



# Valve Regulated Lead Acid (VRLA) battery with Gel electrolyte technology

## Solar Battery Sub System

A range of 65 Ah to 250 Ah 12/24V, valve regulated lead acid (VRLA) battery with gel electrolyte technology to get long service lifetime and high performance in deep discharging. It can be used in wide range of ambient temperature and keep good performance of constant power input

### Benefits

- Gel electrolyte, 12 years lifespan in float service application.
- Excellent capacity restoration, 95% capacity recovery after short circuit in 24 hours.
- Low self-discharge rate, less than 3% per month
- Wide application temperature range, -20C~55C
- High charge efficiency, good small current charge absorption ability
- Water-proof, patented design, that enable underground battery installation
- Ventilation pipe, release the gas from battery to the air for safe CE certified operation

### Features

- IP 68 Patented Design for installing underground
- IP 67 Poka Yoke connectors with tactile audible feedback
- Temperature sensor for efficient compensation implementation in Charge controller.

# Solar Battery Sub System

## Application

- Solar Street lighting
- Solar Flood Lighting

## Versions



Lithium Ferro Phosphate battery



Lithium Ferro Phosphate battery



Lithium Ferro Phosphate battery



Lithium Ferro Phosphate battery



Lithium Ferro Phosphate battery



Lithium Ferro Phosphate battery



Lithium Ferro Phosphate battery



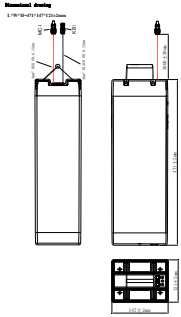
Lithium Ferro Phosphate battery



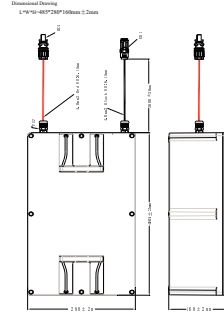
Lithium Ferro Phosphate battery

# Solar Battery Sub System

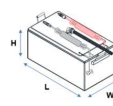
## Dimensional drawing



Dimensional drawing  
L\*W\*H=380\*280\*180mm ± 2mm

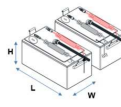


12V Gel Battery Subsystem

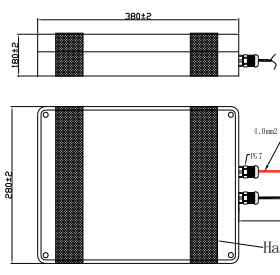


Description	Battery Size (cm) LxWxH
MS532 12V/80Ah IP68 gel battery sub-system	35x16 x202.5
MS531 12V/80Ah IP68 gel battery sub-system	35 1x17 x202.5
MS532 12V/100Ah IP68 gel battery sub-system	35 1x17 x202.5
MS531 12V/100Ah IP68 gel battery sub-system	40 1x17 x202.5
MS532 12V/150Ah IP68 gel battery sub-system	48x17x202
MS531 12V/150Ah IP68 gel battery sub-system	52 2x21 x212.8
MS532 12V/200Ah IP68 gel battery sub-system	52 2x21 x212.8
MS531 12V/200Ah IP68 gel battery sub-system	52x21 x212.8

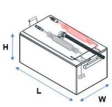
24V Gel Battery Subsystem



Description	Battery Size (cm) LxWxH
MS532 12V/80Ah IP68 Gel Bat. Sys. For 24	35x16x202.5
MS532 12V/100Ah IP68 Gel Bat. Sys. For 24	35 1x17 x202.5
MS532 12V/150Ah IP68 Gel Bat. Sys. For 24	35 1x17 x202.5
MS532 12V/200Ah IP68 Gel Bat. Sys. For 24	40 1x17 x202.5
MS532 12V/250Ah IP68 Gel Bat. Sys. For 24	48x17x202
MS532 12V/300Ah IP68 Gel Bat. Sys. For 24	52 2x21 x212.8
MS532 12V/350Ah IP68 Gel Bat. Sys. For 24	52 2x21 x212.8
MS532 12V/400Ah IP68 Gel Bat. Sys. For 24	52 2x21 x212.8
MS532 12V/450Ah IP68 Gel Bat. Sys. For 24	52x21 x212.8

