Su-Kam®

SOLAR I INVERTER I BATTERY I LITHIUM

LITHIUM
Catalogue

ESS I POWERWALL I TELECOM I BESS I EV

www.su-kam.com

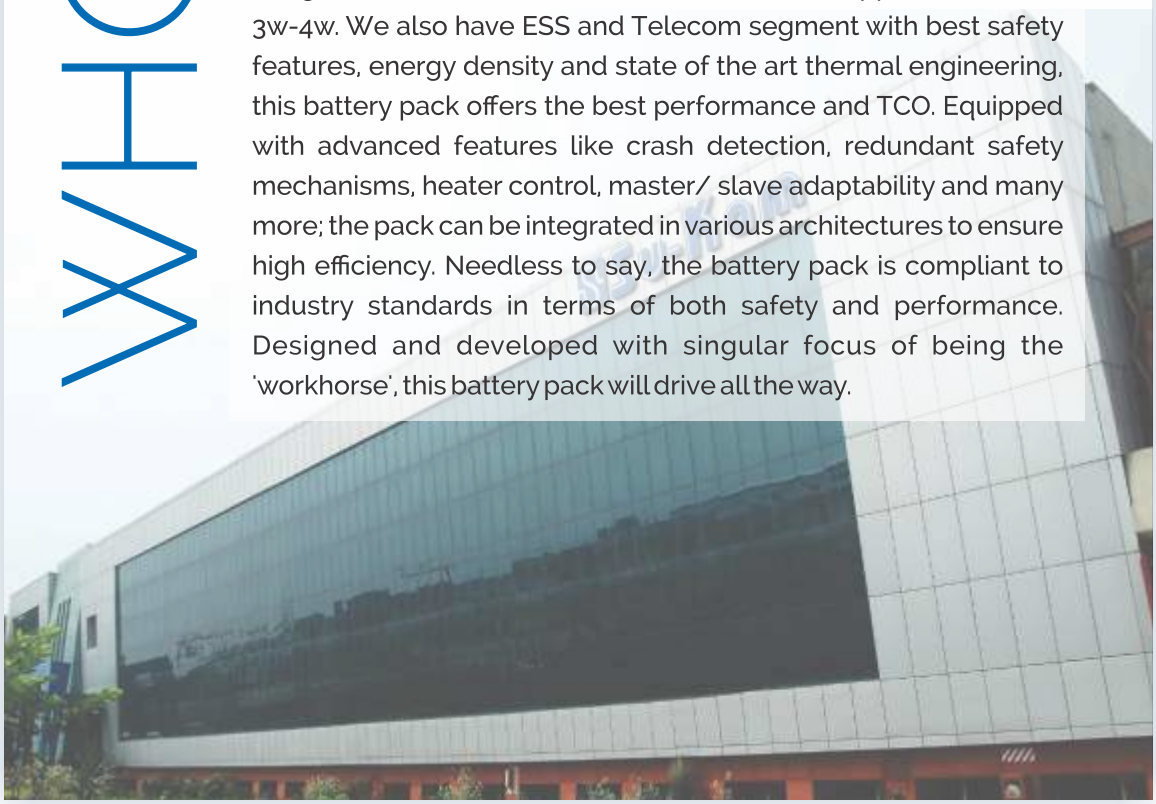
MADE IN INDIA

WHO WE ARE ?

The foundation for the Su-Kam success story was laid in the year 1988. Today, Su-Kam has the distinction of being one of the leading power back up, generation & monitoring companies in India with a wide array of best in class products, Government approved in-house R&D center, product innovation, highly efficient manufacturing units, widespread dealer, distributor & service network, robust exports, strong workforce, large project base, numerous awards & recognitions and a long string of firsts to its credit. It has to its credit, a wide range of over 200 products. The product categories include, Low & High Capacity UPS as well as Home, Commercial, Online & Line interactive UPS catering to capacities up to 100 KVA as well as solar power solutions. The company also specializes in manufacturing Lead Acid, Tubular, SMF, Tall Tubular &Automotive batteries, Battery equalizers, and Battery accessories, Lithium Batteries.

The spirit of revolution stays strong and today Su-Kam has made a foray into the solar power sector. In a short span of time, it has made an impact with its mammoth projects and is fast making good on its commitment of 'leaving no corner of the country in the dark'. From rural to urban landscape, from homes to massive infrastructure development, the Su-Kam presence is deeply felt.

Su-Kam, being an enabler in electric mobility proudly presents our newest offering in EV & ESS segment in form of battery pack. These are designed f or the harsh and abusive conditions applicable to 2w-3w-4w. We also have ESS and Telecom segment with best safety features, energy density and state of the art thermal engineering, this battery pack offers the best performance and TCO. Equipped with advanced features like crash detection, redundant safety mechanisms, heater control, master/ slave adaptability and many more; the pack can be integrated in various architectures to ensure high efficiency. Needless to say, the battery pack is compliant to industry standards in terms of both safety and performance. Designed and developed with singular focus of being the 'workhorse', this battery pack will drive all the way.



