



India's Leading Energy Storage Company

Lithium Powered Battery & Energy Storage system



Prismatic LiFePO4 cells



High Energy Density



Cell Balancing



Parallel & Series connection



Instant Charging



FR Grade



Long Life



Safety



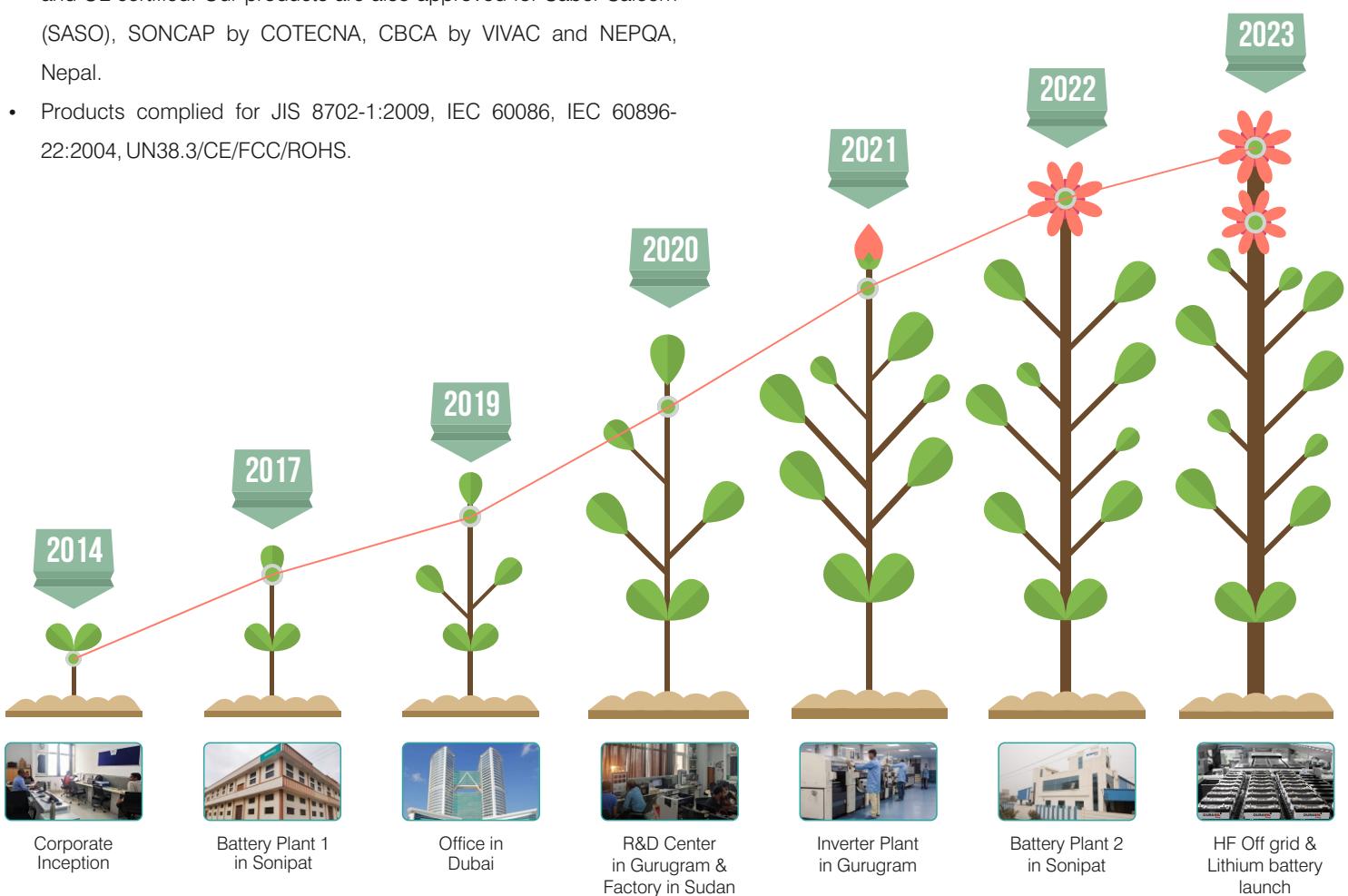
Zero Maintenance

Let's improve the quality of life!