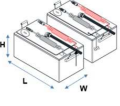


12V Gel Battery Subsystem



Description	Battery Size (cm) LxWxH
MS532 12V/80Ah IP68 gel battery sub-system	35x16 x202.5
MS531 12V/80Ah IP68 gel battery sub-system	35 1x17 x202.5
MS532 12V/100Ah IP68 gel battery sub-system	35 1x17 x202.5
MS531 12V/100Ah IP68 gel battery sub-system	40 1x17 x202.5
MS532 12V/150Ah IP68 gel battery sub-system	48x17x202
MS531 12V/150Ah IP68 gel battery sub-system	52 2x21 x212.8
MS532 12V/200Ah IP68 gel battery sub-system	52 2x21 x212.8
MS531 12V/200Ah IP68 gel battery sub-system	52x21 x212.8

24V Gel Battery Subsystem



Description	Battery Size (cm) LxWxH
MS532 12V/80Ah IP68 Gel Bat. Sys. For 24	35x16x202.5
MS532 12V/100Ah IP68 Gel Bat. Sys. For 24	35 1x17 x202.5
MS532 12V/150Ah IP68 Gel Bat. Sys. For 24	35 1x17 x202.5
MS532 12V/200Ah IP68 Gel Bat. Sys. For 24	40 1x17 x202.5
MS532 12V/250Ah IP68 Gel Bat. Sys. For 24	48x17x202
MS532 12V/300Ah IP68 Gel Bat. Sys. For 24	52 2x21 x212.8
MS532 12V/350Ah IP68 Gel Bat. Sys. For 24	52 2x21 x212.8
MS532 12V/400Ah IP68 Gel Bat. Sys. For 24	52 2x21 x212.8
MS532 12V/450Ah IP68 Gel Bat. Sys. For 24	52x21 x212.8

Operating and Electrical	
Cable connection kit	Included
Approval and Application	
Ingress protection code	IP68

## Operating and Electrical

Order Code	Full Product Name	Battery ampere hour	Battery charging & discharging cycles	Battery type	Battery voltage
911401823202	ZJS601 80AH 12.8V Battery	80 Ah	2000	Lithium Ferro Phosphate	12.8 V

Order Code	Full Product Name	Battery ampere hour	Battery charging & discharging cycles	Battery type	Battery voltage
911401823702	ZJS601 120AH 25.6V Battery	120 Ah	2000	Lithium Ferro Phosphate	25.6 V

## Solar Battery Sub System

Order Code	Full Product Name	Battery ampere hour	Battery charging & discharging cycles	Battery type	Battery voltage
911401823402	ZJS601 120AH 12.8V Battery	120 Ah	2000	Lithium Ferro Phosphate	12.8 V
911401823002	ZJS601 50AH 12.8V Battery	50 Ah	2000	Lithium Ferro Phosphate	12.8 V
911401822402	ZJS601 100AH 25.6V Battery	100 Ah	2000	Lithium Ferro Phosphate	25.6 V
911401823102	ZJS601 70AH 12.8V Battery	70 Ah	2000	Lithium Ferro Phosphate	12.8 V
911401823302	ZJS601 100AH 12.8V Battery	100 Ah	2000	Lithium Ferro Phosphate	12.8 V
911401823602	ZJS601 90AH 25.6V Battery	90 Ah	2000	Lithium Ferro Phosphate	25.6 V
911401823502	ZJS601 70AH 25.6V Battery	70 Ah	2000	Lithium Ferro Phosphate	25.6 V
911401816902	XGS321 12V/65AH IP68 Gel Bat sys 5yrs	65 Ah	750	Gel	12 V
911401817002	XGS321 12V/80AH IP68 Gel Bat sys 5yrs	80 Ah	750	Gel	12 V
911401817102	XGS321 12V/100AH IP68 Gel Bat sys 5yrs	100 Ah	750	Gel	12 V
911401817302	XGS321 12V/150AH IP68 Gel Bat sys 5yrs	150 Ah	750	Gel	12 V
911401817402	XGS321 12V/180AH IP68 Gel Bat sys 5yrs	180 Ah	750	Gel	12 V
911401817502	XGS321 12V/200AH IP68 Gel Bat sys 5yrs	200 Ah	750	Gel	12 V
911401817802	XGS322 12V/65AH IP68 Gel Bat 5yrs For24	65 Ah	750	Gel	24 V