Su-Kam®

SOLAR I INVERTER I BATTERY I LITHIUM

SU-KAM GLOBAL PRESENCE IN 90+ COUNTRIES

MAKE IN INDIA

37 GLORIOUS YEARS OF INNOVATION

www.su-kam.com

Su-Kam®

25.6V-100/200AH

INDIA'S BEST
LITHIUM WALL MOUNTED INVERTER BATTERY WITH BLUETOOTH

Compatible with all Inverter and UPS models up to 3kWh, 5kWh.

Su-kam lithium battery with a configuration is highly versatile and well-suited for a variety of applications, including home backup, clinics, small offices, and other small commercial setups. This setup could also be paired with an inverter designed specifically for lithium batteries to maximize efficiency and longevity.

BATTERY PACK
TECHNICAL SPECIFICATIONS

S.No	Paramaters	Unit	SKL256100	SKL256200
1	Pack Nominal voltage	V	25.6	25.6
2	Rated Capacity	AH	100	200
3	BMS configuration	Positive & negative Buck With single output		
4	Number of cells in series in a rack	Cells	8	8
5	Cell Capacity used in a rack	AH	100	100
6	Number of racks to achieve the desired		1	2
7	Total capacity of system	AH	100	200
8	Expected Cycle Life @ 90 % DOD at 25°C	Cycle	>6000	
Battery Pack configuration				
S.No	**General Overview of Rack**	**Unit**	**SKL256100**	**SKL256200**
1	Chemistry of the cells	Prismatic	LFP	LFP
2	Capacity of the battery pack	KWHr.	2.56	5.12
3	Usable capacity of AH (90%)	Ah	90	180
4	Usable capacity of battery pack (90%)	KWHr.	2.3	4.6
5	Number of cells in Battery Pack	Cell	8	16
6	Configuration		8S1P	8S2P
7	Total number of cells in series	Cell	8	
8	Balancing type in the module BMS		Passive balancing	
9	Number of temperature sensors in a Battery pack	Sensors	8	
10	SOC protection level	%	<= 10	
11	Nominal voltage of battery pack	V	25.6	
12	Minimum voltage of battery pack	V	20.4	
13	Maximum voltage of battery pack	V	29.2	
14	Battery pack charging profile	CC/CV		
15	Continuous charging current	C	0.2	
16	Continuous Discharging current	C	0.2	
17	Communication ports	CAN , RS485		
Operative environment requirements				
S.No	**Parameter**	**Range**	**Values**	
1	Charging operating temperature	°C	0-45°C	
2	Discharging operating temperature	°C	-10 - 50°C	
3	Operating humidity range	%RH	<95(40°C±2°C)	
4	Storage temperature range	°C	0～+60	
5	Storage humidity range	%RH	<95(40°C±2°C)	
6	Recommended Operating temperature range	%RH	20°C-35°C	

Note: Specifications are subject to change during the detailed engineering

Compact Size & Less Weight

Fast Charging

Bluetooth Enable

Longer Life

Safe & Reliable

Perfect Compatible

Easy Installation

Smart BMS

Su-Kam®

48V-100/200/300AH

INDIA'S BEST
LITHIUM WALL MOUNTED
INVERTER BATTERY WITH BLUETOOTH

Compatible with all Inverter and UPS models up to 3kWh, 5kWh, 8kWh & 10kWh.

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BATTERY PACK
TECHNICAL SPECIFICATIONS

Su-Kam®

Sr No	Specifications	48V-100Ah	48V-200Ah	48V-300Ah
1	Battery Model	SKL48100E	SKL48200E	SKL48300E
2	Cell Capacity	3.2V, 100Ah		
3	Type of Cell	Prismatic		
4	Rated Capacity	100 Ah @25°C	200 Ah @25°C	300 Ah @25°C
5	Configuration	1P15	2P15	3P15
6	Rated Voltage	48V		
7	Working Voltage Range	42V~52.5V		
8	Rated Energy	4.8 kWh	9.6 kWh	14.4 kWh
9	Usable Capacity of Battery Pack (90%)	4.32 kWh	8.6 kWh	12.9 kWh
10	Standard Charging/Discharging Current	0.2C @ 25℃		
11	Peak Discharge Current (for 2 min)	1C @ 25℃		
12	Working Temperature Range	0～55℃(Charge)		
13		5～60℃(Discharge)		
14		-10℃~35℃（For one month） 25℃±2℃（For three months）		
15	Storage Temperature and Humidity	65%±20%RH		
16	Cycle Life 90% DOD	6000 cycles base on @25℃, 0.2C		
17	IP Grade	IP 55 / IP 65 (optional)		
18	Battery Pack Charging Profile	CC/CV		
19	Communication Interface	CAN & RS485		
20	Altitude	0-3000m		
21	Humidity Range	5~80% RH non-condensing		
22	Protections	Over Voltage Protection		
23		Under Voltage Protection		
24		Over Temperature Protection		
25		Short Circuit Protection		
26		Over Charge Protection		
27		MCCB Protection		
28		Over Discharge Protection		
	Additional Features			
29	Status Indicators	SOC / ALM / ON		
30	Display	LCD Screen		
31	Communication Ports	RS485/CAN		
32	Reset Key	For resetting		
33	Terminal Size	M6 Terminal		
34	Address switch	For Single / multiple in parallel		
35	Installation	Vertical		
36	Scalability	Max.15 pieces in parallel (standard)		
37	Recommended Operation Environment	Indoor		