From a modest start in early 2000 we invested a lot of time, effort and money solving the customer's problem in the areas of electricity. Today we can't imagine life without electricity. We always strive to offer a solution to our customers which can bring brightness and smiles in their life. After successfully developing market, customer awareness and establishing a few brands in more than 30 countries and having focus on green energy, we have been engaged in the areas of energy storage, renewable energy, storage products and electrical solution.

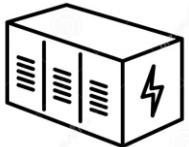
The backbone of the company are -

- Having 4 state of the art manufacturing facility in North of India.
- Total installed capacities of all the batteries and inverter are more than 1 Million a year.
- One of the largest OEM supplier & technology partner to conglomerate big energy & solar brands globally.
- We are ISO 9001 & 14001 Certified company and our Products are CE and UL certified. Our products are also approved for Saber Saleem (SASO), SONCAP by COTECNA, CBCA by VIVAC and NEPQA, Nepal.
- Products complied for JIS 8702-1:2009, IEC 60086, IEC 60896-22:2004, UN38.3/CE/FCC/ROHS.



Our Journey

ENERGY STORAGE CELL



- High power cell series
- Power energy type cell series
- Energy type cell series

ELECTRIC ENERGY STORAGE



- Power generation side energy storage system
- Grid side energy storage system
- User side energy storage system
- Industrial and commercial energy storage system

NETWORK ENERGY STORAGE



- Communication base station energy storage
- Data center energy storage

HOUSEHOLD ENERGY STORAGE



- Portable power supply
- Home energy storage

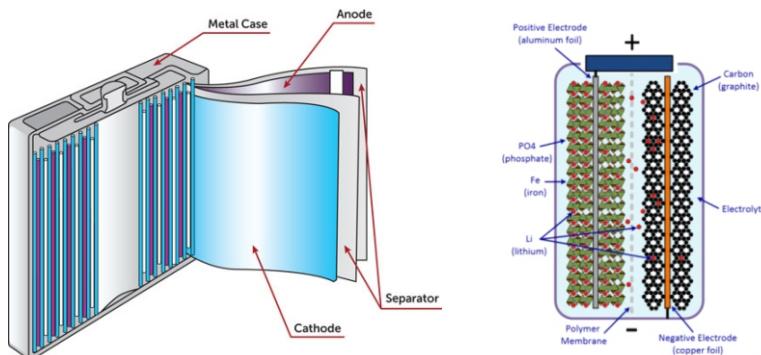


Lithium Technology **TECHNOF** *Series*

Working Principle of Lithium Cells

Lithium Iron Phosphate (LiFePO₄) battery is made of power-generating electrochemical cells to power electrical devices. LiFePO₄ battery consists of an anode, cathode, separator, electrolyte, and positive and negative current collectors. The anode terminal acts as the source of lithium ions. The electrolyte carries positively charged lithium ions from the anode to the cathode and vice versa through the separator. The movement of the lithium ions creates free electrons in the anode and as a result, electrons will flow through an external circuit to the cathode i.e. positive terminal, and accordingly, a current will flow from the positive terminal to the negative terminal when an electric load is connected across the battery. The cell consists of concentric alternating layers of the negative and positive electrode materials between which separator layers are situated. The cell is then filled with electrolyte to allow ion conduction.

The cathode terminal must be manufactured in such a way that it can release a vast amount of lithium ions during the battery operation. The most common cathode material is LiCoO₂, however, there are some disadvantages associated with the material. As a result, LiFePO₄ finds its application as a replacement for LiCoO₂. Graphical representation that illustrates the process.



