

**SuperSafe**<sup>®</sup>  
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**F R O N T T E R M I N A L**

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**BATTERY  
PERFORMANCE DATA**

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**EnerSys**<sup>®</sup>

*Power/Full Solutions*

RESERVE  
POWER

# Constant Current Discharge Performance Data

## Discharge Currents (Amperes) to 1.60Vpc at 20°C

Battery Type	Standby Time (Minutes)											Standby Time (Hours)													
	5	10	15	20	25	30	35	40	45	50	55	1	1.5	2	2.5	3	4	5	6	7	8	9	10	12	24
12T30F	156.0	94.6	69.8	56.1	47.2	40.9	36.3	32.6	29.6	27.2	25.2	23.5	16.8	13.1	10.8	9.23	7.15	5.85	4.95	4.29	3.90	3.49	3.16	2.60	1.30
12T38F	179.0	109.0	80.6	64.6	54.3	47.0	41.5	37.3	33.9	31.1	28.7	26.7	19.0	14.9	12.3	10.5	8.18	6.72	5.71	4.98	4.56	4.30	4.10	3.10	1.60
12T62F	283.0	190.0	145.0	118.0	93.0	86.9	70.6	69.2	57.4	54.1	48.7	46.5	35.2	27.1	22.8	18.8	14.5	11.8	10.0	8.68	7.68	6.89	6.25	5.30	2.85
12T92F	360.0	245.0	188.0	154.0	131.0	114.0	102.0	91.4	83.2	76.5	70.7	65.8	46.9	36.7	30.3	25.8	20.1	16.5	14.1	12.4	11.3	10.3	9.36	7.80	4.40
12T100FC	254.7	254.7	207.5	179.4	152.6	133.5	119.5	107.0	97.7	89.7	83.1	77.5	55.4	43.3	35.8	30.4	23.6	19.4	16.5	14.5	12.7	11.6	10.4	8.90	4.90
12T101F	305.2	211.2	165.0	141.9	123.3	108.5	97.8	88.8	81.8	75.7	70.5	68.2	48.3	38.6	32.3	28.0	22.1	18.2	15.8	13.7	12.5	11.2	10.3	8.60	4.20
12T125F	300.2	249.4	207.6	178.4	158.0	142.5	129.3	117.8	106.9	98.8	92.6	85.9	62.5	48.8	41.1	35.1	28.1	23.3	20.1	17.4	15.4	13.7	12.4	10.5	5.28
12T155FS	454.9	322.3	256.3	219.0	191.9	170.2	153.2	139.0	127.2	117.5	109.1	101.4	77.3	61.4	50.9	43.7	34.3	28.4	24.3	21.4	19.1	17.1	15.6	13.2	7.04
12T170FS	367.5	367.5	319.0	281.2	241.3	211.9	189.0	171.1	156.7	144.5	134.3	125.5	90.8	71.7	59.3	50.7	39.5	32.5	27.7	24.2	21.5	19.3	17.6	14.9	8.12
12T170F	540.0	388.6	295.1	234.7	193.1	169.7	156.5	145.6	136.2	128.0	120.7	114.0	81.8	64.7	53.8	46.3	36.4	30.3	26.3	23.2	20.7	18.6	17.0	14.5	8.16
12T190F	413.7	413.7	356.9	311.8	267.3	235.0	210.0	190.1	174.2	160.9	149.6	140.0	101.3	79.9	66.2	56.6	44.2	36.3	31.0	27.0	24.0	21.6	19.7	16.8	9.10

## Discharge Currents (Amperes) to 1.63Vpc at 20°C

Battery Type	Standby Time (Minutes)											Standby Time (Hours)													
	5	10	15	20	25	30	35	40	45	50	55	1	1.5	2	2.5	3	4	5	6	7	8	9	10	12	24
12T30F	155.0	93.7	69.2	55.6	46.8	40.6	35.9	32.3	29.4	27.0	25.0	23.3	16.6	13.0	10.8	9.19	7.12	5.82	4.93	4.28	3.89	3.48	3.15	2.60	1.30
12T38F	175.0	108.0	80.1	64.3	54.1	46.8	41.4	37.1	33.7	30.9	28.5	26.6	18.9	14.8	12.2	10.4	8.08	6.64	5.64	4.92	4.50	4.25	4.06	3.00	1.60
12T62F	274.0	186.0	143.0	116.0	98.8	86.0	76.3	68.6	62.4	56.9	52.6	46.2	34.7	27.0	20.9	18.8	14.5	11.8	10.0	8.65	7.65	6.87	6.23	5.87	2.83
12T92F	348.0	239.0	185.0	152.0	129.0	113.0	100.0	90.5	82.5	75.8	70.2	65.4	46.7	36.5	30.2	25.7	20.0	16.5	14.1	12.3	11.3	10.2	9.34	7.80	4.40
12T100FC	248.7	248.7	204.1	177.1	150.3	132.4	117.2	106.0	97.1	88.9	82.4	77.2	55.0	43.2	35.6	30.3	23.5	19.3	16.5	14.4	12.7	11.4	10.4	8.90	4.84
12T101F	305.2	211.2	165.0	141.9	123.3	108.5	97.8	88.8	81.8	75.7	70.5	68.2	48.3	38.6	32.3	28.0	22.1	18.2	15.8	13.7	12.5	11.2	10.3	8.60	4.20
12T125F	300.2	249.4	207.6	178.4	158.0	142.5	129.3	117.8	106.9	98.8	92.6	85.9	62.4	48.8	41.0	35.0	27.9	23.2	20.0	17.4	15.4	13.7	12.4	10.5	5.28
12T155FS	454.9	322.3	256.3	219.0	191.9	170.2	153.2	139.0	127.2	117.5	109.2	101.4	77.3	61.4	50.9	43.7	34.3	28.4	24.3	21.4	19.1	17.1	15.5	13.2	7.03
12T170FS	362.7	362.7	314.9	278.3	239.2	210.1	178.8	170.2	155.8	143.9	133.8	125.1	90.6	71.5	59.1	50.6	39.4	32.4	27.6	24.1	21.4	19.3	17.5	14.9	8.12
12T170F	519.0	377.9	292.7	234.7	193.1	169.7	156.5	145.6	136.2	128.0	120.7	114.0	81.8	64.7	53.8	46.3	36.4	30.3	26.3	23.2	20.7	18.6	17.0	14.5	8.16
12T190F	409.0	409.0	352.1	308.1	264.7	233.3	208.6	189.2	173.5	160.4	149.1	139.4	101.1	79.8	66.2	56.6	44.2	36.3	31.0	27.0	24.0	21.6	19.7	16.7	9.10