Note: Specifications are subject to change during the detailed engineering

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51.2V-100/200/300AH

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INVERTER BATTERY WITH BLUETOOTH

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BATTERY PACK
TECHNICAL SPECIFICATIONS

Su-Kam®

Sr No	Specifications	51.2V-100Ah	51.2V-200Ah	51.2V-300Ah
1	Battery Model	SKL512100E	SKL512200E	SKL512300E
2	Cell Capacity	3.2V, 100Ah		
3	Type of Cell	Prismatic		
4	Rated Capacity	100 Ah @25°C	200 Ah @25°C	300 Ah @25°C
5	Configuration	1P16S	2P16S	3P16S
6	Rated Voltage	51.2V		
7	Working Voltage Range	44.8V~58.4V		
8	Rated Energy	5.1 kWh	10.2 kWh	15.3 kWh
9	Usable Capacity of Battery Pack (90%)	4.59 kWh	9.18 kWh	13.77 kWh
10	Standard Charging/Discharging Current	0.2C @ 25℃		
11	Peak Discharge Current (for 2 min)	1C @ 25℃		
12	Working Temperature Range	0～55℃(Charge)		
13		5～60℃(Discharge)		
14		-10℃~35℃（For one month） 25℃±2℃（For three months）		
15	Storage Temperature and Humidity	65%±20%RH		
16	Cycle Life 90% DOD	6000 cycles base on @25℃, 0.2C		
17	IP Grade	IP 55 / IP 65		
18	Battery Pack Charging Profile	CC/CV		
19	Communication Interface	CAN & RS485		
20	Altitude	0-3000m		
21	Humidity Range	5~80% RH non-condensing		
22	Protections	Over Voltage Protection		
23		Under Voltage Protection		
24		Over Temperature Protection		
25		Short Circuit Protection		
26		Over Charge Protection		
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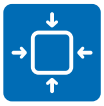

Compact Size & Less Weight


Fast Charging


Bluetooth Enable


Longer Life


Safe & Reliable


Perfect Compatible


Easy Installation


Smart BMS

Su-Kam®

TELECOM BATTERY

48V 100Ah/200Ah

KEY FEATURES

- Specifically designed for hybrid power in Unstable Power Networks to overlap continues and unpredictable power blackouts.
- Space-efficiency, 100Ah only 4u height.
- Long cycling life 6,000 times cycling @ 50% DOD@25°C
- Ultra-fast re-charging time
- Excellent deep discharge performance, up to 80% capacity built-in BMS
- Minimize fuel and save running time on DG operated sites
- Capable of uncontrolled Partial State of Charge (PSOC) operation without running down in capacity

TELECOM BATTERY

Description		Value		Unit
Battery Model		48V 100Ah	48V 200Ah	V/Ah
Battery rated capacity		4.8	9.6	KwHr
Battery usable capacity		3.84	7.68	KwHr
Battery DOD		80		%
Battery nominal volatge		48		V
Battery configuration		15S 1 P/2P		S/P
Battery working voltage range		37 ~ 52		V
Battery low warning threshold level		45.75		V
Battery low protection threshold level		44.25		V
Battery high warning threshold level		52.5		V
Battery high protection threshold level		54		V
Charge / Discharge Current (A)	Recommended	50	100	Amp
	Maximum	70	140	Amp
	Peak (2 Min for 25C)	100	200	Amp
Other Parameters				
Recommend Depth of Discharge		85%		
Temperature sensors		15 Sensors		
Approx. Weight (Kg)		42 ~ 46		
Master LED indications		4 LED (SOC:25%~100%)		
		2 LED (working, alarming, protecting)		
IP Rating of Enclosur		IP65		
Working Temperature		0.C to 50°C		
Storage Temperature		0.C to 60°C		
Humidity		90% - 95		
Altitude		3000 mtr.		
Cycle Life (25±2 ,0.5C/0.5C,80%EOL)		3500		
Installation		Outdoor&Ground		
Communication Port		CAN2.0, RS485		
Cell Balancing type		Passive		
Cycle life (0.2C, 25)		80% DOD 4000 cycles		

