

NSol! PV System Summary

Solar Power

FearTheSkunk

18131 Metz Drive
Germantown, MD
USA

++1.240.462.6554
nsolpv@verizon.net
www.nsolpv.com

Site Summary

Site Name:
Location: WATERLOO, IA, USA
Latitude: 42.55N **Longitude:** 92.40W **Elevation:** 265 m
Comments: NREL : 94910

Load / System Summary

Design Load: 364.1Ah Day @ 48.0VDC
Tilt: 45S **Azimuth:** 0E **Tracking:** Fixed
Min ALR: 1.12 **Avg ALR:** 1.82
LOLP: 1.950 % **Avail:** 99.813 **Avg BSOC:** 94 %

System Summary

PV (Module / Array)

Model: SW75A
Rating: 75 / 11.1kWp
Modules: 148
Config: 4 S x 37 P
Vtyp: 16.70 / 66.8
Ityp: 4.50 / 166.5
Voc: 22.50 / 90.0
Isc: 4.83 / 178.7
Volts: 48.0V Battery

Battery Bank

Model: Generic 2V
Rating: 109.20
Units: 24
Config: 24 S x 1 P
Voltage: 2.0 / 48.0
Amp-hr: 2275.0 / 2275.0
Rating: 5.0 days

Controller:

Model: Standard
Type: Standard
Voltage: 48
Rating: 60

Inverter:

Model:
Voltage: 120V
Rating: 4kVA

System Performance Summary

Month	Array Insol (kWh/m2/d)	Avg Temp (deg C)	Array (Ah/day)	Sys Losses (%)	Load (Ah/day)	Batt Size (days)	Array/Load Ratio	Avg BSOC (%)	LOLP (%)
Jan	3.48	-9.7	522.1	10	364.1	4.2	1.43	94	0.0
Feb	4.16	-6.6	622.9	10	364.1	4.3	1.71	96	0.0
Mar	4.33	1.2	648.3	10	364.1	4.5	1.78	96	0.0
Apr	4.79	9.1	717.2	10	364.1	4.7	1.97	97	0.0
May	5.21	15.7	780.6	10	364.1	4.9	2.14	97	0.0
Jun	5.56	20.6	833.1	10	364.1	4.9	2.29	98	0.0
Jul	5.57	22.8	834.1	10	364.1	5.0	2.29	98	0.0
Aug	5.29	21.3	793.4	10	364.1	5.0	2.18	97	0.0
Sep	4.78	16.6	716.7	10	364.1	4.9	1.97	97	0.0
Oct	4.00	10.1	599.3	10	364.1	4.8	1.65	95	0.0
Nov	3.06	2.1	458.6	10	364.1	4.6	1.26	88	0.3
Dec	2.72	-6.5	406.9	10	364.1	4.3	1.12	79	2.0