## Discharge Currents (Amperes) to 1.65Vpc at 20°C

Battery Type	Standby Time (Minutes)											Standby Time (Hours)													
	5	10	15	20	25	30	35	40	45	50	55	1	1.5	2	2.5	3	4	5	6	7	8	9	10	12	24
12T30F	155.0	93.0	68.7	55.2	46.5	40.3	35.7	32.1	29.2	26.9	24.9	23.2	16.6	13.0	10.7	9.15	7.10	5.80	4.92	4.26	3.88	3.47	3.14	2.60	1.30
12T38F	173.0	107.0	79.7	64.1	53.9	46.6	41.2	37.0	33.6	30.9	28.5	26.5	18.8	14.7	12.1	10.3	8.02	6.58	5.60	4.88	4.47	4.22	4.03	3.00	1.60
12T62F	267.0	183.0	141.0	115.0	97.9	85.3	75.7	68.2	62.0	56.7	52.4	46.0	34.6	26.9	20.9	18.7	14.4	11.8	10.0	8.64	7.64	6.85	6.22	5.86	2.82
12T92F	340.0	235.0	182.0	151.0	128.0	111.0	99.6	89.9	81.9	75.4	69.8	65.0	45.6	36.4	30.1	25.7	20.0	16.5	14.1	12.3	11.3	10.2	9.32	7.70	4.40
12T100FC	244.1	244.1	201.3	175.1	148.4	131.3	117.8	106.3	96.5	88.2	81.8	76.8	54.7	43.0	35.4	30.2	23.4	19.2	16.4	14.3	12.6	11.4	10.3	8.84	4.83
12T101F	305.2	211.2	165.0	141.9	123.3	108.5	97.8	88.8	81.8	75.7	70.5	68.2	48.3	38.6	32.3	28.0	22.1	18.2	15.8	13.7	12.5	11.2	10.3	8.60	4.20
12T125F	300.2	249.4	207.6	178.4	158.0	142.5	129.3	117.8	106.9	98.8	92.6	85.9	62.3	48.8	41.0	34.9	27.8	23.1	19.9	17.4	15.4	13.7	12.4	10.5	5.28
12T155FS	454.9	317.0	253.3	217.0	190.5	169.2	152.4	138.4	126.8	117.2	108.9	101.2	77.3	61.4	50.9	43.7	34.3	28.4	24.3	21.4	19.1	17.1	15.5	13.2	7.03
12T170FS	358.2	358.2	311.2	275.4	237.1	208.5	186.6	169.2	155.0	143.2	133.2	124.6	90.3	71.3	59.0	50.5	39.4	32.4	27.6	24.1	21.4	19.2	17.5	14.9	8.10
12T170F	503.6	369.9	288.4	234.7	193.1	169.7	156.5	145.6	136.2	128.0	120.7	114.0	81.8	64.7	53.8	46.3	36.4	30.3	26.3	23.2	20.7	18.6	17.0	14.5	8.16
12T190F	404.5	404.5	348.0	305.1	262.5	231.6	207.2	188.0	172.6	159.5	148.4	138.8	100.8	79.6	66.0	56.5	44.1	36.3	30.9	27.0	24.0	21.6	19.6	16.7	9.10