Key Points (Additional protections)
Monomer under voltage protection
Monomer under voltage warning
Monomer over voltage protection
Monomer over voltage warning
Pack under voltage protection
Pack under voltage warning
Pack over voltage protection
Pack over voltage warning
Monomer under temperature protection
Monomer over temperature protection
Pack over charge current protection 2 Level
Pack ove discharge current protection 3 level
Pack deep discharge protection
Sleep mode & transportation mode available
Monomer open wire detection
Battery parallel operation available
Battery remote monitoring & control option available (Optional)
MCCB protection available with the battery
Inverter compatibility in terms of communication with the battery available & customization is also available

**Any kind of customization related to the dimension and parameters is acceptable.

Su-Kam®

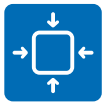
5.5KW/10KW
ALL IN ONE STORAGE SYSTEM
Solar Inverter With LifePo4 Battery

Su-kam all in one Power wall lithium battery with a configuration is highly versatile and well-suited for a variety of applications, including home backup, clinics, small offices, and other small commercial setups. This setup could also be paired with an inverter designed specifically for lithium batteries to maximize efficiency and longevity.

ALL IN ONE STORAGE SYSTEM
Solar Inverter With LifePo4 Battery

1	System Model	SKLW5.5KW(Powerwall)	SKLW10KW(Powerwall)
2	Rated Power	5500VA/5500W	10000VA/10000W
Input			
1	Voltage Range	154-264VAC±3V(Normal mode)185-264VAC±3V(UPS Mode)	
2	Frequency Range	50/60Hz±0.1%	
Output			
1	The Output Voltage	230VAC±5%	
2	Peak Power	11000VA for 3ms	22000VA for 3ms
3	Conversion Efficiency (Maximum)	94%	
4	Output Frequency	50/60Hz±0.1%	
5	Switching Time	10ms (computer equipment), 20ms (home appliances)	
6	Output Waveform	Sine Wave	
Solar Charging and Mains Charging			
1	Solar Charging Method	MPPT	Double MPPT
2	PV Maximum Input Power	5500W	2×5500W
3	MPPT Input Voltage Range	120-500Vdc	90-500Vdc
4	Maximum PV Charging Current	100A	150A
5	Maximum AC Charging Current	60A	150A
6	Maximum Charging Current	100A	150A
Physical Parameters			
1	Battery Capacity	5120WH	10240WH
2	Battery Voltage	51.2VDC	
3	Battery Type	Lithium Iron Phosphate (LiFePo4)	Lithium Iron Phosphate (LiFePo4)
4	Full Charge Voltage (FC)	56V	
5	Full Discharge Voltage (FD)	42V	
6	Maximum Continuous Discharge Current	80A(0.8C)	160A
7	Maximum Discharge Current	120A(1 minute)	200A(1 minute)
8	Protect	BMS, Circuit Breaker	BMS, Circuit Breaker
9	Charging Voltage	56V	
10	Charging Vurrent (Recommended)	50A(0.5C)	100A(0.5C)
11	Charging Current (Maximum)	70A	140A
12	Display	LCD	
13	Communication Protocol	RS232/CAN	
14	Parallel Interface	Supported	
15	Operating Temperature	0-40°C	
16	Storage Temperature	-10 - 60°C	
17	Operating Environment Humidity	20%-90% Non Condensing	
18	Noise	<50dB	
19	L×W×H (product dimensions) in mm	(510×225×1005±2	(510×225×1090±2
20	Net Weight (NW Kg)	70±0.8	130±0.8

• Under fair usage as per our instruction.


Compact Size & Less Weight


Fast Charging


Bluetooth Enable


Longer Life


Safe & Reliable


Perfect Compatible


Easy Installation


Smart BMS

Su-Kam®

LITHIUM
ENERGY STORAGE

51.2V to 720V

Application

Grid stabilization:
Energy storage systems can help stabilize the grid.

Renewable energy integration:
Energy storage systems can help integrate renewable energy into the grid.

Backup power:
Energy storage systems can provide backup power during power outages.

Industrial :
Energy storage systems can help homes meet the gap between electricity generation and demand.

