PowerShade

The PowerShade is a shade structure with integrated solar panels capable of both generating power and reducing air conditioning load up to 30%. Three sizes are available to meet your footprint and the power requirements. The core components of the PowerShade are the tent structure, removable solar panels, and cabling.

Each PowerShade includes the tent, removable solar panels, cabling, poles, straps carrying bags, a hoist, wiring instructions, and all tools required for assembly.



- 1.8kW
- 3.6kW
- 5.4kW

Each PowerShade is setup to power 24V systems. Balance of Systems (BOS) is required to optimize power harvesting, provide an AC output, or tie into a microgrid. Each BOS is capable of providing a 2.4kW AC output with grid tie capability. The PowerFilm BOS also has a NATO Slave Port standard, which enables a military vehicle to be charged or used as an additional battery pack. PowerFilm supplies the BOS as an add-on component. To fully utilize the power produced by the 5.4kW PowerShade will require two BOS systems.

A complete power solution will require the addition of energy storage. PowerFilm supplies battery systems that pair with the PowerShade and the BOS systems. It is recommended to have one battery box per kW of power and optimally two per BOS.



PowerShade	Weight	Cleared Space	Stake Space	BOS Required	Battery Control Boxes
1.8kW	707 lbs	26.5' x 24'	43'x 44'	1	2
3.6kW	1,235 lbs	26.5' x 48'	43' x 68'	1-2	2-4
5.4kW	1,650 lbs	27' x 92'	47' x 92'	2	4
BOS	168 lbs				
Battery Control Box	41 lbs				

Notes:

- 1. Cleared Space is the usable shaded space beneath the PowerShade.
- 2. Stake Space is the total footprint of the staked down structure.