
Max. usable PV Input Power	250 kW
Recommended max. PV array size	250 kW
Max. input voltage	1000 V
Rated voltage	600 V
Start-up voltage	180 V
MPPT voltage range	150 - 950 V
Max. input current	10*42A
Max. short circuit current	10*60A
MPPT number / Max. input strings number	10/20
Communication	CAN, RS485-115200, Ethernet, Optional: Wi-Fi, Cellular, LAN Optional: Wi-Fi, Cellular

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LVTSG-50kS(PV100k)(112kWh)

LVTOPSUN ESS

5 Unique Advantages

★ Uses advanced 314Ah cells, delivering outstanding performance with long-term durability

★ Patented Fan-cooling design at pack level, ensurehigh consistent thermal management at cell level

★ Multi-layers of escalating protection – from the cell, through the pack, to the entire system

★ Zero heat transfer between inverter and cells improves stability and extends lifespan

★ LVTOPSUN StorgeCloud: Smart remote control, AI optimisation, and instant troubleshooting – all in one platform

6 Leading Advantages

- <10ms transfer from on-grid to off-grid for uninterrupted power supply ①
- Flexible system expansion, up to 0.5MW/1.12MWh, to meet growing energy needs ②
- Supports remote monitoring and OTA upgrades on the StorageCloud app

① Transfers between on-grid and off-grid in under 20 milliseconds when using multiple inverters in parallel.
② When inverters in parallel >6 units, use of a LVTOPSUN power distribution cabinet is recommended.

- Combustible gas, smoke and temperature detection, system active ex haust, and fire alarm
- EMS,hybridinverter and BMS integrated technology, support black start function,Offgrid operation,etc
- Support storting energy from diesel generator

DATASHEET

Models	LVTSG-50kS(PV100k)(112kWh)
System	
Rated energy capacity	112 kWh
Max. cycle rate	0.5 P
Max. cycle efficiency	90%
Usable energy capacity	100.8 kWh
Dimensions (W × H × D)	1100 × 1300 × 2300 mm
Dimensions (without inverter) (W × H × D)	780 × 1300 × 2300 mm
Weight	1700 kg (Cabinet) + 80 kg (Inverter)
Operating temperature range	-20 ~ +55°C
Storage temperature range	0 ~ +40°C
Operating humidity range	⩽95% (non-condensing)
Max. operation altitude	3000 m
System temperature control mode	Industrial-grade air-conditioning (Cabinet); Liquid-cooling (Pack); Intelligent fan-cooling (Inverter)
Fire suppression mode	Default: Aerosol, Explosion relief valve, Fire water inlet Optional: Flammable gas detector, Explosion relief panel, Explosion-proof exhaust fan, Smoke and temperature detectors
Ingress protection	IP55 (Cabinet) + IP65 (Inverter)
Anti-corrosion class (Battery)	C4/C5 (Optional)
Anti-corrosion class (Inverter)	C4
Noise (rated operating condition)	75 dB @ 1 m
Lightning protection	Type II (AC port), Type II (PV&Battery)
Protection mode	Anti-islanding protection, residual current detection, insulation resistance detection, AC overcurrent protection, and AC cable connection protection
Certification standards	Safety EMC Standards:IEC/EN62109-1,IEC/EN62109-2,IEC61000-6-1/2/3/4,Grid Regulation:IEC61727, IEC62116,CEIO-21,EN50549,NRS 097,RD140,UNE217002,OVE-Richt1inie R25,G99,VDE-AR-N4105,UN38.3
Battery	
Cell type	LFP 3.2 V / 314 Ah
Cell cycle life	8000
System battery configuration	1P112S
Rated voltage	358.4 V
Operating voltage range	313.6~403.2 V
Rated DC current	157 A
Number of battery packs	7
Battery pack capacity	16.08 kWh
Battery pack weight	125 kg
Inverter	
Inverter model	SUN-50K-SG01HP3-EU-BM4
Rated output power	50 kW
Max. apparent output power@On-grid	50 kVA
Rated grid voltage	3/N/PE, 220 V / 380 V; 3/N/PE, 230 V / 400 V
Rating grid frequency	50 Hz / 60 Hz
AC grid frequency range	45 - 55 Hz / 55-65 Hz
Rated output current	75.8 A / 72.5 A
Max. apparent output power@Off-grid	1.5 times of rated power, 10ms
Back-up switch time	< 10ms
Power factor	> 0.99 (0.8 leading - 0.8 lagging)
THDi / THDv (@linear load)	< 3%
Max. usable PV Input Power	65 kW
Recommended max. PV array size	65 kW
Max. input voltage	1000 V
Rated voltage	600 V
Start-up voltage	180 V
MPPT voltage range	150 - 850 V
Max. input current	4*36A
Max. short circuit current	4*55A
MPPT number / Max. input strings number	4/8
Communication	CAN, Ethernet, Optional: Wi-Fi, Cellular, LAN Optional: Wi-Fi, Cellular