## Discharge Currents (Amperes) to 1.67Vpc at 20°C

Battery Type	Standby Time (Minutes)											Standby Time (Hours)													
	5	10	15	20	25	30	35	40	45	50	55	1	1.5	2	2.5	3	4	5	6	7	8	9	10	12	24
12T30F	153.0	92.3	68.1	54.7	46.1	40.0	35.4	31.9	29.0	26.7	24.7	23.0	16.5	12.9	10.7	9.12	7.07	5.79	4.90	4.25	3.87	3.46	3.13	2.55	1.30
12T38F	169.0	106.0	79.3	63.8	53.7	46.5	41.1	36.9	33.5	30.7	28.4	26.4	18.7	14.6	12.0	10.3	7.96	6.53	5.56	4.84	4.43	4.19	4.00	3.00	1.60
12T62F	260.3	179.2	139.0	114.0	96.9	84.6	75.1	67.7	61.6	56.3	52.1	45.8	34.4	26.9	20.8	18.7	14.4	11.8	9.94	8.62	7.63	6.84	6.21	5.85	2.82
12T92F	332.0	230.0	180.0	148.0	127.0	111.0	98.7	89.1	81.3	74.8	69.4	64.6	46.3	36.3	30.0	25.6	20.0	16.4	14.0	12.3	11.3	10.2	9.30	7.70	4.30
12T100FC	238.9	238.9	198.0	172.8	148.2	129.9	115.5	104.3	95.7	87.4	81.1	76.3	54.4	42.8	35.2	30.1	23.3	19.1	16.3	14.3	12.6	11.3	10.3	8.81	4.81
12T101F	298.1	208.3	163.4	140.9	122.5	108.0	97.4	88.5	81.6	75.5	70.4	68.2	48.3	38.6	32.3	28.0	22.1	18.2	15.8	13.7	12.5	11.2	10.3	8.60	4.20
12T125F	297.6	244.6	203.1	175.3	156.0	141.1	128.3	117.2	106.3	98.5	92.2	85.5	62.5	48.8	41.0	34.9	27.8	23.1	19.9	17.4	15.4	13.7	12.4	10.5	5.28
12T155FS	441.1	311.6	250.3	215.0	189.1	168.2	151.6	137.8	126.3	116.8	108.6	100.9	77.3	61.4	50.9	43.7	34.3	28.4	24.3	21.4	19.1	17.1	15.5	13.2	7.03
12T170FS	352.8	352.8	306.8	272.0	234.6	206.6	185.1	168.0	154.0	142.3	132.4	123.9	90.0	71.1	58.9	50.4	39.3	32.3	27.6	24.0	21.4	19.2	17.5	14.9	8.08
12T170F	487.2	361.2	283.0	232.6	193.1	169.7	156.5	145.6	136.2	128.0	120.7	114.0	81.8	64.7	53.8	46.3	36.4	30.3	26.3	23.2	20.7	18.6	17.0	14.5	8.16
12T190F	399.1	399.1	343.1	301.5	259.9	229.6	205.4	186.7	171.5	158.5	147.5	138.0	100.4	79.3	65.8	56.3	44.0	36.2	30.8	26.9	23.9	21.5	19.6	16.7	9.10

### Discharge Currents (Amperes) to 1.69Vpc at 20°C

Battery Type	Standby Time (Minutes)											Standby Time (Hours)													
	5	10	15	20	25	30	35	40	45	50	55	1	1.5	2	2.5	3	4	5	6	7	8	9	10	12	24
12T30F	152.9	91.6	67.5	54.3	45.7	39.7	35.2	31.6	28.8	26.5	24.5	22.9	16.4	12.9	10.7	9.10	7.10	5.80	4.90	4.20	3.70	3.40	3.00	2.50	1.30
12T38F	165.6	106.2	78.7	63.5	53.5	46.3	40.9	36.8	33.3	30.6	28.3	26.3	18.6	14.5	12.0	10.2	7.90	6.50	5.50	4.80	4.30	3.80	3.50	3.00	1.60
12T62F	252.0	172.9	134.7	111.1	94.9	83.0	73.9	66.7	60.8	55.8	51.7	45.6	34.3	26.7	21.9	18.6	14.4	11.7	10.2	8.60	7.60	6.80	6.20	5.84	2.82
12T92F	323.0	226.4	176.8	146.1	125.1	109.6	97.7	88.3	80.7	74.3	68.9	62.4	46.1	36.2	29.9	25.6	19.9	16.4	14.0	12.3	10.9	9.90	9.00	7.70	4.30
12T100FC	230.0	230.0	191.5	167.8	144.2	126.8	113.4	102.7	93.9	86.6	80.4	75.1	54.0	42.4	35.1	29.9	23.3	19.1	16.3	14.2	12.6	11.3	10.3	8.80	4.80
12T101F	290.4	205.1	161.6	139.6	121.6	107.4	96.9	88.1	81.3	75.3	70.2	68.2	48.3	38.6	32.3	28.0	22.1	18.2	15.8	13.7	12.5	11.2	10.3	8.60	4.20
12T125F	294.6	239.6	198.8	172.3	154.0	139.6	127.2	116.4	105.6	98.1	91.8	85.1	62.7	48.8	41.0	34.9	27.8	23.1	19.9	17.4	15.4	13.7	12.4	10.5	5.28
12T155FS	427.2	306.0	247.0	212.8	187.5	167.0	150.7	137.1	125.8	116.3	108.4	100.6	77.3	61.4	50.9	43.7	34.3	28.4	24.3	21.4	19.1	17.1	15.5	13.2	7.03
12T170FS	346.5	346.5	301.6	268.1	231.6	204.3	183.3	166.5	152.8	141.3	131.5	123.1	89.5	70.8	58.6	50.2	39.2	32.2	27.5	24.0	21.3	19.1	17.4	14.8	8.05
12T170F	470.1	351.5	277.2	228.7	192.5	169.7	156.5	145.6	136.2	128.0	120.7	114.0	81.8	64.7	53.8	46.3	36.4	30.3	26.3	23.2	20.7	18.6	17.0	14.5	8.16
12T190F	392.5	392.5	337.6	297.3	256.9	227.1	203.6	185.2	170.1	157.3	146.5	137.1	99.9	79.0	65.6	56.2	43.8	36.1	30.8	26.9	23.9	21.5	19.6	16.7	9.10