Lithium Iron Phosphate - Low Voltage WALL MOUNTED BATTERY

DURASOL®
Energi

Durasol Energi Technof Series CE-5 & CE-10 wall mounted energy storage power supply is a high-tech product with multiple application scenarios which is developed by Intelenergi. The battery has small size, light weight with long cycle life and supports rapid charging. It adopts advanced intelligent power supply with protection functions of over charge, over discharge, over current and temperature and has outstanding advantages in the application field of household energy storage.

Salient Features

- Extremely simple design in appearance
- Elegant appearance IP40, IP20
- It supports multiple battery modules in parallel upto 15 modules
- Easy installation and maintenance, customized design to meet the requirements of different customers
- Multiple protection and alarm system, safe and reliable.



Parameters / TFWM		CE-5	CE-10
Battery parameters	Rated voltage	51.2 V	51.2 V
	Rated Capacity	100Ah	200Ah
	Energy	5120Wh	10240Wh
	Operating Voltage range	44~57.6V ±1V	44~57.6V ±1V
	Recommended Charge Current	0.5 C (50A)	0.5 C (100A)
	Recommended Discharge Current	0.5 C (50A)	0.5 C (100A)
	Max Discharge Current	1 C (100A)	1 C (200A)
	Type of battery	LFP battery (LiFePO4)	LFP battery (LiFePO4)
	Cell Combination	16S1P	16S2P
	Protection functions	Over voltage, under voltage, over temperature, low temperature, over current, short circuit	
Operating condition	Self-discharge rate @25	<3% (90 days storage)	<3% (90 days storage)
	Storage temperature range	0~45°C	0~45°C
	Operating temperature range	Charge 0°C ~50°C	Charge 0°C ~50°C
		Discharge -15°C ~55°C	Discharge -15°C ~55°C
	Operating humidity condensing	5%~95%	5%~95%
Others	Other function	Cell equalizer	Cell equalizer
	Cycle life	6000 cycles @ 0.5C, 80% DOD, @25°C 4000 cycles @ 0.5C, 100% DOD, @30°C	
	Weight (apprx)	46kg	85kg
	Dimension (L * W * H)	430*186*600 ± 1mm	680*415*235 ± 1mm
	Heat dissipation method	Natural cooling	Natural cooling
	Installation method	Wall hanging	Wall hanging
	Communication method	CAN/RS485	CAN/RS485
	Protection Class	IP-40	IP-20
	Application	Indoor	Indoor
	Combination	15P	15P
Matched inverter		Durasol Energi, Pylon, Growatt, SRNE Solar, Goodwe, Ginlong, Pengcheng, Riyueyuan, Victron, Sorotek, Schneider, SMA, Meishile, TBB, studer,Deye	

Applications



Hybrid Solar Systems

Stand alone Off Grid Solar System

Online UPS systems

Residential Inverters/
Convertor Systems

Emergency power backup

Lithium Iron Phosphate - Low Voltage WALL MOUNTED BATTERY



Durasol Energi Technof Series MOON5-W & MOON10-W wall mounted energy storage power supply is a high-tech product with multiple application scenarios which is developed by Intelenergi. The battery has small size, light weight with long cycle life and supports rapid charging. It adopts advanced intelligent power supply with protection functions of over charge, over discharge, over current and temperature and has outstanding advantages in the application field of household energy storage.

Salient Features

- Extremely simple design in appearance
- Elegant appearance IP21
- It supports multiple battery modules in parallel upto 15 modules
- Easy installation and maintenance, customized design to meet the requirements of different customers
- Multiple protection and alarm system, safe and reliable.



