

# Lithium Battery

## 12V/24V Series



POWER

LINK

### Product Information



#### UP To 10X Life

Times longer than lead acid battery.



#### 60% Faster Charge

100% full charge in one hour



#### Less weight

Lithium-ion batteries are one-third the weight of lead acid batteries



#### Warranty

18 months warranty on our line of Lithium Ion Batteries that guarantees it to be free of manufacturer defects



#### Maintenance Free

Maintenance free or automatic repair



#### Built In Protection

Our lithium batteries have a built in Battery Management System (BMS)



#### Wide Range Temperature

Wide adaptability from low temperature to high temperature



#### 100% DOD

Our battery will perform for over 2,000 cycles at 100% DOD, comparing with only 500 cycles at 80% DOD with a lead acid battery

### Applications

- Office machines and Computers
- Telecommunications
- UPS Equipment
- Electrical facilities
- Vending machine



Solar Street Lighting



Park & Scenic Spot Solar Lighting



Square & Parking Solar Lighting



Residential & Campus Solar Lighting



Other Solar Lighting Applications

### Features

- Built-in automatic protection for over-charge, over-discharge, and exceeding temperature conditions
- One single BMS can manage multiple battery models (<200)
- Application voltages from 12V~ 480V
- Internal cell balancing
- Thousands of cycles, 100% DOD, under normal conditions
- Thousands of cycles, 100% DOD, under normal conditions
- Can be charged using most standard lead-acid chargers (set for AGM/GEL cells)

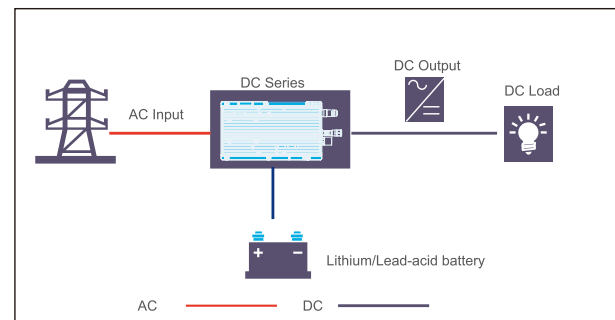
LiFePO4	Nominal Capacity	Nominal Voltage	Nominal Energy	Max Charging current	Max Discharge current	Dimensions (L*W*H)			Approx. Weight	Terminal	IP Degree
	[Ah]	[V]	[Wh]	[A]	[A]	L [mm]	W [mm]	TH [mm]	[kg]	Type	
LFP12006	6	12.8	77	3	6	90	70	107	0.90	F2	IP50
LFP12008	8	12.8	102	4	8	151	65	94	1.10	F2	IP50
LFP12012	12	12.8	154	6	12	151	98	101	1.30	F2	IP50
LFP12020	20	12.8	256	10	20	181	77	167	2.00	Insert M5	IP50
LFP12030	30	12.8	384	15	30	195	130	168	3.60	Insert M5	IP50
LFP12040	40	12.8	512	20	40	195	130	168	5.60	Insert M6	IP50
LFP12050	50	12.8	640	25	50	229	138	213	6.30	Insert M8	IP50
LFP12060	60	12.8	768	25	50	229	138	213	9.40	Insert M8	IP50
LFP12080	80	12.8	1024	40	80	258	166	215	9.50	Insert M8	IP50
LFP12100-1	100	12.8	1280	50	100	258	166	215	13.00	Insert M8	IP50
LFP12100-2	100	12.8	1280	50	100	330	172	215	13.00	Insert M8	IP50
LFP12120-1	120	12.8	1536	50	100	330	172	220	13.50	Insert M8	IP50
LFP12120-2	120	12.8	1536	50	100	260	180	257	13.50	Insert M8	IP50
LFP12150	150	12.8	1920	50	100	521	237	217	20.00	Insert M8	IP50
LFP12200	200	12.8	2560	50	100	483	170	240	22.00	Insert M8	IP50
LFP12300	300	12.8	3840	50	100	522	240	218	29.20	Insert M8	IP50
LFP24050	50	25.6	1280	25	50	330	172	215	13.20	Insert M8	IP50
LFP24060	60	25.6	1536	30	60	260	180	257	17.50	Insert M8	IP50
LFP24085	85	25.6	2176	43	85	483	170	240	20.60	Insert M8	IP50
LFP24100	100	25.6	2560	50	100	483	170	240	22.00	Insert M8	IP50
LFP24120	120	25.6	3072	50	100	483	170	240	26.50	Insert M8	IP50
LFP24150	150	25.6	3840	50	100	520	269	208	35	Insert M8	IP50