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LVTS-(48-241)kWh-HV V1

It uses a high capacity 314Ah battery to support 6 clusters in parallel with a Maximum capacity of 1.446MWh.

5 Unique Advantages

- ★ Ultra Safe:Intelligent fire extinguishing system, dectects and wxtinguishes fire in 5S
- ★ Easy Installation:cable connection between modules,plug-and-play
- ★ Long Life:LFP cells,8000+ cycles,10 years long life cycles
- ★ Active Cell Balancing:Miaximum balancing current:2.2A,Greatly increase the capacity utilization,rate of the battery pack
- ★ Fast Charge/Discharge:Max continuous charge/ discharge current:Charge 0.6C(180A), Discharge0.7C (200A)

3 Leading Advantages

- Uses advanced 314Ah cells, delivering outstanding performance with long-term durability
- Up to 10 clusters in parallel,48.228KWh-2.41MWh capacity[1]
- Supports remote monitoring and OTA upgrades onthe Storage Cloud app

Model	LVTS-(48~241)kWh-HV V1
Battery Type	$LiFePO_4$ (LFP)
Nominal Battery Energy	16.076kWh
Usable Battery Energy	15.272kWh
Nominal Capacity	314Ah
Nominal Voltage	51.2V
Module Number per Cluster	3~15Pcs
Operating Voltage	134.4V~864V
System Energy Range	48.228kWh~1.446MWh
Recommended Charge & Discharge C Rate	0.5C(157A)
Max. Charge & Discharge C Rate	Charge 0.6C(180A),Discharge0.7C(200A)
Peak Discharge Current (25°C)	314A
Recommended Charge & Discharge Power	8.038KW
Max. Charge & Discharge Power	10.239KW
Depth of Discharge (DOD)	90% DOD/25°C/0.5C
Charging Temp. Range	O°C~55°C
Discharging Temp. Range	-2O°C~55°C
Net Weight (kg) [2]	53.5+140*n
Single Cluster Dimension (W/D/H) [3]	490/850/150+240*n(With bracket and cover plate)
Protection Level	IP20
Communication	CAN/RS485
Cycle Life [4]	≥8000 Cycles
User Interface	WIFI+APP
Safety Protection	Built-in aerosol fire extinguisher
Cooling method	Forced wind cooling
Installation	Cable stacking
Expansion	Up to 6 clusters in parallel
Warranty Period [5]	5 Years
Battery Module Name	LVTS-512314-HV V1
Certification & Safety Standard	UN38.3,CE
Compatible Inverters	Solis/Deye/Magarevo/Atess/Growatt ect.