Parameters / TFWM		MOON5-W	MOON10-W
Battery parameters	Rated voltage	51.2 V	51.2 V
	Rated Capacity	100Ah	200Ah
	Energy	5120Wh	10240Wh
	Operating Voltage range	43~57.6V ±1V	43~57.6V ±1V
	Recommended Charge Current	0.5 C (50A)	0.5 C (100A)
	Recommended Discharge Current	0.5 C (50A)	0.5 C (100A)
	Max Discharge Current	1 C (100A)	0.75 C (150A)
	Type of battery	LFP battery (LiFePO4)	LFP battery (LiFePO4)
	Cell Combination	16S1P	16S2P
	Protection functions	Over voltage, under voltage, over temperature, low temperature, over current, short circuit	
Operating condition	Self-discharge rate @25	<3% (90 days storage)	
	Storage temperature range	0~45°C	0~45°C
	Operating temperature range	Charge 0°C ~50°C Discharge -15°C ~55°C	Charge 0°C ~50°C Discharge -15°C ~55°C
	Operating humidity condensing	5%~95%	5%~95%
	Other function	Cell equalizer	Cell equalizer
Others	Cycle life	6000 cycles @ 0.5C, 80% DOD, @25°C 4000 cycles @ 0.5C, 100% DOD, @30°C	
	Weight (apprx)	55kg	92.5kg
	Dimension (L * W * H)	415*185*616.1 ±1mm	600*167.5*814 ±1mm
	Heat dissipation method	Natural cooling	Natural cooling
	Installation method	Wall/Floor mounted	Wall/Floor mounted
	Communication method	CAN/RS485	CAN/RS485
	Protection Class	IP-21	IP-21
	Application	Indoor	Indoor
	Combination	15P	15P
	Matched inverter	Durasol Energi, Pylon, Growatt, SRNE Solar, Goodwe, Ginlong, Pengcheng, Riyueyuan, Victron, Sorotek, Schneider, SMA, Meishile, TBB, studer,Deye	

Applications



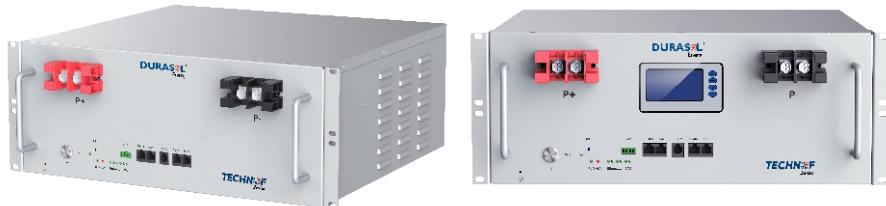
Lithium Iron Phosphate - RACK MOUNTED BATTERY



Durasol Energi Technof Series CT-5 Lithium battery is a High-tech product independently developed by Intelenergi. The battery is small in size and light in weight, and it supports 19-inch rack installation. It has a long service life and supports fast charging. It adopts advanced intelligent BMS with alarm and protection functions such as overcharge, over discharge, over current, temperature, etc., and historical data storage, charging current limiting. The product has prominent advantages in the field of household and telecom applications.

Salient Features

- Good temperature performance.
- Protection functions of voltage, current & temperature
- Long life(3000 times @0.5C, 100%DOD, 25t)
- Easy O&M, integrative BMS design, supports self-management, residual capacity.
- Expandable LCD display function.