BATTERY ENERGY STORAGE SYSTEMS

Su-Kam®

Technical Specification

	SPECIFICATION	51.2V/100Ah	96V/100Ah	120V/100Ah
General	Chemistry of the cells	LFP	LFP	LFP
	Cell type (Cylindrical/Prismatic)	Prismatic	Prismatic	Prismatic
	Cell Nominal Voltage/Ah	3.2V / 100Ah	3.2V / 100Ah	3.2V / 100Ah
Electrical Characteristics	Battery Rack Voltage (V)	51.2V	96V	121.6V
	Battery Rack Capacity (Ah)	100Ah	100Ah	100Ah
	Battery Rack Energy Rating(kWh)	5.1 kWh	9.6kWh	12kWh
	Total No. of Rack	NA	NA	NA
	Number of Battery Modules/Rack	1	1	1
	Rack Level Configuration	NA	NA	NA
	Battery Module Configuration	16S 1P	30S 1P	38S 1P
	Total No. of Cell	16	30	38
	Continuous Charging Current (A)	0.5C	0.5C	0.5C
	Continuous Discharging Current (A)	0.8C	0.8C	0.8C
	Nominal Voltage of Battery Rack(V)	51.2V	96V	121.6V
	Minimum Voltage of Battery Rack(V)	45V±2V	90V±2V	112V±2V
	Maximum Voltage of Battery Rack(V)	56V±2V	108V±2V	135V±2V
	BMS Type Rack Level	NA	NA	NA
	BMS Type Module Level	Software	Software	Software
Mechanical Characteristics	Rack Dimension (L * W * H)mm	562x202x338	760x347x365	1065x535x275
	Battery Case Type	Metal Cabinet	Metal Cabinet	Metal Cabinet
	Connector Type	SB120 Connector	SB175 Connector	SB50 & SB120 Connector
	IP Rating	IP21	IP21	IP21
	Wire Size	16sqmm	25sqmm	35sqmm
	Weight (kg)	50 kg	100kg	125 kg
Battery Life	Cycle Life	>3500@90%DOD	>3500@90%DOD	>3500@90%DOD

	SPECIFICATION	240V/100AH	720V/100AH	480V/100AH
General	Chemistry of the cells	LFP	LFP	LFP
	Cell type (Cylindrical/Prismatic)	Prismatic	Prismatic	Prismatic
	Cell Nominal Voltage/Ah	3.2V / 100Ah	3.2V / 100Ah	3.2V / 100Ah
Electrical Characteristics	Battery Rack Voltage (V)	240V	720V	480V
	Battery Rack Capacity (Ah)	100Ah	100Ah	100Ah
	Battery Rack Energy Rating(kWh)	24kWh	72kWh	48kWh
	Total No. of Rack	1	1	2
	Number of Battery Modules/Rack	5	15	10
	Rack Level Configuration	5S 1P	15S 1P	10S 1P
	Battery Module Configuration	15S 1P	15S 1P	15S 1P
	Total No. of Cell	75	225	150
	Continuous Charging Current (A)	0.5C	0.5C	0.5C
	Continuous Discharging Current (A)	0.8C	0.8C	0.8C
	Nominal Voltage of Battery Rack(V)	240V	720V	480V
	Minimum Voltage of Battery Rack(V)	215V±2V	680V±2V	444V±2V
	Maximum Voltage of Battery Rack(V)	260V±2V	765V±2V	520V±2V
	BMS Type Rack Level	CBMS	CBMS	CBMS
	BMS Type Module Level	Software	Software	Software
Mechanical Characteristics	Rack Dimension (L * W * H)mm	710x700x1610	1250x730x2100	710x700x1610 (2 Rack's)
	Battery Case Type	Metal Cabinet	Metal Cabinet	Metal Cabinet
	Connector Type	As per requirement	As per requirement	As per requirement
	IP Rating	IP21	IP21	IP21
	Wire Size	As per requirement	As per requirement	As per requirement
	Weight (kg)	400kg	1150kg	800kg
Battery Life	Cycle Life	>3500@90%DOD	>3500@90%DOD	>3500@90%DOD

- Size can be customized as per requirement.
- Under fair usage as per our instruction.

