

Shenzhen LiFePO4 prismatic cell battery solar system setup.

4 x Shenzhen 3.2 Volt Nom. 200 amp Hr. prismatic cells.

JK-B2A8S20P LiFePO4 200 amp (constant) BMS (200 amp max charge rate).

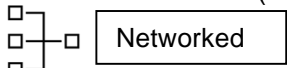
2 x CSE 195 watt mono solar panels (36.4V volt x 5.36A = (36V x 10.72A Peak)

Victron MPPT 75/15 with built in BT.

Victron BMV – 712 with built in BT.

Latronics Inverter LS-1512 1500 watt inverter.

Victron Blue Smart 15 amp Charger with built in BT.



SHENZHEN BATTERY LIFEPO4 PRISMATIC CELL BATTERY	FACTORY SPECIFICATIONS
Shenzhen Battery recommended standard charging Current	Standard Charging: 0.2C = 40 amps. ✓
Shenzhen Battery recommended maximum charging Current	Max Charging: 1C = 200 Amps. ✓ (10.72A Peak solar)
Shenzhen Battery recommended charging cut-off voltage	3.65V x 4 = 14.6V.
Shenzhen Battery recommended discharge cut-off	2.5V x 4 = 10V
Shenzhen recommended maximum discharge rate	Continuous Discharging 2C = 400 Amps. ✓
JK-B2A8S20P BMS	SPECIFICATIONS
JK-B2A8S20P BMS maximum charging current.	Max Charging: 200 amps. (Have 10.72A Peak solar)
JK-B2A8S20P BMS maximum discharge current.	Peak discharge: 350 Amps (30 seconds).
JK-B2A8S20P BMS constant discharge current.	Constant discharge: 200 Amps
JK-B2A8S20P BMS	SETTINGS
JK-B2A8S20P BMS battery type:	Lifepo4
JK-B2A8S20P BMS Cell count	4
JK-B2A8S20P BMS Battery capacity (AH):	200
JK-B2A8S20P BMS Balance trigger voltage (V):	0.010V
JK-B2A8S20P BMS Calibrating voltage (V):	As read on multimeter at battery
JK-B2A8S20P BMS Calibrating current (A):	As read on BMV-712
JK-B2A8S20P BMS Start balance (V):	3.00V
JK-B2A8S20P BMS Max balance current (A):	2.0
JK-B2A8S20P BMS Cell OVP (V):	3.6V (14.4V).
JK-B2A8S20P BMS SOC- 100% VOLT:	3.55V (14.2V).
JK-B2A8S20P BMS Cell OVPR (V):	3.5V (14V).
JK-B2A8S20P BMS Cell UVPR (V):	2.680V (10.72V).
JK-B2A8S20P BMS SOC-0% Volt (V):	2.620V (10.48V).
JK-B2A8S20P BMS Cell UVP (V):	2.625 (10.5V).
JK-B2A8S20P BMS Power Off volts (V):	2.61V (10.44V).
JK-B2A8S20P BMS Vol Smart sleep (V):	3.500
JK-B2A8S20P BMS Timer Smart sleep (H):	24
JK-B2A8S20P BMS Continued charge current (A):	200
JK-B2A8S20P BMS Discharge OCP delay (S):	300
JK-B2A8S20P BMS Discharge OCPR Time (S):	60
JK-B2A8S20P BMS Charge OPT (°C):	°70
JK-B2A8S20P BMS Charge OPTR (°C):	°60
JK-B2A8S20P BMS Discharge OPT (°C):	°70
JK-B2A8S20P BMS Discharge OPTR (°C):	°60
JK-B2A8S20P BMS Charge UPT (°C):	°4 (Australia).

JK-B2A8S20P BMS Charge UPTR (°C):	°8 (Australia).
JK-B2A8S20P BMS MOSFET OTP (°C):	°100
JK-B2A8S20P BMS MOSFET OPR (°C):	°80
JK-B2A8S20P BMS SCP Delay (µS)	1500
JK-B2A8S20P BMS SCPR Time (S)	60
JK-B2A8S20P BMS Device Addr.:	1
JK-B2A8S20P BMS User Private data:	.dat
JK-B2A8S20P BMS User data 2:	
JK-B2A8S20P BMS UART1 Protocol number:	0
JK-B2A8S20P BMS CAN Protocol number:	0
JK-B2A8S20P BMS LCD Buzzer trigger:	9
JK-B2A8S20P BMS LCD Buzzer trigger value:	100
JK-B2A8S20P BMS LCD Buzzer Release Val:	95

Victron BMV – 712 with shunt

SETTINGS

Victron BMV – 712 Battery capacity	200 Amp Hrs.
Victron BMV – 712 Charged voltage	14.1V (0.2V below absorption for solar)?
Victron BMV – 712 discharge floor.	10%
Victron BMV – 712 Tail current	6.00%
Victron BMV – 712 Charged detection time	3 Min.
Victron BMV – 712 Peukert exponent	1.05
Victron BMV – 712 Charge efficiency factor	99%
Victron BMV – 712 current threshold.	0.10A
Victron BMV – 712 float voltage	13.6V
Victron BMV – 712 Time to go averaging	3 Min.
Victron BMV – 712 SOC on reset	CLEAR (until next full charge confirmation).

Victron MPPT 75/15 solar regulator

SETTINGS

Victron MPPT 75/15 Absorption voltage	14.2V
Victron MPPT 75/15 Float voltage	13.6V
Victron MPPT 75/15 Re-Bulk voltage offset?	0.1V (gives 13.5 V restart).
Victron MPPT 75/15 Tail current	1.A
Victron MPPT 75/15 Absorption time (fixed)	1 Hrs.
Victron MPPT 75/15 Temperature compensation	Disabled

MPPT 75/15 set to Battery Life algorithm: Self adapting algorithm to maximize life of the battery.

Victron MPPT 75/15 & BMV Monitor Networked.

Victron Smart Blue 15 amp charger set to lithium backup **(NOTE: HAS TO BE 5 VOLTS ABOVE BATTERY V TO CHARGE!)**

Latronics LS1512 Inverter

SPECIFICATIONS

Inverter low voltage cut off voltage	10.5V (not adjustable) ✓
Inverter Constant current standard.	1500 watts @ 12 volts = 125 amps. ✓
Constant current ½ hour max	1600 watts @ 12 volts = 134 amps ✓
Surge current max (5 seconds)	4500 watts @ 12 volts = 375 amps ✓