

SunZilla 3.0: Materials List

Quantity	Name	Dimensions [mm]
<i>Solar-Frames</i>		
6	Hinges	24 (l) x 20 (w) x 1 (th)
4	L-Aluminium profile	558 (l) x 20 (w) x 2 (th)
4	Squared aluminium profile (better rectangular profiles with 20 x 8)	150 (l) x 20 (w) x 2 (th)
4	T-Aluminium profiles	560 (l) x 15 (w) x 15 (h)x 2 (th)
4	T-Aluminium profiles	435 (l) x 15 (w) x 15 (h)x 2 (th)
2	L-Aluminium profiles	545 (l) x 15 (w) x 15 (h)x 2 (th)
4	L-Aluminium profiles	420 (l) x 15 (w) x 15 (h)x 2 (th)
24	Hexagonal bolts	M3 x 8 (l)
24	washers	M3
24	Self-locking nuts	M3
36	Countersunk bolts	M5 x 10 (l)
36	Self-locking nuts	M5
36	washers	M5
8	Wing bolts	M6 x 20 (l)
<i>Mounting System/ Inner Structure – Solar-Box</i>		
4	Squared aluminium profiles	732 (l) x 25 (w) x 2 (th)
2	Squared aluminium profiles	200 (l) x 20 (w) x 2 (th)
2	Squared aluminium profiles	515 (l) x 20 (w) x 2 (th)
3	Squared aluminium profiles	560 (l) x 15 (w) x 2 (th)
4	Squared aluminium profiles	370 (l) x 15 (w) x 2 (th)
14	Hexagonal bolts	M6 x 50 (l)
14	Self-locking nuts	M6
28	Washers	M6
4	(Wing) bolts	M6 x 40 (l)
8	Wing nuts	M6
4	(Wing) bolts	M6 x 30 (l)
<i>Electro Battery Box</i>		
2	Gel Battery: <i>Here we've used the Yuasa NP 38-12B</i>	12 V, 38,5 Ah, 170 (H) x 197 (L) x 165 (W)
1	Fuse	20 A, DC
1	LED (Green)	
1	Resistor,	2 kOhm
1	Switch	DC
2*	Female Connector WEIPU SP21	
1	Fuse Holder	

Solar Box		
1	MPPT-Battery charger: <i>Here we've used the Victron- Blue-Solar-Charge-Controller-MPPT-100-15</i>	100 (H) x 113 (W) x 47 (D)
4	Semi-flexible mono-crystalline PV-modules <i>Here we've used SUPERFLEX SGM-FL-35W</i>	12 V, 35 Wp
2	Female M4-plugs	
2	Male M4-plugs	
2*	Female Connector, Weipu SP21	
3	Heat shrink tubes (short)	For 4 mm ² cables
Ac Inverter Box / Socket box		
1	Sinus – Inverter: <i>Here we've used a Victron Phoenix-Inverter-350</i>	350 VA, 24 V 72 (H) x155 (W) x237 (D)
2*	Female Connector WEIPU SP21	
1	LED (Green)	
1	DC-switch	
Cables		
4	DC-plugs (male), <i>We've used the Weipu SP21</i>	
10 m	Flexible cables	4 mm ² , 1000V
10 m**	Flexible cables	0,25 mm ² (for signal transmission for later extension)
2	Heat shrink tubes (long)	1m,
Boxes, Inner Mounting Structures, Wooden Foot		
1	¼ EURO norm box, with lid	742 (H) x 600 (L) x 400 (W) (Usable: 732 (H) x 570 (L) x 370 (W))
2	1/8 EURO norm box, with lid	230 (H) x 400 (L) x 300 (W) (Usable: 208 (H) x 370 (L) x 270 (W))
1	Plywood	800 (L) x 600 (W) x 10 (th)
1	Plywood	Min. 1200 (L) x 400 (W) x 18 (th)
8	Bicycle spokes	Around 150 mm
Electronics, Visualisation, Regulation System		
Coming Soon...		

*To ensure SunZillas extensibility (with additional modules), each box has two BUS Connector (WEIPU, female) through which the module boxes can be connected.

** Because SunZilla will have some smart components in each module in the future, 2 communication lines will be implemented in the cables.