# Lithium Battery

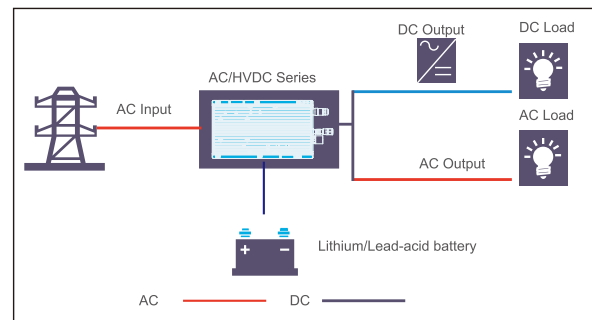
## 5G Power Station



### Product Information



Micro Base Station Integrated Lithium Power Supply System (-48VDC)



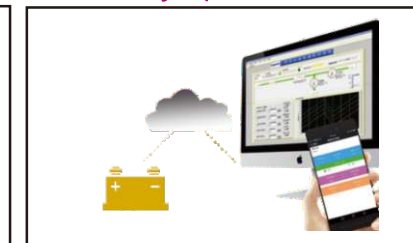
Micro Base Station 220V AC/DC Integrated Lithium Power Supply System

### Features and Benefits

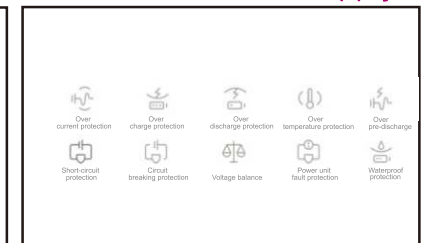
#### Rapid Design



#### Easy Operation

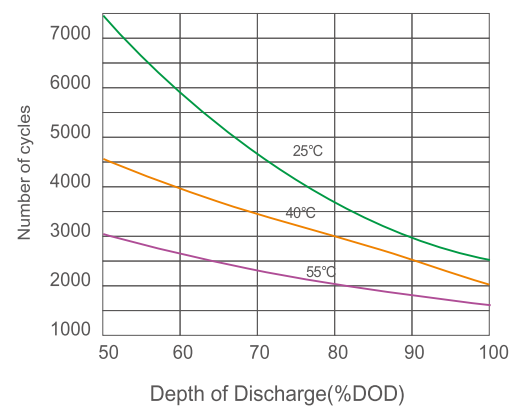


#### Reliable Power Supply

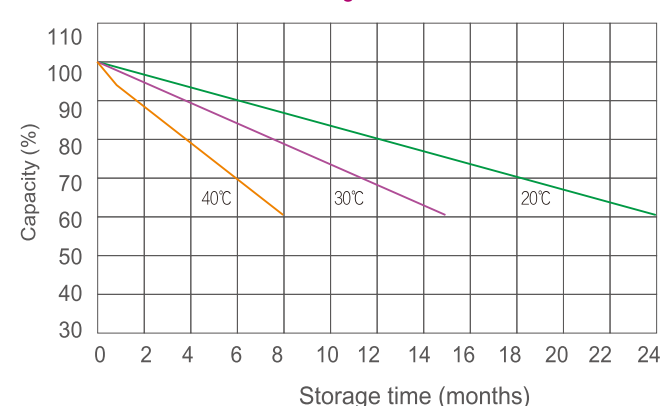


NEATA series power supply module. When the AC output supplies to the load bypass, the DC output supplies 48V power to the battery. When the AC is tured off the DC output is inverted to 220V supplying power to the load. NEATA power module convert AC or HVDC to steady 48V DC. Lithium battery modul supply power to communication device.