### Discharge Currents (Amperes) to 1.71Vpc at 20°C

Battery Type	Standby Time (Minutes)											Standby Time (Hours)													
	5	10	15	20	25	30	35	40	45	50	55	1	1.5	2	2.5	3	4	5	6	7	8	9	10	12	24
12T30F	152.0	90.8	66.9	53.7	45.3	39.3	34.9	31.4	28.6	26.3	24.4	22.7	16.3	12.8	10.6	9.10	7.00	5.80	4.90	4.20	3.70	3.30	3.00	2.50	1.30
12T38F	161.7	103.9	78.1	63.1	53.2	46.1	40.8	36.6	33.3	30.5	28.2	26.2	18.5	14.5	11.9	10.1	7.80	6.40	5.50	4.80	4.20	3.80	3.50	3.00	1.60
12T62F	240.0	169.3	132.5	109.5	93.7	82.1	73.1	66.0	60.2	55.4	51.3	45.4	34.1	26.6	21.9	18.6	14.4	11.7	10.2	8.59	7.59	6.79	6.19	5.83	2.79
12T92F	314.0	221.6	173.7	143.9	123.4	108.3	96.7	87.5	79.9	73.7	68.3	63.8	45.9	36.1	29.8	25.5	19.9	16.4	14.0	12.2	10.9	9.90	9.00	7.70	4.30
12T100FC	224.0	224.0	187.6	164.8	142.0	125.1	112.0	101.5	92.9	85.7	79.6	74.4	53.6	42.2	34.9	29.8	22.2	19.0	16.2	14.1	12.5	11.3	10.3	8.70	4.80
12T101F	282.0	201.6	159.6	138.2	120.6	106.6	96.3	87.6	80.9	74.9	69.9	68.1	48.3	38.6	32.3	28.0	22.0	18.1	15.7	13.7	12.5	11.2	10.3	8.60	4.20
12T125F	289.9	233.3	194.2	169.1	151.8	137.9	125.8	115.1	104.5	97.4	90.9	84.3	62.2	48.5	40.7	34.7	27.7	23.0	19.9	17.4	15.4	13.7	12.4	10.5	5.28
12T155FS	412.9	300.1	243.5	210.4	185.7	165.6	149.6	136.2	125.0	115.7	107.7	100.0	77.0	61.2	50.7	43.6	34.3	28.4	24.3	21.4	19.0	17.1	15.5	13.2	7.03
12T170FS	339.1	339.1	296.0	263.8	228.3	201.8	181.3	164.8	151.3	140.1	130.5	122.2	89.0	70.4	58.4	50.0	39.0	32.1	27.4	23.9	21.2	19.1	17.3	14.7	8.02
12T170F	451.4	341.0	271.0	223.7	190.1	169.0	156.5	145.6	136.2	128.0	120.7	114.0	81.8	64.7	53.8	46.3	36.4	30.3	26.3	23.2	20.7	18.6	17.0	14.5	8.16
12T190F	384.9	384.9	331.5	292.6	253.5	224.3	201.4	183.3	168.5	155.9	145.3	136.0	99.3	78.6	65.3	55.9	43.6	35.9	30.6	26.8	23.8	21.4	19.5	16.7	9.00

### Discharge Currents (Amperes) to 1.73Vpc at 20°C

Battery Type	Standby Time (Minutes)											Standby Time (Hours)													
	5	10	15	20	25	30	35	40	45	50	55	1	1.5	2	2.5	3	4	5	6	7	8	9	10	12	24
12T30F	151.1	89.9	66.2	53.2	44.8	38.9	34.5	31.1	28.3	26.1	24.2	22.5	16.2	12.8	10.6	9.00	7.00	5.70	4.90	4.20	3.70	3.30	3.00	2.50	1.20
12T38F	157.4	102.6	77.5	62.7	52.9	45.9	40.6	36.5	33.1	30.4	28.1	26.1	18.5	14.4	11.8	10.0	7.80	6.40	5.40	4.70	4.20	3.80	3.50	2.90	1.60
12T62F	233.0	165.6	130.1	107.8	92.4	81.1	72.3	65.4	59.7	54.9	50.9	45.2	33.9	26.5	21.8	18.5	14.3	11.7	10.2	8.58	7.58	6.79	6.17	5.82	2.79
12T92F	304.7	216.6	170.5	141.6	121.7	106.9	95.6	86.5	79.2	73.0	67.8	63.3	45.6	35.9	29.7	25.5	19.9	16.4	13.9	12.2	10.9	9.80	9.00	7.70	4.30
12T100FC	217.9	217.9	183.4	161.7	139.6	123.2	110.4	100.2	91.8	84.7	78.8	73.6	53.2	41.9	34.6	29.6	23.0	18.9	16.1	14.1	12.5	11.2	10.2	8.70	4.70
12T101F	272.9	197.6	157.3	136.5	119.3	105.6	95.5	87.0	80.4	74.5	69.5	68.1	48.0	38.3	32.1	27.8	21.9	18.0	15.6	13.6	12.5	11.2	10.2	8.60	4.20
12T125F	282.7	225.7	189.3	165.8	149.2	135.8	123.9	113.3	102.9	96.3	89.5	83.0	60.9	47.9	40.3	34.4	27.5	22.8	19.7	17.3	15.3	13.7	12.4	10.5	5.28
12T155FS	397.9	293.7	239.6	207.5	183.6	163.9	148.2	135.1	124.1	114.9	107.0	99.5	76.6	60.9	50.5	43.4	34.1	28.3	24.2	21.2	18.9	17.1	15.5	13.2	7.03
12T170FS	331.5	331.5	289.9	259.1	224.7	199.1	179.1	163.0	149.8	138.7	129.3	121.1	88.4	69.9	58.1	49.8	38.8	31.9	27.2	23.8	21.1	19.0	17.3	14.7	7.99
12T170F	432.3	329.4	264.0	218.3	186.9	167.5	155.3	145.1	136.2	128.0	120.7	114.0	81.8	64.7	53.8	46.3	36.4	30.3	26.3	23.2	20.7	18.6	17.0	14.5	8.16
12T190F	376.5	376.5	324.7	287.5	249.8	221.3	198.8	181.2	166.7	154.4	143.9	134.8	98.6	78.1	64.9	55.7	43.5	35.8	30.5	26.5	23.7	21.3	19.4	16.5	9.00