Order Code	Full Product Name	Battery ampere hour	Battery charging & discharging cycles	Battery type	Battery voltage
911401818002	XGS322 12V/100AH IP68 Gel Bat 5yrs For24	100 Ah	750	Gel	24 V
911401818202	XGS322 12V/150AH IP68 Gel Bat 5yrs For24	150 Ah	750	Gel	24 V
911401818802	XGS321 12V/80AH IP68 Gel Bat sys 3yrs	80 Ah	750	Gel	12 V
911401818902	XGS321 12V/100AH IP68 Gel Bat sys 3yrs	100 Ah	750	Gel	12 V
911401819002	XGS321 12V/120AH IP68 Gel Bat sys 3yrs	120 Ah	750	Gel	12 V
911401819202	XGS321 12V/180AH IP68 Gel Bat sys 3yrs	180 Ah	750	Gel	12 V
911401819502	XGS321 12V/250AH IP68 Gel Bat sys 3yrs	250 Ah	750	Gel	12 V
911401819602	XGS322 12V/65AH IP68 Gel Bat 3yrs For24	65 Ah	750	Gel	24 V
911401820002	XGS322 12V/150AH IP68 Gel Bat 3yrs For24	150 Ah	750	Gel	24 V
911401820402	XGS322 12V/250AH IP68 Gel Bat 3yrs For24	250 Ah	750	Gel	24 V

## Temperature

Order Code	Full Product Name	Ambient temperature range
911401823202	ZJS601 80AH 12.8V Battery	0 to +60 °C
911401823702	ZJS601 120AH 25.6V Battery	0 to +60 °C
911401823402	ZJS601 120AH 12.8V Battery	0 to +60 °C
911401823002	ZJS601 50AH 12.8V Battery	0 to +60 °C
911401822402	ZJS601 100AH 25.6V Battery	0 to +60 °C
911401823102	ZJS601 70AH 12.8V Battery	0 to +60 °C
911401823302	ZJS601 100AH 12.8V Battery	0 to +60 °C
911401823602	ZJS601 90AH 25.6V Battery	0 to +60 °C
911401823502	ZJS601 70AH 25.6V Battery	0 to +60 °C
911401816902	XGS321 12V/65AH IP68 Gel Bat sys 5yrs	-20 to +55 °C

Order Code	Full Product Name	Ambient temperature range
911401817002	XGS321 12V/80AH IP68 Gel Bat sys 5yrs	-20 to +55 °C
911401817102	XGS321 12V/100AH IP68 Gel Bat sys 5yrs	-20 to +55 °C
911401817302	XGS321 12V/150AH IP68 Gel Bat sys 5yrs	-20 to +55 °C
911401817402	XGS321 12V/180AH IP68 Gel Bat sys 5yrs	-20 to +55 °C
911401817502	XGS321 12V/200AH IP68 Gel Bat sys 5yrs	-20 to +55 °C
911401817802	XGS322 12V/65AH IP68 Gel Bat 5yrs For24	-20 to +55 °C
911401818002	XGS322 12V/100AH IP68 Gel Bat 5yrs For24	-20 to +55 °C
911401818202	XGS322 12V/150AH IP68 Gel Bat 5yrs For24	-20 to +55 °C