Cycle life versus DOD and temperture at 0.2C



Self-discharge characteristic



Model	Voltage	Capacity	Dimensions(L*W*H)mm	Weight(KG)	communication	warranty	Description
5G IP65 rectifier 1KW	56.5V	1KW	300*97*420	9	bluetooth, APP	3years	56.5V1KW
5G IP65 rectifier 2KW	56.5V	2KW	300*97*420	9	bluetooth, APP	3years	56.5V2KW
5G IP65 rectifier 3KW	56.5V	3KW	300*97*420	9	bluetooth, APP	3years	56.5V3KW
5G-LFP4850	48V	50AH	300*190*420	34	RS485/4G	3years	Maximum charge/discharge current: 50A
	51.2V	50AH	300*190*420	35	RS485/4G	3years	Charging current limit: 20A. Max 4pcs parallel application
SMART-LFP48100	48V	100AH	442*400*133	46	RS485/Dry port	5years	no limited for parallel application

# Rack Design

## LFP48V Series



### PRODUCT FEATURES



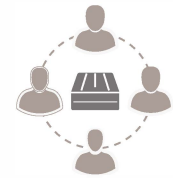
#### High Energy Cell

- Advanced High Capacity and Long Lifecycle



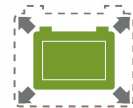
#### Easy Installation

- Easy Installation by Simple Module Structure



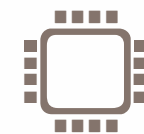
#### Standard Module

- Standard Module for Various Customer Needs



#### Scalability

- Easy to Expand Capacity



#### INTELLIGENT BMS

- Intelligent BMS management system
- Super active/passive equalization manager
- High resolution thermal management function

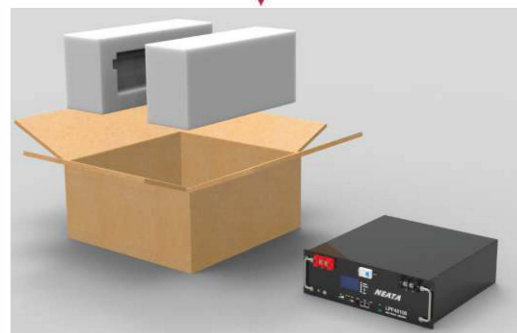


#### Compatibility

- Compatible with Various Standard Inverters

\* Inverter for Residential, SMPS for Telecom

Standard maintenance free design. Meet the inch communication cabinet installation



Long life, battery life cycle of more than 3500 cycles at 80% DOD depth and residual capacity 0% SOC

The built-in BMS has a variety of protection and communication functions to ensure the reliability of the battery pack performance and achieve long-distance real battery data.

Wide temperature range and high reliability

The internal resistance of the battery is small, and the performance of the rate is superior.

Multiple battery packs can be used in parallel for high volume applications

Model	Nominal voltage (V)	Typical capacity (Ah)	Charge current (A)	Constant discharge current/ Peak current (3S)	Weight (Kg)	Dimension (mm)	Remark
LFP4810	48	11	5	10A/20A	7	442*330*44	Support 16P
LFP4820	48	22	10	20A/40A	13	442*330*88	Support 16P
LFP4850	48	50	25	50A/100A	24	442*390*88	Support 16P
LFP48100	48	100	50	100A/120A	45	442*480*155	Support 16P
LFP48150	48	150	50	100A/120A	65	442*465*178	Support 16P
LFP48180	48	180	50	100A/120A	72	442*550*226	Support 16P
LFP48200	48	200	50	100A/120A	76	442*580*226	Support 16P
LFP48240	48	240	50	100A/120A	95	442*600*264	Support 16P

# Rack Design

## LFP51.2V Series



### PRODUCT FEATURES

The built-in BMS has a variety of protection and communication functions to ensure the reliability of the battery pack performance and achieve long-distance real battery data.

Wide temperature range and high reliability

Standard maintenance free design. Meet the inch communication cabinet installation



The internal resistance of the battery is small, and the performance of the rate is superior.

Multiple battery packs can be used in parallel for high volume applications

Long life, battery life cycle of more than 3500 cycles at 80% DOD depth and residual capacity 0% SOC

Model	Nominal voltage (V)	Typical capacity (Ah)	Charge current (A)	Constant discharge current/ Peak current (3S)	Weight (Kg)	Dimension (mm)	Remark	Cycle life
LFP4810	51.2	11	5	10A/20A	8	442*330*44	Support 16P	6000
LFP4820	51.2	22	10	20A/40A	14.5	442*330*88	Support 16P	6000
LFP4850	51.2	50	25	50A/100A	25.5	442*390*88	Support 16P	6000
LFP48100	51.2	100	50	100A/120A	47	442*480*155	Support 16P	6000
LFP48150	51.2	150	50	100A/120A	69	442*465*178	Support 16P	6000
LFP48180	51.2	180	50	100A/120A	78	442*550*226	Support 16P	6000
LFP48200	51.2	200	50	100A/120A	82	442*580*226	Support 16P	6000
LFP48240	51.2	240	50	100A/120A	106	442*600*264	Support 16P	6000