With Touch Screen

Fast Charging

Bluetooth Enable

Longer Life

Safe & Reliable

Perfect Compatible

Easy Installation

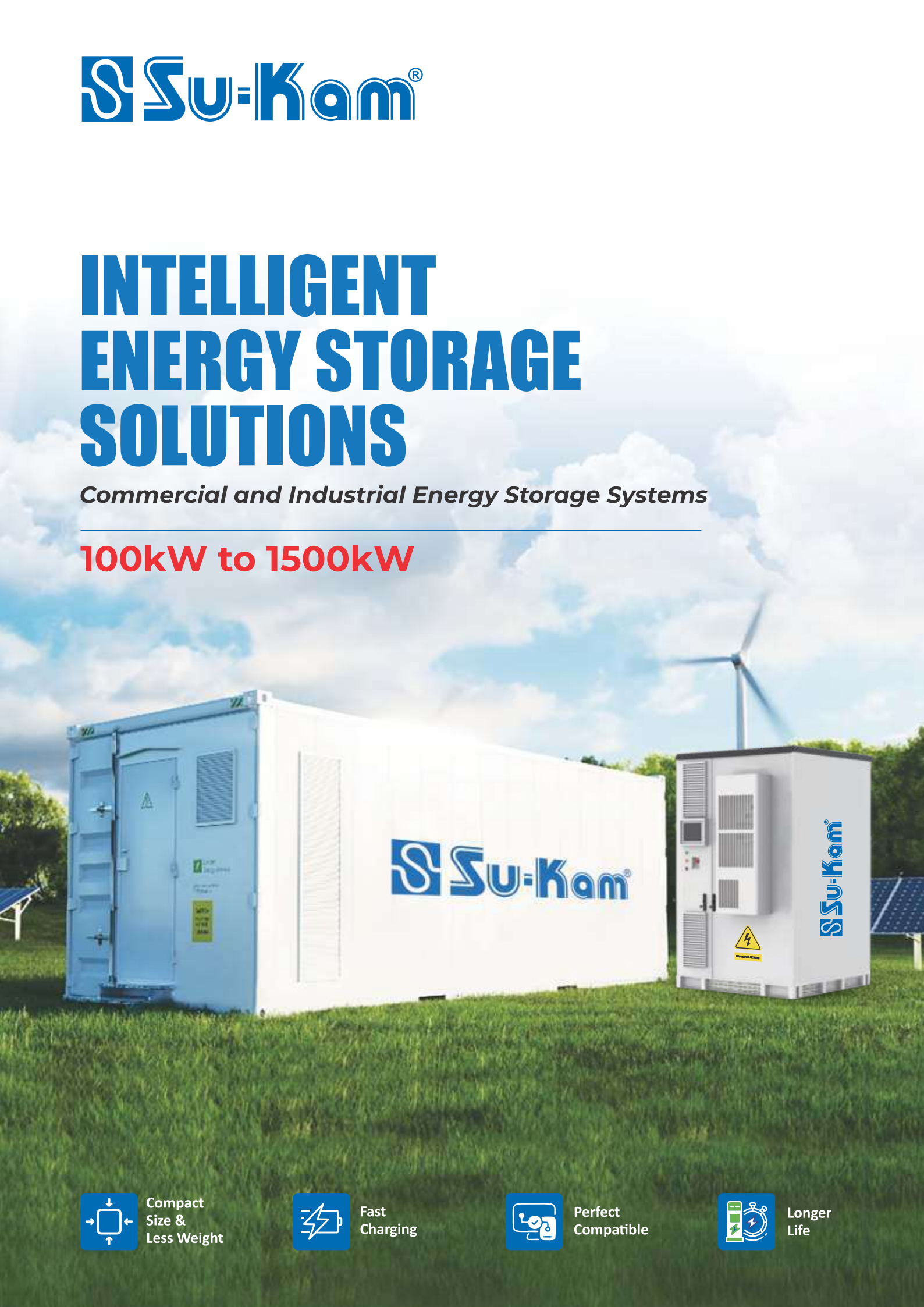
Master BMS

Su-Kam®

INTELLIGENT ENERGY STORAGE SOLUTIONS

Commercial and Industrial Energy Storage Systems

100kW to 1500kW



- Compact Size & Less Weight
- Fast Charging
- Perfect Compatible
- Longer Life

Features of the energy storage system

Su-Kam is proud to introduce its state-of-the-art industrial and commercial energy storage cabinets, designed to provide cutting-edge, sustainable energy solutions. These advanced cabinets utilize lithium iron phosphate batteries and are fully integrated with PCS, battery BMS, EMS, thermal management, power distribution, and fire protection modules. The systems employ single-cluster charging and discharging management, enabling efficient full charging and discharging cycles.

These energy storage cabinets are optimized for a range of application modes, including “peak-valley arbitrage,” “emergency power backup,” “station area expansion,” and “demand management.” The systems also integrate key functions such as harmonic control, reactive power compensation, three-phase imbalance management, and peak and frequency regulation. For scalability, multiple cabinets can be connected in parallel, allowing for seamless expansion of the energy storage system as needed.

Designed for ease of use, Su-Kam’s energy storage cabinets are easy to install, convenient to operate, and simple to maintain. The plug-and-play solution is perfect for a variety of application scenarios, from the user side to the new energy sector, offering flexible and reliable energy storage capabilities.

High security

- Adopting lithium iron phosphate batteries with high thermal stability.
- Adopting a square aluminium shell structure with a combined cover with an explosion-proof valve for high safety and no liquid leakage
- Adoption of prevention-oriented fire protection strategy and independent fire protection system.

High integration

- Electrical and battery segregation design, convenient maintenance
- Modular and highly integrated design, saving floor space
- Prefabricated cabin installation solution, reducing on-site installation costs and commissioning time.

Long life

- Highly automated production equipment ensures the consistency of battery performance.
- Low internal resistance, high discharge rate and stable discharge platform.
- Long cycle life

Intelligent Operation

- Real-time data interaction on cloud platform and remote control strategy issuance
- Electricity statistics
- Functions of failure warning, thermal runaway warning, life prediction, etc.

Why BESS

Commercial and Industrial (C&I) storage systems are used for the energy management of industrial and commercial enterprises and are sized according to individual need (capacities in the range from 100 kWh up to 20 MWh) . Due to their comparatively high capacity and performance, they also can provide system services – in particular, a charging infrastructure for electric vehicles without requiring a cost-intensive and lengthy grid expansion. These storage systems ensure a reliable and secure energy supply, and in combination with a PV system, they can even replace a dedicated conventional fossil-fuel power plant. They are also economically attractive as they help to avoid expensive peak loads (peak shaving) and can accommodate variable electricity tariffs. In combination with photovoltaic electricity generated for self-use, commercial storage can help increase the solar self-sufficiency of the business.