## Solar Battery Sub System

Order Code	Full Product Name	Ambient temperature range
911401818802	XGS321 12V/80AH IP68 Gel Bat sys 3yrs	-20 to +55 °C
911401818902	XGS321 12V/100AH IP68 Gel Bat sys 3yrs	-20 to +55 °C
911401819002	XGS321 12V/120AH IP68 Gel Bat sys 3yrs	-20 to +55 °C
911401819202	XGS321 12V/180AH IP68 Gel Bat sys 3yrs	-20 to +55 °C
911401819502	XGS321 12V/250AH IP68 Gel Bat sys 3yrs	-20 to +55 °C

Order Code	Full Product Name	Ambient temperature range
911401819602	XGS322 12V/65AH IP68 Gel Bat 3yrs For24	-20 to +55 °C
911401820002	XGS322 12V/150AH IP68 Gel Bat 3yrs For24	-20 to +55 °C
911401820402	XGS322 12V/250AH IP68 Gel Bat 3yrs For24	-20 to +55 °C

### Mechanical and Housing

Order Code	Full Product Name	Overall height	Overall length	Overall width
911401823202	ZJS601 80AH 12.8V Battery	471 mm	147 mm	121 mm
911401823702	ZJS601 120AH 25.6V Battery	160 mm	280 mm	485 mm
911401823402	ZJS601 120AH 12.8V Battery	180 mm	280 mm	380 mm
911401823002	ZJS601 50AH 12.8V Battery	471 mm	147 mm	121 mm
911401822402	ZJS601 100AH 25.6V Battery	160 mm	280 mm	485 mm
911401823102	ZJS601 70AH 12.8V Battery	471 mm	147 mm	121 mm
911401823302	ZJS601 100AH 12.8V Battery	471 mm	147 mm	121 mm
911401823602	ZJS601 90AH 25.6V Battery	160 mm	280 mm	485 mm
911401823502	ZJS601 70AH 25.6V Battery	180 mm	280 mm	380 mm
911401816902	XGS321 12V/65AH IP68 Gel Bat sys 5yrs	235 mm	350 mm	166 mm
911401817002	XGS321 12V/80AH IP68 Gel Bat sys 5yrs	273 mm	329 mm	172 mm
911401817102	XGS321 12V/100AH IP68 Gel Bat sys 5yrs	273 mm	329 mm	172 mm
911401817302	XGS321 12V/150AH IP68 Gel Bat sys 5yrs	300 mm	480 mm	170 mm
911401817402	XGS321 12V/180AH IP68 Gel Bat sys 5yrs	218 mm	522 mm	238 mm
911401817502	XGS321 12V/200AH IP68 Gel Bat sys 5yrs	218 mm	522 mm	238 mm

Order Code	Full Product Name	Overall height	Overall length	Overall width
911401817802	XGS322 12V/65AH IP68 Gel Bat 5yrs For24	235 mm	350 mm	332 mm
911401818002	XGS322 12V/100AH IP68 Gel Bat 5yrs For24	273 mm	329 mm	344 mm
911401818202	XGS322 12V/150AH IP68 Gel Bat 5yrs For24	300 mm	480 mm	340 mm
911401818802	XGS321 12V/80AH IP68 Gel Bat sys 3yrs	273 mm	329 mm	172 mm
911401818902	XGS321 12V/100AH IP68 Gel Bat sys 3yrs	273 mm	329 mm	172 mm
911401819002	XGS321 12V/120AH IP68 Gel Bat sys 3yrs	266 mm	406 mm	174 mm
911401819202	XGS321 12V/180AH IP68 Gel Bat sys 3yrs	218 mm	522 mm	238 mm
911401819502	XGS321 12V/250AH IP68 Gel Bat sys 3yrs	220 mm	520 mm	269 mm
911401819602	XGS322 12V/65AH IP68 Gel Bat 3yrs For24	235 mm	350 mm	332 mm
911401820002	XGS322 12V/150AH IP68 Gel Bat 3yrs For24	300 mm	480 mm	340 mm
911401820402	XGS322 12V/250AH IP68 Gel Bat 3yrs For24	220 mm	520 mm	538 mm

