

# Electrical Budget Worksheet (Feral International Folkboat)

1 Calculate your DC Loads:

Lighting	Amps	Hours	AH/Day
Running Lights	0.2	12	2.4
Masthead Tricolor Light			0.0
Anchor Light			0.0
Strobe Light	1.0	6	6.0
Spreader Lights			0.0
Cabin Light (small)	1.0	1	1.0
Cabing Light (big incandescent)			0.0
Cabing Light (flourescent)			0.0
Instrument Lights			0.0
Handheld Spot Light			0.0
Other			0.0
<b>Lighting AH</b>			<b>9.4</b>

Galley	Amps	Hours	AH/Day
Refrigeration			0.0
Prop Solenoid			0.0
Other			0.0
<b>Galley AH</b>			<b>0.0</b>

Electronics	Amps	Hours	AH/Day
Autopilot			0.0
VHF (receive)	0.5	24	12.0
VHF (transmit)	1.5	0.1	0.2
SSB (receive)			0.0
SSB (transmit)			0.0
SSB Digital controller			0.0
GPS	0.5	24	12.0
Instruments			0.0
Weather fax receiver			0.0
Radar (standby)			0.0
Radar (transmit)			0.0
AIS	0.5	24	12.0
Energy Monitors	0.2	24	4.8
Stereo			0.0
Computer (screen off)			0.0
Computer (screen on)			0.0
Computer (serial adapter)			0.0
Other			0.0
<b>Electronics AH</b>			<b>41.0</b>

Plumbing	Amps	Hours	AH/Day
Fresh Water Pump			0.0
Bilge Pump(s)			0.0
Other			0.0
<b>Plumbing AH</b>			<b>0.0</b>

Inverter	Watts	Hrs/day	AH/Day
Microwave			0.0
Chargers (nicad)			0.0
Other			0.0
<b>Inverter AH</b>			<b>0.0</b>

Gross Energy Consumption AH/Day **50.4**

2 Alternative Energy Sources

Device	Amps	Hrs/day	AH/day
Solar, avg	8.0	7	56.0
Wind, avg			0.0
Water, avg.			0.0
<b>Contribution of AES AH/Day</b>			<b>56.0</b>

two 43 watt fixed panels, plus 3 20 watt flexible

3 Net Energy Consumption, AH/Day **-5.7**

4 Desired Hours Between Charging **48**

5 Range of Battery Use **50-85%**

For example, from 50-85% state of charge.

6 Recommended Battery Capacity **#VALUE!**

two 105 amp hour batteries

7 Alternator Output, Amps **25**

8 Charge Efficiency Factor **0.60**

9 Minimum Minutes to Charge **-45**

Assumes alternator runs at full output.