Value of the ESS

New energy On-grid — Smooth photovoltaic power generation and promote the consumption and adoption of renewable energy

Peak-loads hifting — By peak-load shifting, peak-valley difference profit is realized

Balanced load — Ease the impact of peak power consumption on the power grid

Expand capacity — Realize expansion of capacity, saving capacity cost and cable expansion cost

Virtual grid — Multiple photovoltaic ESS are aggregated to achieve autonomous coordination and optimal control, and participate in power system operation and power market trading.

Core advantages

Cloud platform

7days/24hours real-time monitoring and timely response

EMS

The EMS(Energy Management System) balance the charge and discharge management of the energy storage system, and achieve equipment operation optimization to improve power supply reliability.

BMS

Independent research and development of the dedicated BMS(battery management system), with high-efficient battery charging and discharging protection and status tracking, so that the battery can work safely and efficiently for a long time; EMS, PCS and the dedicated BMS constitutes the safety triangle 3S system.

PCS

Specially customized PCS(Power Conversion System) for special power industry, with the energy storage battery system, can be independently off-grid with load operation (can also be on-grid), and with a high proportion of motor load capacity, so it can operate reliably in harsh environments.

Commercial and industrial energy storage integrated system - 215KWh (expandable 242KWh)

Model	ESS100K215KWh
Type	**100kW/215kWh**
Battery Parameters	
Cell	LFP280Ah
Pack	153.6V 280Ah
Rated Voltage	768V (5 modules in series)
Battery capacity	280Ah
Rated energy	215.04kWh
Usable energy	204.2KWh
Voltage range	684V~864V
Max.Charging power	100kW
AC On-grid parameters	
Inverter	100kW
Grid Type	3W+N+PE
Rated Charge/Discharge Power	100kW
Rated Grid voltage	AC400V
Applicable grid frequency	45~55Hz/55~65Hz
Rated current	144A
THDi	<3%
Power factor	1(Leading)~1(Lagging)
General Parameter	
Dimension: W*D*H (mm)	1450mm*1350mm*2340mm
Max. Weight	2200KG
IP Degree	IP54
Operating Temperature Range	-20~50℃
Relative Humidity	0~95%(No condensation)
Maximum operating altitude	4000m(>2000/derating)
Cooling Method	Air-cooled (cooling, ventilation, heating)
Noise	≤75dB
System Efficiency	≥85%
Firefighting system	Integrated
Communication	Ethernet, Modbus TCP/IP

HIGH YIELD

EFFICIENT AND FLEXIBLE

SAFE AND RELIABLE

SMART AND ROBUST

Compact Size & Less Weight

Fast Charging

Active / Force Cooling

Longer Life

Safe & Reliable

Perfect Compatible

Easy Installation

Master with Slave BMS

Su-Kam®
SOLAR I INVERTER I BATTERY I LITHIUM

EV BATTERY (L3 & L5)

KEY FEATURES

- Long cycle life and LFP chemistry delivering high energy density
- Flexibility in battery pack placement due to compact size under the driver seat or under the cargo
- Capable to withstand side impact, drop and top loading
- High accuracy in voltage, current measurement
- Service friendly design, allows easy access to electronic and electro-mechanical components
- 100% Automotive qualified components
- Thermal management to ensure battery operation at controlled temperature
- 5+ years data and event storage locally at BMS level
- Environmental compliance as per ISO 16750
- UN38.3, AIS-156 & AIS-004 certified

51.2V 100Ah / 200Ah

Extra Mileage | Fast Charging | Longer Life | Ultra-low Maintenance

TECHNICAL SPECIFICATION

51.2V-100AH (L3)

SAFETY CHARACTERISTICS

- Over-charge/Over-discharge Ability to withstand over-charge/withstand over-discharge, and there is no fire, no exploding and work well .
- Short circuit Ability to withstand short circuit, and there is no fire, no exploding.
- Acupuncture Ability to withstand nail puncturing, and there is no fire, no exploding.
- Thermal shock Ability to withstand thermal shock, and there is no fire, no exploding .

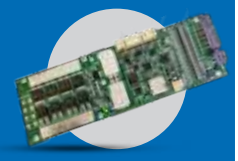
ELECTRICAL CHARACTERISTICS	
Nominal Voltage	51.2V
Nominal Capacity	100Ah
Battery pack energy	4.8 KwHR
Impedance (Max. at1000Hz)	⩽ 20mΩ
Expected Cycle Life	More than 2500 cycles

OPERATION CONDITIONS	
Charge Method	Constant Current/Constant Voltage (CC-CV)
Max. Charge Voltage	58.4V
Standard Charge Current	16A
Max. Charge Current	50A
Continuous Discharge Current	25A
Peak Instant Discharge Current	75A
Peak Instant Discharge Time	5 seconds
Discharge Cut-off Voltage	43.2V
Discharge Temperature	-20°C~60°C
Storage Temperature	15° C ~35°C
	280±2mm
Width	380±2mm
	585±2mm
Weight	~55kg