Parameters / TFRM		CT-5	CT-5L
Battery parameters	Rated Voltage	51.2 V	
	Rated Capacity	100Ah	
	Energy	5120 Wh	
	Operating Voltage Range	44V ~ 57.6V±1V	
	Recommended Charge Current	0.5C (50A)	
	Recommended Discharge Current	0.5C (50A)	
	Type of battery	LFP battery (LiFePO4)	
	Combination	16S1P	
	Protection functions	Over voltage, under voltage, over temperature, low temperature, over current, short circuit	
Operating condition	Self-discharge rate @25	<3% (90 days storage)	
	Storage temperature range	0~45°C	
	Operating temperature range	Charge 0°C ~50°C	
		Discharge -15°C ~55°C	
	Operating humidity condensing	5%~95%	
	Communication interface	RS485 / CAN	
Others	Other function	Cell equalizer, Current limiter	Cell equalizer, Current limiter LCD
	Cycle life	6000 cycles @ 0.5C, 80% DOD, @25°C 4000 cycles @ 0.5C, 100% DOD, @30°C	
	Weight (apprx)	45 kg	
	Dimension (L * W * H)	440*420*176 ± 2mm	
	Heat dissipation method	Natural cooling	
	Installation method	Rack Mounted	
	Application	Indoor	
	Combination	15P	
	Communication method	RS485/CAN	
	Protection Class	IP-20	
Inverter supported		Durasol Energi, Pylontech, Growatt, SRNE, Goodwe, Ginlong, Luxpower, Voltronic power, Victron, Sorotech, Schneider, SMA, Must, Tbbpower, Studer	

Applications



Hybrid Solar Systems

Stand alone Off Grid Solar System

Telecom systems

Residential Inverters/
Convertor Systems

Data Centre

Lithium Iron Phosphate - ENERGY STORAGE POWER BANK

DURASOL®
Energi

Durasol Energi Series CS5000-X-P stack based energy storage power supply is a high-tech product with multiple application scenarios which is developed by Intelenergi with battery modules, off-grid inverter and EMS unit integrated inside. The system has 4 levels of protection strategy and supports usage of 4 battery modules in parallel with stack-based installation and can connects with PV, grid, and load to work. The charge mode can be chosen according to the application scenarios and the installation and O&M have been simplified. It is suitable for the scenarios of household emergency power backup (power shortage, power failure, typhoons, earthquakes and other natural disasters), peak and valley price arbitrage, and self generating and self-use, and has outstanding advantage in the application files of household energy storage.

Salient Features

- Single-phase European standard and single-phase American standard design, supporting multi-system grid voltage standards
- Multiple working modes (photovoltaic priority, mains priority, inverter priority)
- Simple installation and maintenance, the customized design meets the different requirements
- Bring your own IOS/Android. App monitoring
- Single battery 5.12kWh, expandable up to 20.48KWh
- Multiple protection and alarm system, safe and reliable
- Homely style, elegant and beautiful



Parameters / TFESPB		CS5000-5-P	CS5000-10-P	CS5000-15-P	CS5000-20-P
Battery parameters	Rated voltage	51.2 V			
	Rated Capacity	100Ah			
	Energy (KWH)	5.12	10.24	15.36	20.48
	Operating Voltage range	44~57.6 V ±1V			
	Recommended Charge Current	0.5C (50A)			
	Recommended Discharge Current	0.5C (50A)			
	Battery type	LFP battery (LiFePO4)			
	Cell Combination	16S1P			
	Protection functions	Over voltage, under voltage, over temperature, low temperature, over current, short circuit			
Operating condition	Self-discharge rate @25	<3% (90 days storage)			
	Storage temperature	0~45°C			
	Operating temperature range	Charge 0°C ~50°C			
		Discharge -15°C ~55°C			
	Operating humidity condensing	5%~95%			
	Other function	Cell equalizer, Current limiter, LCD			
Others	Heat dissipation method	Natural cooling			
	Dissipation method	Smart air cooling			
	Cycle life	6000 cycles @ 0.5C, 80% DOD, @25°C 4000 cycles @ 0.5C, 100% DOD, @30°C			
	Weight (apprx)	87 Kg	137 Kg	187 Kg	237 Kg
	Dimension (L * W * H) mm	650*440*345	650*440*485	650*440*625	650*440*765
Applications	Installation method	Stackable			
	Application	Indoor			
	Combination	1P	2P	3P	4P
	Communication method	RS485/CAN			
	Protection Class	IP-21			
	Inverter supported	Durasol Energi, Pylon, Growatt, SRNE Solar, Goodwe, Ginlong, Pengcheng, Riyueyuan, Victron, Sorotek, Schneider, SMA, Meishile, TBB, studer,Deya			

Applications



Hybrid Solar Systems

Stand alone Off Grid Solar System

Telecom systems

Residential Inverters/
Convertor Systems

Online UPS System

Lithium Iron Phosphate - MONOBLOCK BATTERY

Durasol Energi Technof Series 12.8V monoblock battery is a high-tech product with multiple application scenarios which is developed by Intelenergi.