**PLUG&PLAY**  
Convenient and flexible

**FLEXIBLE**  
Modular rack design for easier installation and smaller landscape

**SAFE AND RELIABLE**  
Adopt high safety, long life, excellent performance LiFePO4 prismatic cells

**LONG LIFE SPAN**  
Over 4000 times of cycle life

**INTELLIGENT BMS**  
Intelligent BMS to ensure a safe reliable operation

**INTERCONNECTION**  
Multiple communications including RS485, CAN

**ECO FRIENDLY**  
No outgassing and zero ambient emissions

**EXPANDABLE**  
Parallel on cabinet level available



# Wall Mounting/Standing

## LFP48V Series



**Warranty**



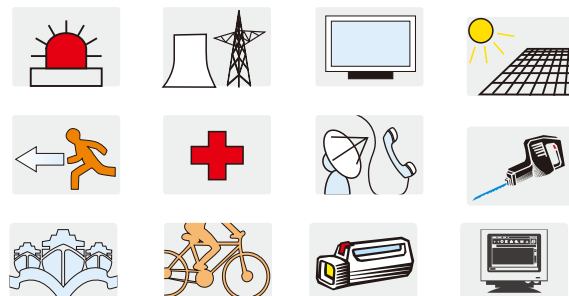
**100% DOD**

### General Features

- Environmentally friendly
- Longer Service Life
- High Reliability and Quality
- High Power Density
- Excellent Recovery from Deep Discharge
- Living Up to Prevailing Standards
- Non-sensitive-to Occasional Deep Discharges
- International leading technology

### Applications

- Solar and wind systems
- Cable TV
- Telecommunications
- Wheelchair
- Marine Equipment
- Military Equipment
- Emergency lighting
- Power Plants
- Medical Devices
- Golf Cart



Model	Nominal voltage (V)	Typical capacity (Ah)	Charge current (A)	Constant discharge current/ Peak current (3S)	Weight (Kg)	Dimension (mm)
LFP4850W	51.2	50	50	50A/100A	47	442*500*100
LFP48100W	51.2	100	50	100A/120A	48	442*550*126
LFP48150W	51.2	150	50	100A/120A	69	442*600*175
LFP48200W	51.2	200	50	100A/120A	82	442*600*200

### Technical features:

- Longer service life( for standby use);
- Longer cycle life;
- Excellent high rate performance;
- Special thermal runaway defense system design;
- Four layers structure design to prevent battery leakage;
- Innovative connecting copper strip;
- Better cost performance;
- Higher reliability.

