

Notes:

Place cursor over device to show hyperlink, duplicate items only have links on one location

Links are to products we have used, you may substitute as needed or preferred

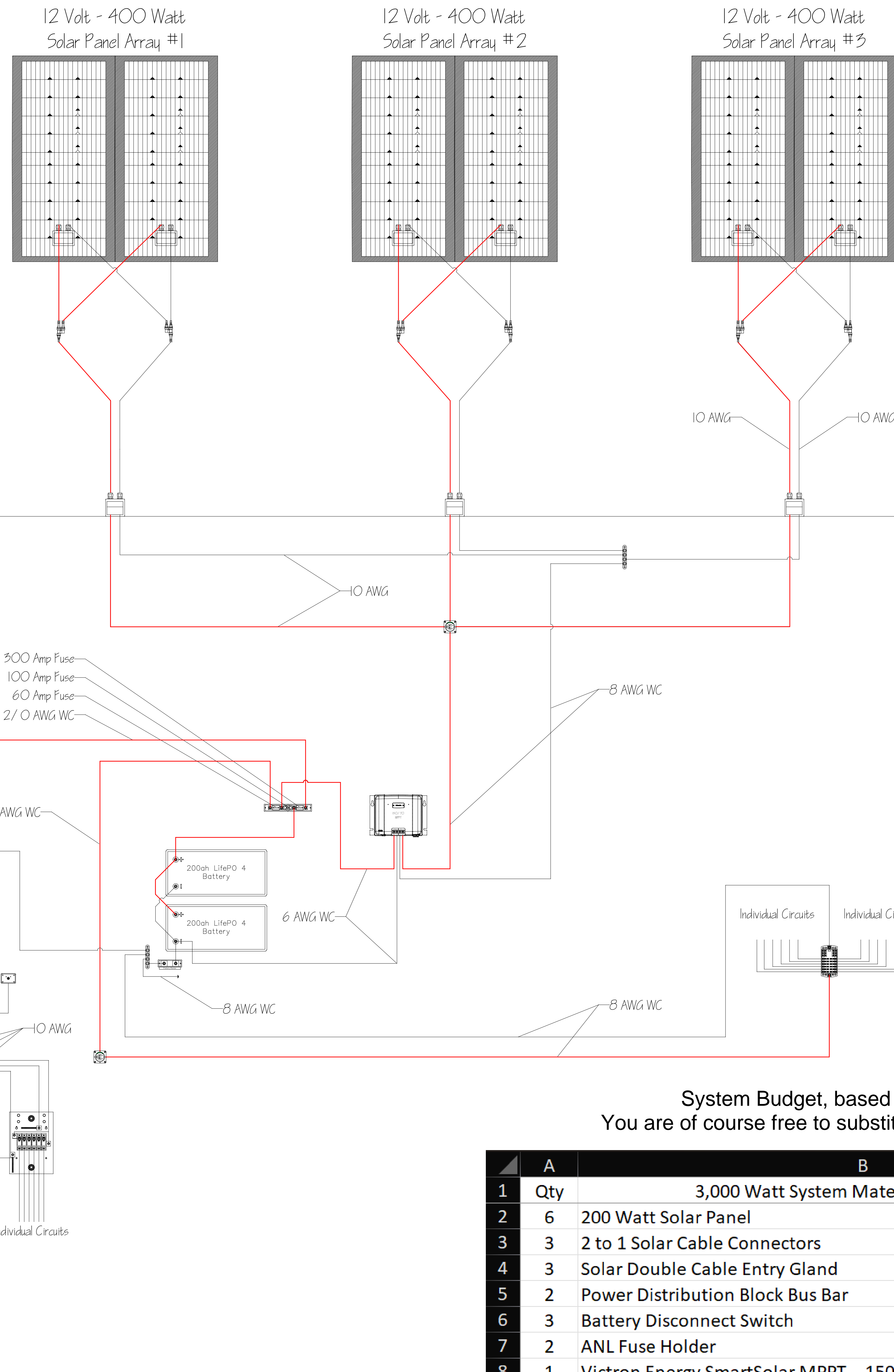
Battery may be changed to fit budget, however 200ah batteries typically have higher BMS output capabilities to meet the needs of 3,000W Inverter

Linked MPPT controller is rated for 1,000W input, typical solar panels are rated about 80% efficiency, should be no issue with 1,200W of panels with linked controller

There are many ways to mount panels, we recommend a uni-strut system, details for the mounting system can be found on our web site