Modul	LVTSG504-1500V-250A
Operating Voltage	130-1500
Maximum Continuous Current	250A
Dimension (W/D/H)	440/800/230(Without bracket and cover plate)
Weight	35kg
Protection Level	IP20

[1] When cluster in parallel >6 units, use of a LVTOPSUN power distribution cabinet is recommended.
[2] Net Weight of Expansion Base and Expansion Upper Cover:20kg.
[3] Height of Expansion Upper Cover: 8Omm,."n" stands for the number of battery modules, up to a maximum of 4.If the installation is on an upper floor, you will need to evaluate the floor weighing before determining the number of stacks.
[4] Test conditions: O.2C Charging & Discharging,25°C, 90%DOD, 7O%EOL
[5] Refer to LVTOPSUN Warranty Letter

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LVTS-(48~241)kWh-HV V2

It uses a high capacity 314Ah battery to support 6 clusters in parallel with a Maximum capacity of 1.446MWh.

5 Unique Advantages

★ Ultra Safe:Intelligent fire extinguishing system, dectects and wxtinguishes fire in 5S

★ Easy Installation:cable connection between modules,plug-and-play

★ Long Life:LFP cells,8000+ cycles,10 years long life cycles

★ Active Cell Balancing:Miaximum balancing current:2.2A,Greatly increase the capacity utilization,rate of the battery pack

★ Fast Charge/Discharge:Max continuous charge/ discharge current:Charge 0.6C(180A), Discharge0.7C (200A)

3 Leading Advantages

- Uses advanced 314Ah cells, delivering outstanding performance with long-term durability
- Up to 10 clusters in parallel,48.228KWh-1.446MWh capacity[1]
- Supports remote monitoring and OTA upgrades onthe Storage Cloud app

Model	LVTS-(48~241)kWh-HV V2
Battery Type	$LiFePO_4$ (LFP)
Nominal Battery Energy	16.076kWh
Usable Battery Energy	15.272kWh
Nominal Capacity	314Ah
Nominal Voltage	51.2V
Module Number per Cluster	3~15Pcs
Operating Voltage	134.4V~864V
System Energy Range	48.228kWh~1.446MWh
Recommended Charge & Discharge C Rate	0.5C(157A)
Max. Charge & Discharge C Rate	Charge 0.6C(180A),Discharge0.7C(200A)
Peak Discharge Current (25°C)	314A
Recommended Charge & Discharge Power	8.038KW
Max. Charge & Discharge Power	10.239KW
Depth of Discharge (DOD)	90% DOD/25°C/0.5C
Charging Temp. Range	O°C~55°C
Discharging Temp. Range	-2O°C~55°C
Net Weight (kg) [2]	53.5+140*n
Single Cluster Dimension (W/D/H) [3]	590/865/400+270*n(With bracket and cover plate)
Protection Level	IP20
Communication	CAN/RS485
Cycle Life [4]	≥8000 Cycles
User Interface	WIFI+APP
Safety Protection	Built-in aerosol fire extinguisher
Cooling method	Forced wind cooling
Installation	Cable stacking
Expansion	Up to 6 clusters in parallel
Warranty Period [5]	5 Years
Battery Module Name	LVTS-512314-HV V2
Certification & Safety Standard	UN38.3,CE
Compatible Inverters	Solis/Deye/Magarevo/Atess/Growatt ect.

Modul	LVTSG503-1500V-250A
Operating Voltage	130-1500
Maximum Continuous Current	250A
Dimension (W/D/H)	590/865/250(With bracket and cover plate)
Weight	35kg
Protection Level	IP20

[1] When cluster in parallel >6 units, use of a LVTOPSUN power distribution cabinet is recommended.
[2] Net Weight of Expansion Base and Expansion Upper Cover:18.5kg.
[3] Height of Expansion Upper Cover: 8Omm,."n" stands for the number of battery modules, up to a maximum of 8.If the installation is on an upper floor, you will need to evaluate the floor weighing before determining the number of stacks.
[4] Test conditions: O.2C Charging & Discharging,25°C, 90%DOD, 7O%EOL
[5] Refer to LVTOPSUN Warranty Letter

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Information might be subject to change without notice during product improvement.