# Vertical ESS

Energy storage system

## VESS48 Series



Villa



Base station



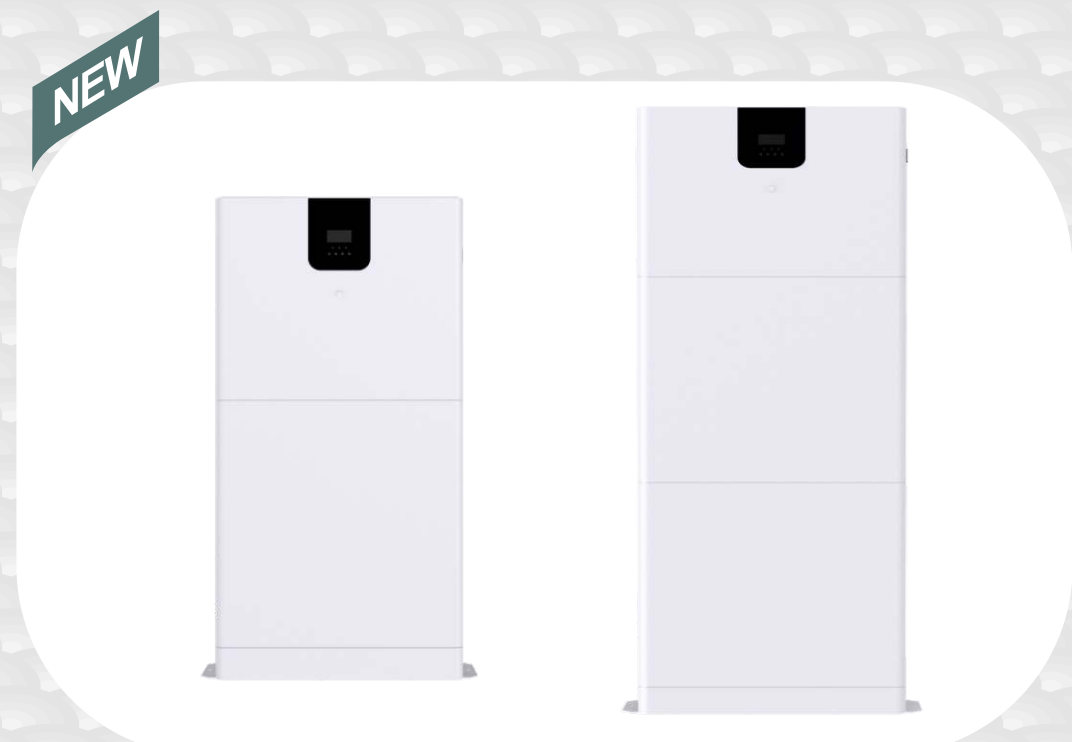
Telecom room



EV charging station



Farm



### Applications

- Office machines and Computers
- Telecommunications
- UPS Equipment
- Electrical facilities
- Vending machine



**Long life and safety**  
Vertical industry integration ensures more than 6000 cycles with 80% DoD.

**Easy to install and use**  
Integrated inverter design, easy to use and quick to install. Small size, minimizing installation time and cost Compact and stylish design suitable for your sweet home environment.

**Multiple working modes**  
The inverter has a variety of working modes. Whether it is used for main power supply in the area without electricity or backup power supply in the area with unstable power to deal with sudden power failure, the system can respond flexibly.

**Fast and flexible charging**  
A variety of charging methods, which can be charged with photovoltaic or commercial power, or both at the same time



Solar Street Lighting



Park & Scenic Spot Solar Lighting



Square & Parking Solar Lighting



Residential & Campus Solar Lighting



Other Solar Lighting Applications

	VESS48-5.0S-S1	VESS48-10.0S-S	VESS48-15.0S-S1	VESS48-20.0S-S	
<b>BATTERY</b>	Battery Module	1	2	3	4
	Battery Energy	5.12kWh	10.24kWh	15.36kWh	20.48kWh
	Battery Capacity	100AH	200AH	300AH	400AH
	Weight	80kg	130kg	190kg	250kg
	Dimension L x D x H	1190X600X184	1800X600X184	1800x600x184 690x600x184	1800x600x184 1300x600x184
	Battery Type	LiFePO4	LiFePO4	LiFePO4	LiFePO4
	Battery Rated Voltage	51.2V	51.2V	51.2V	51.2V
	Battery Working Voltage Rang	44.8 ~ 57.6V	44.8 ~ 57.6V	44.8 ~ 57.6V	44.8 ~ 57.6V
	Maximum Charging Current	100A	100A	100A	100A
	Maximum Discharging Current	100A	100A	100A	100A
DOD	80%	80%	80%	80%	
Parallel Quantity	1	2	3	4	
Designed Life-span	15years	15years	15years	15years	
<b>PV CHARGE</b>	Solar Charge Type	MPPT	MPPT	MPPT	MPPT
	Maximum Output Power	5KW	5KW	5KW	5KW
	PV Charging Current Range	0~80A	0~80A	0~80A	0~80A
	PV Operating Voltage Range	120~500V	120~500V	120~500V	120~500V
<b>AC CHARGE</b>	MPPT Voltage Range	120~450V	120~450V	120~450V	120~450V
	Maximum Charge Power	3150W	3150W	3150W	3150W
	AC Charging Current Range	0 ~ 60A	0 ~ 60A	0 ~ 60A	0 ~ 60A
	Rated Input Voltage	220/230Vac	220/230Vac	220/230Vac	220/230Vac
	Input Voltage Range	90~280Vac	90~280Vac	90~280Vac	90~280Vac
	Rated Output Power	5KW	5KW	5KW	5KW
	Maximum Peak Power	10KVA	10KVA	10KVA	10KVA
	Power Factor	1	1	1	1
<b>INVERTER OUTPUT</b>	Rated Output Voltage (Vac)	230Vac	230Vac	230Vac	230Vac
	Frequency	50Hz	50Hz	50Hz	50Hz
	Auto Switch Period	< 15ms	< 15ms	< 15ms	< 15ms
	THD	< 3%	< 3%	< 3%	< 3%

# Stackable ESS

Energy storage system

## SESS48 Series



Villa



Base station



Telecom room



EV charging station



Farm

### Product Information



#### UP To 10X Life

Times longer than lead acid battery.