### Discharge Currents (Amperes) to 1.75Vpc at 20°C

Battery Type	Standby Time (Minutes)											Standby Time (Hours)													
	5	10	15	20	25	30	35	40	45	50	55	1	1.5	2	2.5	3	4	5	6	7	8	9	10	12	24
12T30F	150.0	88.9	65.4	52.6	44.3	38.5	34.2	30.8	28.1	25.8	23.9	22.3	16.1	12.7	10.5	8.98	6.98	5.72	4.85	4.20	3.82	3.41	3.08	2.50	1.20
12T38F	153.0	101.0	76.8	62.3	52.7	45.7	40.5	36.3	33.0	30.3	27.9	26.0	18.4	14.3	11.7	10.0	7.73	6.33	5.38	4.69	4.30	4.06	3.88	2.90	1.60
12T62F	231.0	164.0	129.0	107.0	92.0	80.7	72.0	65.1	59.5	54.4	50.4	45.1	33.7	26.5	21.7	18.5	14.3	11.7	10.2	8.59	7.59	6.81	6.18	5.80	2.77
12T92F	295.0	211.0	167.0	139.0	120.0	105.0	94.4	85.6	78.3	72.3	67.2	62.7	45.4	35.7	29.6	25.4	19.8	16.3	13.9	12.2	11.2	10.1	9.21	7.60	4.20
12T100FC	214.0	214.0	181.0	159.9	138.1	122.2	109.8	99.6	91.2	83.7	77.9	73.2	52.7	41.6	34.4	29.4	22.9	18.8	16.0	14.0	12.3	11.1	10.1	8.70	4.70
12T101F	262.9	193.0	154.6	134.4	117.8	104.3	94.5	86.1	79.6	73.9	69.0	68.0	47.6	38.0	31.9	27.6	21.8	17.9	15.5	13.6	12.5	11.1	10.2	8.60	4.20
12T125F	273.8	218.2	184.4	162.1	146.5	133.3	121.7	110.9	101.2	94.9	87.9	81.6	59.6	47.3	39.8	34.1	27.3	22.6	19.6	17.3	15.3	13.7	12.4	10.5	5.28
12T155FS	382.1	286.6	235.0	204.2	181.0	161.8	146.5	133.6	122.8	113.8	106.1	98.6	76.0	60.5	50.1	43.0	33.9	28.1	24.0	21.1	18.8	17.0	15.4	13.1	6.98
12T170FS	322.6	322.6	283.4	254.0	220.9	196.1	176.7	161.0	148.1	137.2	127.9	119.9	87.7	69.5	57.7	49.5	38.6	31.8	27.1	23.7	21.0	18.9	17.2	14.6	7.95
12T170F	412.6	317.0	256.1	212.4	183.3	165.3	153.6	143.7	135.0	127.3	120.3	113.9	81.8	64.7	53.8	46.3	36.4	30.3	26.3	23.2	20.7	18.6	17.0	14.5	8.16
12T190F	367.1	367.1	317.3	282.0	245.7	217.9	196.2	178.9	164.7	152.7	142.3	133.5	97.8	77.6	64.5	55.3	43.2	35.6	30.3	26.5	23.5	21.2	19.3	16.5	9.00

### Discharge Currents (Amperes) to 1.80Vpc at 20°C

Battery Type	Standby Time (Minutes)											Standby Time (Hours)													
	5	10	15	20	25	30	35	40	45	50	55	1	1.5	2	2.5	3	4	5	6	7	8	9	10	12	24
12T30F	148.0	86.5	63.5	51.0	43.1	37.4	33.3	30.0	27.4	25.2	23.4	21.9	15.8	12.5	10.4	8.89	6.93	5.68	4.81	4.17	3.79	3.38	3.05	2.40	1.20
12T38F	151.0	97.1	74.8	61.2	51.9	45.1	40.0	36.0	32.7	29.9	27.7	25.7	18.2	14.1	11.6	9.8	7.59	6.21	5.27	4.60	4.21	3.99	3.81	2.90	1.60
12T62F	212.0	154.0	122.0	102.0	88.2	77.8	69.7	63.2	57.9	53.0	49.3	43.6	33.2	26.2	21.5	18.4	14.3	11.7	9.9	8.58	7.59	6.80	6.17	5.79	2.74
12T92F	272.0	198.0	158.0	132.0	115.0	101.0	91.3	83.0	76.1	70.4	65.5	61.3	44.6	35.3	29.4	25.2	19.7	16.2	13.9	12.1	11.1	10.0	9.15	7.58	4.20
12T100FC	195.8	195.8	167.8	149.6	130.3	115.6	104.5	95.0	87.2	80.9	75.4	70.4	51.5	40.6	33.8	28.9	22.5	18.5	15.9	13.8	12.2	11.0	10.0	8.60	4.60
12T101F	233.1	178.7	145.5	127.5	112.3	99.9	90.7	82.9	76.8	71.3	66.7	66.0	46.1	36.8	30.9	26.7	21.3	17.7	15.2	13.4	12.0	10.9	10.0	8.40	4.20
12T125F	246.9	196.1	167.5	149.7	136.0	124.1	113.3	102.4	95.9	88.9	82.1	76.4	57.6	45.7	38.6	33.3	26.5	21.9	18.9	16.7	15.0	13.6	12.4	10.5	5.28
12T155FS	337.0	264.9	220.6	193.2	172.1	154.5	140.2	128.2	118.0	109.5	102.2	95.0	73.5	58.2	48.4	41.7	32.8	27.2	23.3	20.4	18.2	16.4	15.0	12.7	6.78
12T170FS	297.9	297.9	265.1	239.7	209.8	187.5	169.8	155.2	143.1	132.9	124.0	116.4	85.6	68.0	56.6	48.6	38.0	31.3	26.7	23.3	20.6	18.6	17.0	14.4	7.82
12T170F	359.7	283.0	232.3	195.1	171.8	158.1	147.3	138.1	130.0	122.7	116.2	109.6	79.8	63.6	53.2	45.9	36.2	30.3	26.3	23.2	20.7	18.6	17.0	14.5	8.16
12T190F	339.4	339.4	297.3	266.6	234.4	208.5	188.7	172.6	159.1	147.8	137.9	129.5	95.6	76.0	63.3	54.3	42.5	35.0	29.8	26.1	23.2	20.8	19.0	16.2	8.80

