Last Update 5/15/2022

Item	Description	Rated A/hr	Watts (12V)	hrs used per day	watts per day	AH per day	AH battery	hours to 50%	days to 50%	Note
Calc note			*Cx12*		*DxE*	*CxE*	*Running Capacity*	*(BattAH/2) /g24*	*I/24*	
01	Dometic Furnace 16k	3.40	40.80	5.00	204.00	17.00	120.00	24.62	1.03	
02	King Power Antenna	0.10	1.20	1.00	1.20	0.10	103.00	21.13	0.88	switch is on side
03	*A/C Dometic (fan only)*	*1.60*	*20*	*0.00*	*0.00*	*0.00*	*102.90*	*21.11*	*0.88*	*NO DC OPTION*
04	*A/C Compressor*	*12.40*	*150*	*0.00*	*0.00*	*0.00*	*102.90*	*21.11*	*0.88*	*NO DC OPTION*
05	inverter	0.00	0.00	1.00	0.00	0.00	102.90	21.11	0.88	daylight only! Put in a fuse
06	Dometic Refridgerator	0.80	9.60	24.00	230.40	19.20	102.90	21.11	0.88	
07	Double Lamp light	0.00	0.00	0.00	0.00	0.00	83.70	17.17	0.72	
08	pentair pump	0.95	11.40	1.00	11.40	0.95	83.70	17.17	0.72	
09	Transfer pump	1.70	20.40	0.50	10.20	0.85	83.70	17.17	0.72	
10	LED Lights (6)	0.20	2.40	3.00	7.20	0.60	82.85	17.00	0.71	
11	USB Charger (2 port)	0.96	11.52	6.00	69.12	5.76	82.25	16.87	0.70	
12	LP Gas detector	0.05	0.60	0.00	0.00	0.00	76.49	15.69	0.65	has own batt
13	CO Detector	0.05	0.60	24.00	14.40	1.20	76.49	15.69	0.65	
14	gas water heater	2.00	24.00	2.00	48.00	4.00	75.29	15.44	0.64	shorepower only!
15	microwave		1350							*no DC OPTION, removed.*
16	wfdc charge controller									*shorepower only!*
17	Insignia tv	5.40	64.80	1.00	64.80	5.40	71.29	14.62	0.61	ac - runs off inverter
18	clamp on fan	0.80	9.60	0.00	0.00	0.00	65.89	13.52	0.56	
19	macerator pump	10.00	120.00	0.10	12.00	1.00	65.89	13.52	0.56	
20			0.00		0.00	0.00	64.89	13.31	0.55	
26			316.92		672.72	56.06	64.89	13.31		
				Average AH per hour		**2.44**	**55.11**	**AH Used/day**		

Charge Level

% Charge	12V Batt	24V Batt	SpGr
100.00	12.70	25.40	1.27
95.00	12.64	25.25	1.26
90.00	12.58	25.16	1.25
85.00	12.52	25.04	1.24
80.00	12.46	24.92	1.23
75.00	12.40	24.80	1.23
70.00	12.36	24.72	1.22
65.00	12.32	24.64	1.21
60.00	12.28	24.56	1.20
55.00	12.24	24.48	1.20
50.00	12.20	24.40	1.19
45.00	12.16	24.32	1.18
40.00	12.12	24.24	1.18
35.00	12.08	24.16	1.17
30.00	12.04	24.08	1.16
25.00	12.00	24.00	1.16
20.00	11.98	23.96	1.15
15.00	11.96	23.92	1.14
10.00	11.94	23.88	1.13
5.00	11.92	23.84	1.13
Discharged	11.90	23.80	1.12

Net Usage

Solar Charging	**Typical Variable**	**Variables**	**Panel Size (W)**	**Charging Amps**	**AH per day**	**1 day camp**	**2 day camp**	**3 day camp**	
Calc Notes				(W/ChgV)*% eff	Chg Amps *Daylight				
Charge Voltage	**14.2**	**13.70**	300.00	16.42	114.96	179.85	239.71	299.56	
			260.00	14.23	99.64	164.53	209.05	253.58	2x130
			230.00	12.59	88.14	153.03	186.06	219.09	1x100 + 1x130 not recommended
Hours usable daylight (MN)	**5**	**7.00**	200.00	10.95	76.64	141.53	163.06	184.60	
Efficiency	**75.00**	**75%**	130.00	7.12	49.82	114.71	109.42	104.12	
Battery size (AH)	**80.00**	**120.00**	100.00	5.47	38.32	103.21	86.42	69.63	
group 24	80.00		75.00	4.11	28.74	93.63	67.26	40.89	
group 27	105.00		50.00	2.74	19.16	84.05	48.10	12.15	
group 31	120.00		30.00	1.64	11.50	76.39	32.77	-10.84	
			20.00	1.09	7.66	72.55	25.11	-22.34	
			14.00	0.77	5.36	70.25	20.51	-29.24	