ITEM	CONTENT	CRITERION
Over Charge Protection	Over charge detection voltage	3.7±0.025V
	Over charge release voltage	3.6±0.025V
	Maximum charge voltage	3.7±0.05V
	Standard charge current	⩽16A
Over Discharge Protection	Over discharge detection voltage	2.7± 0.025V
	Over discharge detection delay time	.5 - 1.5sec
	Over discharge release voltage	2.6±0.025V
Over Discharge Current Protection	Over current detection current	121±30A
	Detection delay time	200mS
	Release condition	Cut load
	Maximum continuous current	⩽96A
Short Circuit Protection	Detection condition	Exterior Short Circuit (333A)
	Detection delay time	200uS
	Release condition	Cut short circuit

BMS (BATTERY MANAGEMENT SYSTEM)

Su-Kam LFP Battery is optimized with an in-house Battery Management System (BMS) that monitors individual cells to provide protection against overcharging, over-discharging, and short circuits. Additionally, it enables each battery pack to achieve independent balancing. Overall, the BMS ensures safe and precise operation.



TECHNICAL SPECIFICATION

51.2V-200AH (L5)

Su-kam cargo 3- wheeler Cargo battery is a step in our journey to give you optimum performance. It's designed and manufactured after intensive research and study in collaboration with the leading scientists. It is simple to install, safe, reliable, and it provides the lowest lifetime energy cost for your E-3 wheeler. Global technology is molded to fit India's local requirements.

SAFETY CHARACTERISTICS

- Over-charge/Over-discharge Ability to withstand over-charge/withstand over-discharge, and there is no fire, no exploding and work well
- Short circuit Ability to withstand short circuit, and there is no fire, no exploding
- Acupuncture Ability to withstand nail puncturing, and there is no fire, no exploding
- Thermal shock Ability to withstand thermal shock, and there is no fire, no exploding

S/N	DESCRIPTIONS	SPECIFICATIONS
1)	Battery Model	LFP51.2V200AH
2)	Cell Capacity	3.2V, 100Ah
3)	Type of cell	Prismatic
4)	Rated Capacity	200 Ah @25°C
5)	Nominal Voltage	51.2 V
6)	Voltage Range	40-58.4 V
7)	Total Energy	10.24 kWh
8)	Configuration	16S2P
9)	Standard Charging Current	40A
10)	Max. Charge Current	0.3C ie. 70A
11)	Maximum Continuous Discharge Current	0.6C ie. 150 A
12)	Peak Discharge Current (for 20 sec)	1C ie. 200 A
13)	Cycle Life	≥3000 Cycle life (25°C 0.5°C 80% DOD)

S/N	DESCRIPTIONS	SPECIFICATIONS
14)	Operating Temperature Range	Charging: 0° to +55°C
		Discharging: -10° to +60°C
15)	Recommended Storage Temp Range	+15° to +35°C
16)	IP Class	IP67
17)	Weight	85±3 kg (approx.)
18)	Dimension (l*b*h)±3mm	660*435*280 mm
19)	Battery Casing	MS Sheet Metal
20)	Communication	CAN & RS485
21)	Additional Features	Data Logging
		Audio Visual Warning
		Bluetooth Connectivity
22)	Protections	Over Voltage
		Undervoltage
		Over Temperature
		Short Circuit
		Over Charge/Regenaration
		Over Discharge
23)	Certification	AIS 156 Phase 2

BMS (Battery Management System)

Su-kam LFP Battery is optimized with an in-house Battery Management System (BMS) that monitors individual cells to provide protection against overcharging, over-discharging, and short circuits. Additionally, it enables each battery pack to achieve independent balancing. Overall, the BMS ensures safe and precise operation.

Extra Mileage

Fast Charging

Longer Life

Ultra-low Maintenance

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SOLAR I INVERTER I BATTERY I LITHIUM

STATE OF ART MANUFACTURING - INDIA

Head Office : Plot No. 54, Sector-37, Phase VI, Udyog Vihar, Gurugram, Haryana-122001

R&D Office & Inverter Plant 1:196-B & C, Sector-37, Udyog Vihar, Phase-VI, Gurugram-122001, Haryana

Corporate Office : Plot No. 7, Apparel Park-cum-Industrial Area, Katha, Baddi, Himachal Pradesh - 173205

Lithium Plant: Plot No. 44, Industrial Area, Vill Bhatolikalan, Baddi, Himachal Pradesh

Inverter Plant 2: Plot No. 71 & 64, HPSIDC Industrial Area, Hanuman Chowk, Baddi, Himachal Pradesh

Battery Plant 2: Plot No. 4, HPSIDC Industrial Area, Baddi, Himachal Pradesh - 173205

Su-Kam®

SOLAR I INVERTER I BATTERY I LITHIUM

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