

# Power

## Solar WiFi Series

Supporting Cisco Aironet 1500 Outdoor Mesh Access Point



- Portable, wireless power for wireless applications
- Low voltage system can be installed by non-licensed technician
- Pre-engineered and integrated for rapid and easy installation
- Ideal for emergency, temporary or remote power
- Designed for 7 day autonomy (cloudy weather periods)
- Multiple mounting options: pad, pole, or wall

Alpha's Solar WiFi Series provides portable, wireless power to Cisco's Aironet 1500 Series outdoor mesh access point. These solar power systems' (SPS) rugged design makes them ideal for being located in harsh, outdoor environments. These systems are an efficient source of energy for small loads compared to generators, and have temperature compensated PWM battery charging to extend battery life. The SPS is a lower cost solution compared to utility connection in locations where utility power is not available. The Solar WiFi Series includes integral lightning protection, code-compliant wiring and circuit protection. To minimize installation time and eliminate errors, these systems have pre-connectorized cables.

## Solar WiFi Series

### Specifications

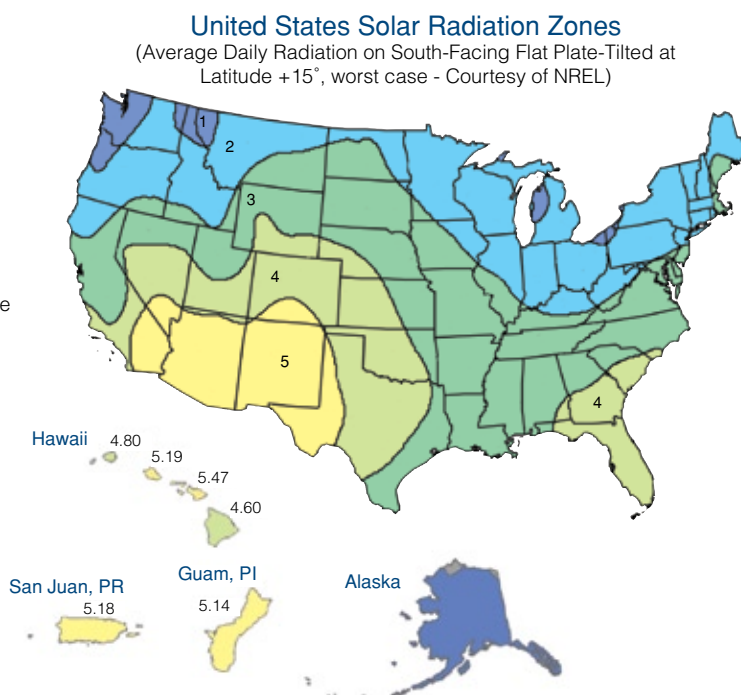
Model:	SPS48-340/108G	SPS 48-680/216G
Daily Rated Energy Production:	Approx. 450W hrs per day (with average daily solar insolation 2.5kWh/m <sup>2</sup> /day)	Approx. 510W hrs per day (with average daily solar insolation 1.4kWh/m <sup>2</sup> /day)
Design Autonomy:	Approx. 7 days (batteries fully charged, for Daily Rated Energy Production)	Approx. 7 days (batteries fully charged, for Daily Rated Energy Production)
Operating Temperature Range:	14 to 122°F (-10 to 50°C)	14 to 122°F (-10 to 50°C)
PV Module:	Sharp NE-170U1, Qty 2	Sharp NE-170U1, Qty 4
Module Nominal Voltage:	24V	24V
Dimensions (in):	62.0 x 32.5 x 1.8 Array: 62 x 65	62.0 x 32.5 x 1.8 Array: 124 x 65
Weight (lb):	37.5 per PV module	37.5 per PV module
Module Efficiency:	13.1%	13.1%
<b>Battery</b>		
Type:	Deep cycle, gelled-electrolyte lead-acid	Deep cycle, gelled-electrolyte lead-acid
Capacity (100hrs, 25°C):	108Ah	232Ah
System Enclosure (Control, Battery):	Alpha Technologies PWE-3	Alpha Technologies UPE-8
Dimensions (in):	26W x 33.5H x 15.0D	30.25W x 36.88H x 16.0D
(mm):	660.4W x 850.9H x 381.0D	768W x 937H x 406D
Charge/Load Controller:	Morningstar ProStar PS-15M-48	
<b>Electrical</b>		
Nominal Output Voltage:	48VDC	48VDC
Maximum Rated Load:	19W (continuous, daily average)	21W (continuous, daily average)
Low Voltage Load Disconnect:	LVD Setting = 46.0VDC	LVD Setting = 46.0VDC
Low Voltage Load Reconnect:	LVR Setting = 50.4VDC	LVR Setting = 50.4VDC
High Voltage PV Disconnect:	HVD Setting = 56.4VDC	HVD Setting = 56.4VDC

### SPS48-340/108G and SPS48-680/216G

#### Ordering Guide

The SPS48-680/216G and SPS48-340/108G are to be selected based on the average daily solar radiation in the installation region. For installations in Solar Zone 1, select the SPS48-680/216G. For installations in Solar Zone 2 through 5, elect the SPS48-340/108G. Use the map on the right to select your solar zone.

Part Number	Product Name
SPS48-680/216G:	SPS, 48VDC, Solar Zone 1
SPS48-340/108G:	SPS, 48VDC, Solar Zones 2 through 5
MC-10-025:	Cable, 12.5 ft separation between PV module and control cabinet, preconnectorized
MC-10-100:	Cable, 50 ft separation between PV module and control cabinet, preconnectorized
744-670-20:	Wooden utility pole mount kit containing two brackets
591-557-20:	Steel/concrete utility pole mount kit containing two brackets



For more information visit [www.alpha.com](http://www.alpha.com)

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