TFMB	12.8V100Ah	12.8V150Ah	12.8V200Ah
ELECTRICAL SPECIFICATIONS			
Nominal Voltage	12.8V	12.8V	12.8V
Nominal Capacity	100Ah	150Ah	200Ah
Energy	1280Wh	1920Wh	2560Wh
Operating Voltage range	8.8~14.6V ±.05V	8.8~14.6V ±.05V	8.8~14.6V ±.05V
Reconnect Voltage	10.8 V (2.7 ± 0.1 v)	10.8 V (2.7 ± 0.1 v)	10.8 V (2.7 ± 0.1 v)
Recommend Low Voltage Disconnect	11 V	11 V	11 V
Recommended Charge Current	20 A	30 A	40 A
Max Charge Current	0.5C	0.5C	0.5C
Recommended Discharge Current	0.5C	0.5C	0.5C
Maximum Discharge Current	100 A	150 A	200 A
Short Circuit Protection	200-600 µs	200-600 µs	200-600 µs
Type of battery	LFP battery (LiFePO4)	LFP battery (LiFePO4)	LFP battery (LiFePO4)
Self-discharge rate @25	<3% (90 days storage)	<3% (90 days storage)	<3% (90 days storage)
Maximum Modules in Series	4S	4S	4S
Maximum Modules in Parallel	10P	10P	10P
Self Discharge	<3% per month	<3% per month	<3% per month
Cycle Life	2500 cycles @ 0.5C, 80% DOD, @30°C 2000 cycles @ 0.5C, 100% DOD, @30°C	2500 cycles @ 0.5C, 80% DOD, @30°C 2000 cycles @ 0.5C, 100% DOD, @30°C	2500 cycles @ 0.5C, 80% DOD, @30°C 2000 cycles @ 0.5C, 100% DOD, @30°C
TEMPERATURE SPECIFICATIONS			
Discharge Temperature	-20 to 60 °C	-20 to 60 °C	-20 to 60 °C
Charge Temperature	0 to 55 °C	0 to 55 °C	0 to 55 °C
Storage Temperature	-10 to 45 °C	-10 to 45 °C	-10 to 45 °C
BMS High Temperature Cut-off	75 °C	75 °C	75 °C
Reconnect Temperature	50 °C	50 °C	50 °C
CHARGE SPECIFICATIONS			
Recommended Charge Voltage	14.2V - 14.6V	14.2V - 14.6V	14.2V - 14.6V
BMS Charge Voltage Cut-off	15.0V ± 0.02v (2s)	15.0V ± 0.02v (2s)	15.0V ± 0.02v (2s)
Reconnect Voltage	14.2V ± 0.05v	14.2V ± 0.05v	14.2V ± 0.05v
Balancing Voltage	13.6V ± 0.02v	13.6V ± 0.02v	13.6V ± 0.02v
MECHANICAL SPECIFICATIONS			
Dimensions (L*W*H)	329*172*214 ±1mm	483*170*240 ±1mm	522*240*218 ±1mm
Weight (apprx)	11 kg	17 kg	22 kg
Terminal Type	M8 x 1.25	M8 x 1.25	M8 x 1.25
Terminal Torque	80-100 in-lbs (9-11 N-m)	80 - 100 in-lbs (9-11 N-m)	80 - 100 in-lbs (9-11 N-m)
Case Material	ABS	ABS	ABS
Enclosure Protection	IP65	IP65	IP65
COMPLIANCE SPECIFICATIONS			
Certifications	UN38.3 /CE/FCC/ROHS	UN38.3 /CE/FCC/ROHS	UN38.3 /CE/FCC/ROHS
Shipping Classification	UN 3480, CLASS 9	UN 3480, CLASS 9	UN 3480, CLASS 9