#### 60% Faster Charge

100% full charge in one hour



#### Less weight

Lithium-ion batteries are one-third the weight of lead acid batteries



#### Maintenance Free

Maintenance free or automatic repair



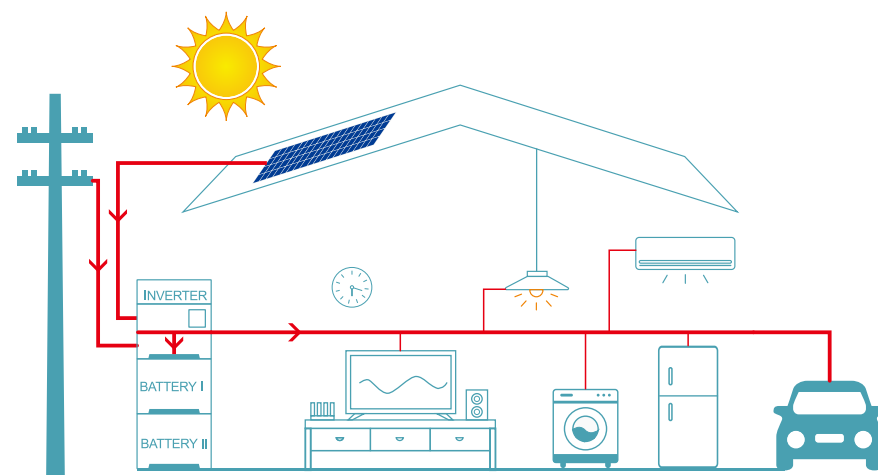
#### Built In Protection

Our lithium batteries have a built in Battery Management System (BMS)