### Application Conditions

Order Code	Full Product Name	Ambient temperature range for charging	Ambient temperature range for discharging (when light is on)
911401823202	ZJS601 80AH 12.8V Battery	0 °C to +60 °C	-20 °C to +60 °C
911401823702	ZJS601 120AH 25.6V Battery	0 °C to +60 °C	-20 °C to +60 °C
911401823402	ZJS601 120AH 12.8V Battery	0 °C to +60 °C	-20 °C to +60 °C
911401823002	ZJS601 50AH 12.8V Battery	0 °C to +60 °C	-20 °C to +60 °C
911401822402	ZJS601 100AH 25.6V Battery	0 °C to +60 °C	-20 °C to +60 °C

Order Code	Full Product Name	Ambient temperature range for charging	Ambient temperature range for discharging (when light is on)
911401823102	ZJS601 70AH 12.8V Battery	0 °C to +60 °C	-20 °C to +60 °C
911401823302	ZJS601 100AH 12.8V Battery	0 °C to +60 °C	-20 °C to +60 °C
911401823602	ZJS601 90AH 25.6V Battery	0 °C to +60 °C	-20 °C to +60 °C
911401823502	ZJS601 70AH 25.6V Battery	0 °C to +60 °C	-20 °C to +60 °C
911401816902	XGS321 12V/65AH IP68 Gel Bat sys 5yrs	-20 °C to +55 °C	-20 °C to +55 °C

## Solar Battery Sub System

Order Code	Full Product Name	Ambient temperature range for charging	Ambient temperature range for discharging (when light is on)
911401817002	XGS321 12V/80AH IP68 Gel Bat sys 5yrs	-20 °C to +55 °C	-20 °C to +55 °C
911401817102	XGS321 12V/100AH IP68 Gel Bat sys 5yrs	-20 °C to +55 °C	-20 °C to +55 °C
911401817302	XGS321 12V/150AH IP68 Gel Bat sys 5yrs	-20 °C to +55 °C	-20 °C to +55 °C
911401817402	XGS321 12V/180AH IP68 Gel Bat sys 5yrs	-20 °C to +55 °C	-20 °C to +55 °C
911401817502	XGS321 12V/200AH IP68 Gel Bat sys 5yrs	-20 °C to +55 °C	-20 °C to +55 °C
911401817802	XGS322 12V/65AH IP68 Gel Bat 5yrs For24	-20 °C to +55 °C	-20 °C to +55 °C
911401818002	XGS322 12V/100AH IP68 Gel Bat 5yrs For24	-20 °C to +55 °C	-20 °C to +55 °C
911401818202	XGS322 12V/150AH IP68 Gel Bat 5yrs For24	-20 °C to +55 °C	-20 °C to +55 °C

Order Code	Full Product Name	Ambient temperature range for charging	Ambient temperature range for discharging (when light is on)
911401818802	XGS321 12V/80AH IP68 Gel Bat sys 3yrs	-20 °C to +55 °C	-20 °C to +55 °C
911401818902	XGS321 12V/100AH IP68 Gel Bat sys 3yrs	-20 °C to +55 °C	-20 °C to +55 °C
911401819002	XGS321 12V/120AH IP68 Gel Bat sys 3yrs	-20 °C to +55 °C	-20 °C to +55 °C
911401819202	XGS321 12V/180AH IP68 Gel Bat sys 3yrs	-20 °C to +55 °C	-20 °C to +55 °C
911401819502	XGS321 12V/250AH IP68 Gel Bat sys 3yrs	-20 °C to +55 °C	-20 °C to +55 °C
911401819602	XGS322 12V/65AH IP68 Gel Bat 3yrs For24	-20 °C to +55 °C	-20 °C to +55 °C
911401820002	XGS322 12V/150AH IP68 Gel Bat 3yrs For24	-20 °C to +55 °C	-20 °C to +55 °C
911401820402	XGS322 12V/250AH IP68 Gel Bat 3yrs For24	-20 °C to +55 °C	-20 °C to +55 °C