Applications



Hybrid Solar Systems



Stand alone Off Grid Solar System



Emergency Lights



Online UPS systems



Small office Home office systems



Residential Inverters/
Convertor Systems



Lithium Iron Phosphate - ENERGY STORAGE POWER BANK (high voltage)

DURASOL®
Energi

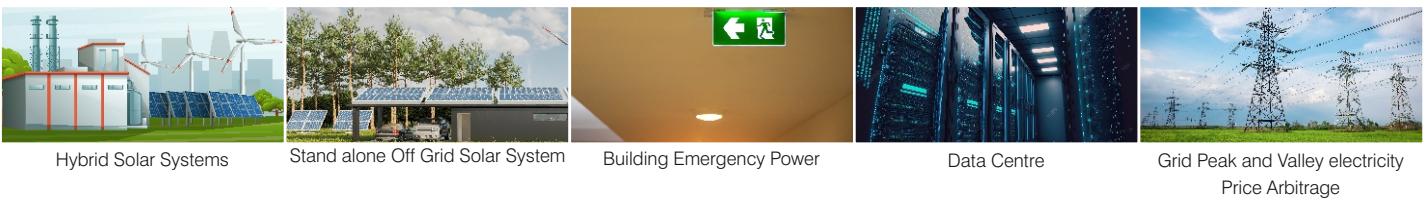
Durasol Energi Technof Series CE-X-S series of high voltage stack-based energy storage battery is a high-tech product with multiple application scenarios which is developed by Intelenergi with battery modules, HVC box and BMS unit integrated inside. The system has 4 levels of protection strategy and supports usage of 2-6 battery modules in parallel. With stack-based installation method, the installation and O&M are simplified. It is suitable for the scenarios of household emergency power backup(power shortage, power failure, typhoons, earthquakes and other natural disasters), peak and valley price arbitrage, and self-generating and self use, and grid dispatching subsidy, etc.

Salient Features

- Homely style, elegant and beautiful
- With high voltage stack-based design, the backup energy can be expanded flexibly
- Multiple electrical protections, safe and reliable
- Adopting LFP cells, safe and stable
- Single battery 5.12KWh, it can be expanded to 30.72KWh

Parameters / TFESPB		CE-10S	CE-15S	CE-20S	CE-25S	CE-30S
System Structure						
Battery parameters	Rated voltage	204.8V	307.2V	409.6V	512V	614.4V
	Rated capacity	50 Ah	50 Ah	50 Ah	50 Ah	50 Ah
	Energy (KWH)	10.24	15.36	20.48	25.6	30.72
	Operating Voltage range	179.2~227.2V±1V	268.8~340.8V±1V	358.4~454.4V±1V	448~568V±1V	537.6~681.6V±1V
	Number of batteries in series	2pcs	3pcs	4pcs	5pcs	6pcs
	Rated voltage	204.8V	307.2V	409.6V	512V	614.4V
	Recommended Charge Current	0.5 C				
	Recommended Discharge Current	0.5 C				
	Battery type	LFP battery (LiFePO4)				
	Cell Combination	32S1P				
	Protection functions	Over voltage, under voltage, over temperature, low temperature, over current, short circuit				
	Self-discharge rate @25	<3% (90 days storage)				
Operating Condition	Storage temperature range	0~45°C				
	Operating temperature range	Charge 0°C ~50°C Discharge -15°C ~55°C				
	Operating humidity condensing	5%~95%				
	Installation method	Stackable				
	Other function	Cell equalizer, Current limiter, LCD				
	Application	Indoor installation				
	Altitude	≤2000m				
	Heat dissipation method	Natural Cooling				
Others	Cycle life	6000 cycles @ 0.5C, 80% DOD, @25°C 4000 cycles @ 0.5C, 100% DOD, @30°C				
	Dimension (L * W * H)	550*370*744 ±1mm	550*370*950 ±1mm	550*370*1216 ±1mm	550*370*1453 ±1mm	550*370*1689 ±1mm
	Weight (apprx)	119Kg	169Kg	220Kg	270Kg	321Kg
	Altitude	≤2000m				
	Communication method	RS485/CAN				
	Protection Class	IP-20				
	Matched inverter	Durasol Energi, Pylon, Growatt, Goodwe, Megarevo, Victron, New Electric, Shangweisi, Atless, Gilong				