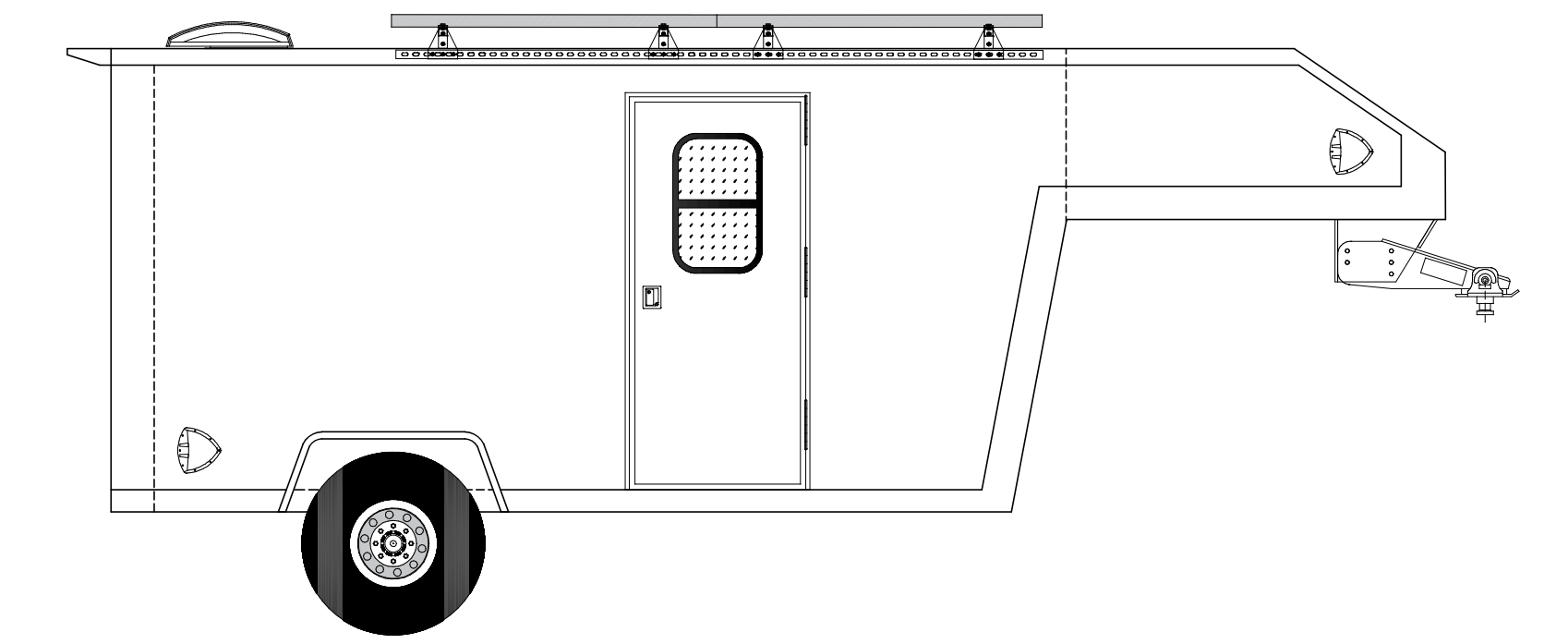
- AWG = American Wire Gauge
- WC = Welding Cable
- Cu = Pure Copper Cable
- CCA = Copper Clad Aluminum Cable

12 Volt - 1,200 Watt Solar Panel Array
6 x 200 Watt Panels



System Budget, based on product links in the diagram.
You are of course free to substitute based on your budget requirements.

	A	B	C	D
1	Qty	3,000 Watt System Materiel - Description	Budget	Extended
2	6	200 Watt Solar Panel	175.00	1050.00
3	3	2 to 1 Solar Cable Connectors	7.00	21.00
4	3	Solar Double Cable Entry Gland	10.00	30.00
5	2	Power Distribution Block Bus Bar	19.00	38.00
6	3	Battery Disconnect Switch	17.00	51.00
7	2	ANL Fuse Holder	7.00	14.00
8	1	Victron Energy SmartSolar MPPT - 150V, 70 amp	385.00	385.00
9	2	Lithium 200aH Battery	400.00	800.00
10	1	Victron Energy SmartShunt IP65 Battery Monitor	99.00	99.00
11	1	AIMS Power 3000 Watt Pure Sine Inverter 12V DC to 120V AC	525.00	525.00
12	1	Blue Sea Systems 9011 AC Rotary Switch	268.00	268
13	1	Homeline 100 Amp 6-Space 12-Circuit Indoor Surface Subpanel	29.00	29
14	1	12 Circuit W/Negative Bus Waterproof Fuse Box with LED Indicator	18.00	18.00
15	1	Wire and connectors	400.00	400
16				
17		Sub-Total		\$ 3,728.00
18				



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Project:

3K Solar System Design

Description:

Boondocking System

Revisions:

No.	Revisions	Date
1.0	First Draft	15-Jan-25
2.0	Final Revision	5-Mar-25

Client:

Telephone:

E-Mail:

Scale:

Drawn to Scale - Not Plotted to Scale

Drawing: 3,000 Watt Electrical System

1:00

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