### Discharge Currents (Amperes) to 1.85Vpc at 20°C

Battery Type	Standby Time (Minutes)											Standby Time (Hours)													
	5	10	15	20	25	30	35	40	45	50	55	1	1.5	2	2.5	3	4	5	6	7	8	9	10	12	24
12T30F	146.0	83.9	61.4	49.3	41.6	36.3	32.3	29.2	26.6	24.6	22.8	21.4	15.5	12.3	10.3	8.80	6.87	5.64	4.78	4.14	3.75	3.35	3.02	2.44	1.20
12T38F	148.0	92.7	72.6	59.9	51.0	44.5	39.5	35.5	32.3	29.6	27.4	25.5	17.9	13.9	11.4	9.66	7.45	6.09	5.17	4.51	4.00	3.91	3.74	2.82	1.60
12T62F	193.0	143.0	115.0	97.0	84.2	74.6	67.1	61.1	56.1	51.5	47.9	42.5	32.6	25.9	21.3	18.3	14.2	11.7	9.88	8.58	7.59	6.80	6.17	5.78	2.71
12T92F	248.0	184.0	149.0	126.0	110.0	97.4	87.8	80.1	73.7	68.3	63.7	59.7	43.8	34.8	29.0	24.9	19.6	16.1	13.8	12.1	11.1	10.0	9.08	7.57	4.10
12T100FC	176.3	176.3	153.3	138.0	120.5	108.1	97.4	88.9	82.5	77.9	72.7	67.2	50.1	39.4	33.2	28.2	22.1	18.2	15.6	13.6	12.0	10.8	9.80	8.40	4.60
12T101F	195.3	159.1	132.3	117.0	103.8	92.8	84.6	77.5	72.0	67.0	62.8	61.5	43.4	34.7	29.1	25.2	20.1	16.8	14.6	12.9	11.5	10.3	9.40	8.00	4.20
12T125F	210.4	170.1	148.4	133.7	120.9	108.4	98.9	91.6	83.6	77.0	72.3	68.4	53.1	41.9	35.4	30.2	24.3	20.1	17.6	15.5	13.9	12.6	11.5	9.84	5.28
12T155FS	281.3	235.5	199.9	176.8	158.5	142.9	130.2	119.3	110.1	102.7	96.1	89.4	69.1	54.7	45.6	39.2	30.9	25.6	22.0	19.3	17.2	15.5	14.1	12.0	6.40
12T170FS	270.0	270.0	240.6	221.1	194.3	174.7	160.7	146.6	135.5	126.3	117.9	110.6	81.7	65.5	54.7	47.0	36.7	30.3	25.8	22.5	20.0	18.0	16.4	13.9	7.63
12T170F	303.4	244.3	201.8	174.6	159.0	147.4	137.6	129.2	121.7	114.9	107.8	101.4	74.6	59.9	50.2	43.4	34.4	28.9	25.1	22.1	19.7	17.8	16.2	13.9	7.92
12T190F	307.1	307.1	272.5	248.5	219.4	196.3	179.1	163.3	150.8	149.7	139.9	123.0	96.6	73.2	63.9	52.5	41.1	33.9	28.9	25.3	22.4	20.2	18.4	15.8	8.40