Applications



Lithium Iron Phosphate - INDUSTRIAL & COMMERCIAL ENERGY STORAGE

DURASOL®
Energi

Durasol Energi Technof Series 50kW/100kWh & 100kW/200kWh lithium battery energy storage outdoor cabinet is a high-tech product developed by Intelenergi for small industrial and commercial energy storage. It integrates lithium battery system, energy storage converter, EMS management and supports a variety of working modes. It is suitable for multiple application scenarios, such as standby power supply, peak load shifting, electric energy storage and new energy access.

Salient Features

- Flexible configurations, stronger capacity expansion, support for parallel use of multiple machines.
- Pack modular standard design, free combination, easy operation and maintenance.
- Perfect protect function, and fire protection, access control, thermal management and other systems.
- Touch LCD to visually display various parameters, records, status, alarms etc.
- Multi-purpose, support a variety of operating modes.
- Three-level BMS management, from the cell to the system, ensures the safe and reliable operation of the system layer by layer.
- Support wired or wireless 4G communication to realize remote monitoring.

Parameters / TFESS		50KW/100KWh	100KW/200KWh
DC side parameter	DC channel	1 channel	1 channel
	DC busbar maximum voltage	900 V	1000 V
	DC side maximum current	200 A	176 A
	DC voltage operating range	200-900 V	560-1000 V
AC grid connection parameter	Maximum input apparent power	50 kVA	100 kVA
	Maximum input active power	50 kW	100 kW
	Rated input voltage	220/380 V, 3P4W+PE	220/380 V, 3P4W+PE
	Maximum continuous input current	86 A	152 A
	Rated input frequency	50 Hz	50 Hz
AC off-grid connection parameter	AC off-grid voltage	220/380 V, 3P4W+PE	220/380 V, 3P4W+PE
	Maximum continuous output current	86 A	152 A
	AC off-grid frequency	50 Hz	50 Hz
Battery parameter	Nominal voltage	LFP	LFP
	Rated power	100KWh	224KWh
	Operating voltage range	358.4 V	672 V
	Battery type	313-392 V	588-735 V
	Rate	≤0.5C	≤0.5C
System parameter	Human-computer interface	8 inch LCD touch screen	8 inch LCD touch screen
	Fire extinguishing system	Perfluorohexanone	Perfluorohexanone
	Heat-removal system	Industrial grade air conditioner / intelligent air cooling	Industrial grade air conditioner / intelligent air cooling
	Operating temperature	0°C-55°C	0°C-55°C
	Protection level	IP54	IP54
	Dimension (L * W * H)	<1350mm*1100mm*2350mm ± 2mm	<1600mm*1100mm*2100mm ± 2mm
	Weight	≤1200KG	≤3000KG



Applications



Generator Replacement

Electricity Distribution company

Grid stabilization/Mini Grid and

Remote Power Supply

Back up to Solar Power Plants

Centralized EV charging stations

Notes





OUR COMPLETE RANGE OF ENERGY SOLUTIONS



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