#### Wide Range Temperature

Wide adaptability from low temperature to high temperature



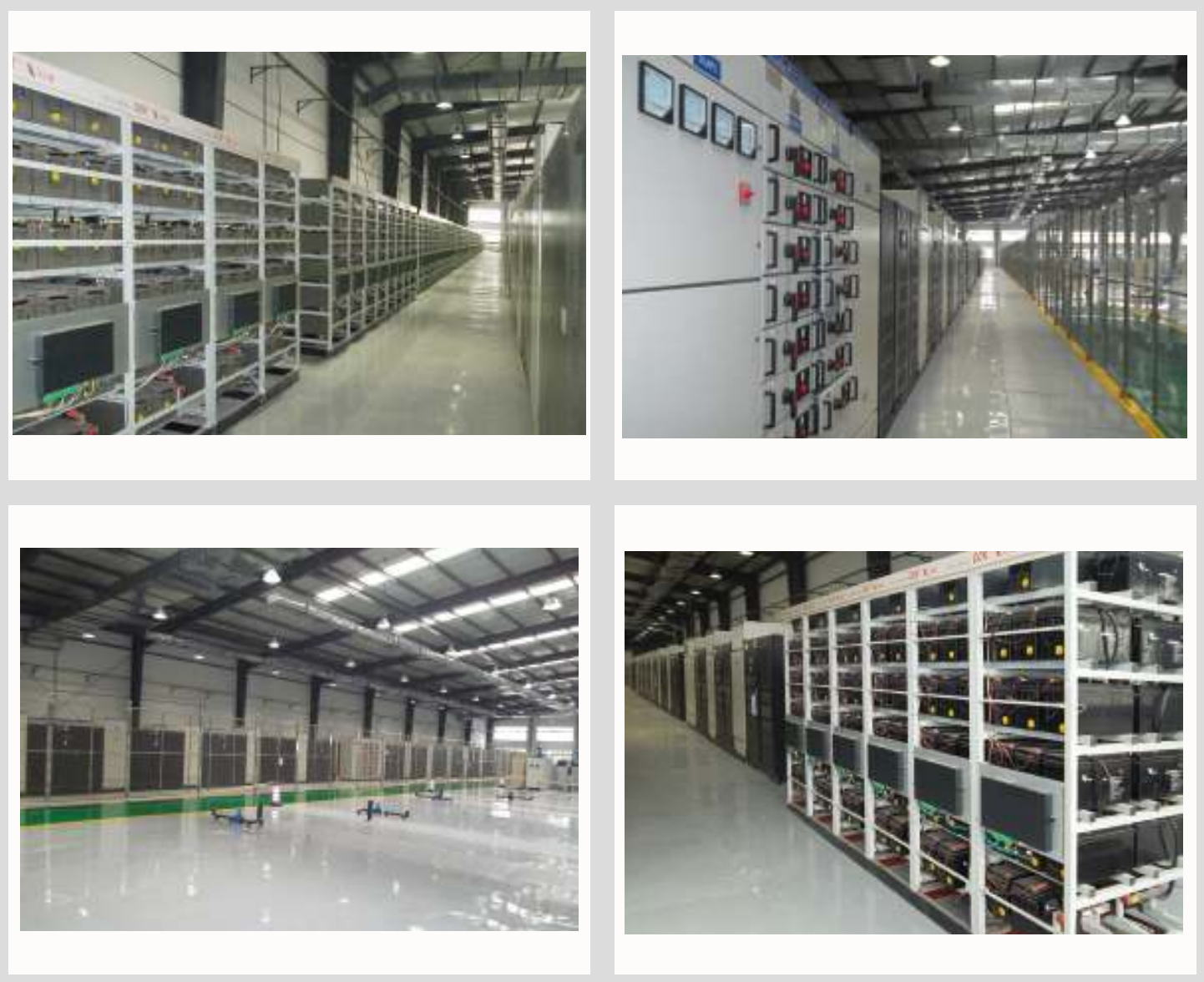
	SESS48-5.0S-S1	SESS48-10.0S-S1	SESS48-15.0S-S1	SESS48-20.0S-S1
<b>BATTERY</b>				
Battery Module	1	2	3	4
Battery Energy	5.12kWh	10.24kWh	15.36kWh	20.48kWh
Battery Capacity	100AH	200AH	300AH	400AH
Weight	80kg	133kg	186kg	239kg
Dimension L × D × H	710×450×400	710×450×600	710×450×800	710×450×1000
Battery Type	LiFePO4	LiFePO4	LiFePO4	LiFePO4
Battery Rated Voltage	51.2V	51.2V	51.2V	51.2V
Battery Working Voltage Range	44.8 ~ 57.6V	44.8 ~ 57.6V	44.8 ~ 57.6V	44.8 ~ 57.6V
Maximum Charging Current	100A	100A	100A	100A
Maximum Discharging Current	100A	100A	100A	100A
DOD	80%	80%	80%	80%
Parallel Quantity	1	2	3	4
Designed Life-span	15years	15years	15years	15years
<b>PV CHARGE</b>				
Solar Charge Type	MPPT	MPPT	MPPT	MPPT
Maximum Output Power	5KW	5KW	5KW	5KW
PV Charging Current Range	0~80A	0~80A	0~80A	0~80A
PV Operating Voltage Range	120~500V	120~500V	120~500V	120~500V
MPPT Voltage Range	120~450V	120~450V	120~450V	120~450V
<b>AC CHARGE</b>				
Maximum Charge Power	3150W	3150W	3150W	3150W
AC Charging Current Range	0 ~ 60A	0 ~ 60A	0 ~ 60A	0 ~ 60A
Rated Input Voltage	220/230Vac	220/230Vac	220/230Vac	220/230Vac
Input Voltage Range	90~280Vac	90~280Vac	90~280Vac	90~280Vac
<b>INVERTER OUTPUT</b>				
Rated Output Power	5KW	5KW	5KW	5KW
Maximum Peak Power	10KVA	10KVA	10KVA	10KVA
Power Factor	1	1	1	1
Rated Output Voltage (Vac)	230Vac	230Vac	230Vac	230Vac
Frequency	50Hz	50Hz	50Hz	50Hz
Auto Switch Period	< 15ms	< 15ms	< 15ms	< 15ms
THD	< 3%	< 3%	< 3%	< 3%

# Data Center Project in Guiyang

• Project Case •

Data Center Project in Guiyang

Unicom mobile base station project in Xinjiang



Data Center Project in airport

Power supply system on ship