# Constant Power Discharge Performance Data



## Constant Power Discharge (Watts per cell) to 1.60Vpc at 20°C

Battery Type	Standby Time (Minutes)											Standby Time (Hours)													
	5	10	15	20	25	30	35	40	45	50	55	1	1.5	2	2.5	3	4	5	6	7	8	9	10	12	24
12T30F	280.0	175.0	131.0	106.0	90.0	79.0	69.9	63.1	57.5	53.0	49.2	45.8	33.0	25.9	21.5	18.3	14.2	11.7	9.89	8.58	7.81	6.96	6.32	5.20	2.60
12T38F	319.0	201.0	151.0	122.0	104.0	90.0	80.1	72.2	65.8	60.4	56.1	52.2	37.5	29.5	24.4	20.9	16.3	13.4	11.4	9.94	9.10	8.60	8.19	6.10	3.30
12T62F	495.0	344.0	268.0	221.0	189.0	165.0	147.0	133.0	121.0	109.7	101.7	89.6	67.7	53.5	43.6	37.5	28.9	23.7	20.0	17.4	15.4	13.9	12.6	10.6	5.60
12T92F	627.0	442.0	346.0	286.0	246.0	215.0	193.0	175.0	159.0	147.3	136.8	127.0	91.9	72.3	60.0	51.3	40.1	33.1	28.3	24.8	22.8	20.6	18.9	15.7	8.80
12T100FC	453.5	453.5	377.7	331.0	284.7	248.8	223.3	202.5	186.1	167.5	155.4	149.1	104.1	84.8	67.2	60.0	46.8	38.5	32.9	28.8	25.4	22.9	20.8	16.3	8.90
12T101F	503.8	364.9	296.4	257.6	225.8	200.7	181.9	166.2	154.0	143.3	134.2	130.2	92.6	74.2	62.4	54.2	42.8	35.2	30.6	26.6	24.3	21.8	20.0	16.7	8.19
12T125F	515.8	430.6	360.4	312.7	278.9	253.2	232.2	213.8	197.3	182.6	169.2	159.2	119.2	93.8	79.3	68.2	54.0	45.0	38.7	34.1	30.3	27.1	24.4	20.9	10.5
12T155FS	750.5	547.8	457.7	395.6	350.4	313.9	284.2	259.5	238.9	223.3	208.9	195.5	148.3	117.7	98.3	84.6	66.5	55.2	47.3	41.5	37.1	33.3	30.3	25.7	13.7
12T170FS	623.1	623.1	575.2	514.0	447.8	396.6	355.9	323.6	297.4	274.6	255.5	239.5	175.6	140.2	116.4	100.1	78.2	64.4	54.9	48.0	42.7	38.4	35.0	29.6	16.1
12T170F	894.3	660.5	520.8	424.3	360.3	314.4	283.5	265.7	250.1	236.2	223.8	212.6	157.7	124.8	104.1	89.7	71.0	59.0	50.9	45.0	40.4	36.6	33.3	28.5	16.6
12T190F	802.8	802.8	680.6	603.1	511.6	463.3	410.5	373.3	348.0	332.0	309.0	280.7	210.0	161.4	138.5	114.7	89.4	73.4	62.8	54.9	48.2	44.0	39.4	34.7	18.5

## Constant Power Discharge (Watts per cell) to 1.63Vpc at 20°C

Battery Type	Standby Time (Minutes)											Standby Time (Hours)													
	5	10	15	20	25	30	35	40	45	50	55	1	1.5	2	2.5	3	4	5	6	7	8	9	10	12	24
12T30F	279.0	173.0	129.0	105.0	90.0	77.9	69.4	62.6	57.1	52.6	48.8	45.5	32.8	25.8	21.4	18.2	14.2	11.6	9.89	8.58	7.78	6.97	6.30	5.20	2.50
12T38F	313.0	199.0	150.0	122.0	103.0	89.8	79.8	71.9	65.4	60.3	55.8	51.9	37.2	29.2	24.2	20.7	16.1	13.2	11.4	9.94	8.99	8.52	8.10	6.10	3.30
12T62F	478.0	336.0	263.0	218.0	187.0	163.0	146.0	132.0	120.0	109.0	101.0	89.1	67.5	53.3	43.5	37.3	28.9	23.6	20.0	17.4	15.4	13.8	12.5	10.6	5.60
12T92F	607.0	432.0	339.0	282.0	243.0	213.0	191.0	173.0	158.0	146.3	135.8	126.0	91.6	72.0	59.9	51.2	40.0	33.0	28.3	24.8	22.8	20.6	18.8	15.7	8.80
12T100FC	445.4	445.4	373.0	327.8	282.4	247.6	222.0	201.1	185.3	167.4	155.5	148.5	104.8	84.5	68.1	59.9	46.6	38.3	32.9	28.8	25.3	22.8	20.7	16.9	9.10
12T101F	503.8	364.9	296.4	257.6	225.8	200.7	181.9	166.2	154.0	143.3	134.2	130.2	92.6	74.2	62.4	54.2	42.8	35.2	30.6	26.6	24.3	21.8	20.0	16.7	8.19
12T125F	515.8	430.6	360.4	312.7	278.9	253.2	232.2	213.8	197.3	182.6	169.2	159.2	119.2	93.8	79.3	68.2	54.0	45.0	38.7	34.1	30.3	27.1	24.4	20.9	10.5
12T155FS	750.5	547.8	457.7	395.6	350.4	313.9	284.2	259.5	238.9	222.8	208.6	195.3	148.3	117.7	98.3	84.6	66.5	55.2	47.3	41.5	37.1	33.3	30.3	25.7	13.7
12T170FS	623.1	623.1	573.9	514.0	447.8	396.6	355.9	323.6	297.4	274.6	255.5	239.5	175.6	140.2	116.4	100.1	78.2	64.4	54.9	48.0	42.6	38.4	34.9	29.6	16.1
12T170F	866.6	648.2	514.7	424.3	360.3	314.4	283.5	265.7	250.1	236.2	223.8	212.6	157.7	124.8	104.1	89.7	71.0	59.0	50.9	45.0	40.4	36.6	33.3	28.5	16.6
12T190F	791.6	791.6	673.4	598.0	507.4	460.5	408.0	371.1	346.5	329.0	307.0	279.8	209.0	161.2	138.3	114.5	89.3	73.4	62.8	54.9	48.2	43.9	39.4	34.6	18.5

## Constant Power Discharge (Watts per cell) to 1.65Vpc at 20°C

Battery Type	Standby Time (Minutes)											Standby Time (Hours)													
	5	10	15	20	25	30	35	40	45	50	55	1	1.5	2	2.5	3	4	5	6	7	8	9	10	12	24
12T30F	278.0	173.0	129.0	105.0	89.0	77.6	69.0	62.3	56.8	52.4	48.6	45.3	32.7	25.7	21.3	18.2	14.2	11.6	9.84	8.54	7.77	6.96	6.29	5.10	2.60
12T38F	310.0	199.0	149.0	122.0	103.0	89.7	79.6	71.7	65.3	60.1	55.6	51.8	37.1	29.1	24.0	20.6	16.0	13.2	11.2	9.78	8.95	8.47	8.07	6.10	3.30
12T62F	473.0	333.0	261.0	216.0	185.0	162.0	145.0	131.0	120.0	108.5	100.6	88.8	67.2	53.2	43.3	37.3	28.8	23.6	20.0	17.4	15.4	13.8	12.5	10.5	5.60
12T92F	601.0	428.0	337.0	280.0	241.0	212.0	190.0	172.0	157.0	145.5	135.2	126.0	91.3	71.9	59.7	51.1	40.0	33.0	28.3	24.8	22.8	20.5	18.8	15.6	8.80
12T100FC	438.9	438.9	368.8	324.8	279.6	245.9	220.4	199.5	184.3	167.1	155.3	147.9	105.0	84.3	68.5	59.7	46.5	38.2	32.8	28.7	25.2	22.7	20.7	17.2	9.30
12T101F	503.8	364.9	296.4	257.6	225.8	200.7	181.9	166.2	154.0	143.3	134.2	130.2	92.6	74.2	62.4	54.2	42.8	35.2	30.6	26.6	24.3	21.8	20.0	16.7	8.19
12T125F	515.8	430.6	360.4	312.7	278.9	253.2	232.2	213.8	197.3	182.6	169.2	159.2	119.2	93.8	79.3	68.2	54.0	45.0	38.7	34.1	30.3	27.1	24.4	20.9	10.5
12T155FS	750.5	547.8	457.7	395.6	350.4	313.9	284.2	259.5	238.9	222.3	208.1	194.7	148.3	117.7	98.3	84.6	66.5	55.2	47.3	41.5	37.1	33.3	30.3	25.7	13.7
12T170FS	623.1	623.1	570.0	512.7	447.0	396.3	355.9	323.6	297.4	274.6	255.5	239.5	175.6	140.2	116.4	100.1	78.2	64.4	54.9	48.0	42.6	38.3	34.9	29.6	16.0
12T170F	846.4	638.7	508.4	422.9	360.3	314.4	283.5	265.7	250.1	236.2	223.8	212.6	157.7	124.8	104.1	89.7	71.0	59.0	50.9	45.0	40.4	36.6	33.3	28.5	16.6
12T190F	782.1	782.1	667.1	593.4	506.7	457.8	405.6	368.9	345.1	327.0	305.0	278.8	208.5	160.9	138.0	114.3	89.1	73.2	62.7	54.8	48.1	43.9	39.3	34.6	18.5

## Constant Power Discharge (Watts per cell) to 1.67Vpc at 20°C

Battery Type	Standby Time (Minutes)											Standby Time (Hours)													
	5	10	15	20	25	30	35	40	45	50	55	1	1.5	2	2.5	3	4	5	6	7	8	9	10	12	24
12T30F	278.0	171.0	128.0	104.0	88.4	77.0	68.6	61.9	56.4	52.1	48.3	45.0	32.5	25.6	21.2	18.1	14.1	11.6	9.81	8.52	7.74	6.96	6.27	5.10	2.60
12T38F	304.0	196.0	149.0	121.0	103.0	89.4	79.4	71.5	65.1	59.9	55.5	51.6	37.0	28.9	23.9	20.4	15.9	13.1	11.1	9.71	8.88	8.41	8.01	6.00	3.30
12T62F	461.0	327.0	257.0	214.0	184.0	161.0	144.0	130.0	119.0	107.9	100.1	88.4	67.0	53.0	43.2	37.2	28.8	23.5	20.0	17.3	15.4	13.8	12.5	10.5	5.60
12T92F	585.0	420.0	331.0	276.0	239.0	209.0	188.0	171.0	156.0	144.7	134.4	125.0	90.9	71.6	59.6	51.0	39.9	33.0	28.2	24.7	22.7	20.5	18.8	15.6	8.80
12T100FC	431.4	431.4	364.0	321.2	278.2	243.2	218.8	199.0	183.1	166.5	154.9	147.1	105.1	84.0	68.8	59.5	46.4	38.1	32.6	28.5	25.1	22.7	20.6	17.5	9.60
12T101F	503.8	364.9	296.4	257.6	225.8	200.7	181.9	166.2	154.0	143.3	134.2	130.2	92.6	74.2	62.4	54.2	42.8	35.2	30.6	26.6	24.3	21.8	20.0	16.7	8.19
12T125F	515.8	425.4	355.6	308.7	276.4	251.9	231.3	213.1	196.9	182.0	168.8	159.0	118.4	93.8	79.0	68.2	54.0	45.0	38.7	34.0	30.3	27.1	24.4	20.9	10.5
12T155FS	736.7	542.1	452.8	392.4	348.1	312.2	283.0	258.5	238.2	221.4	207.2	194.0	148.3	117.7	98.3	84.6	66.5	55.2	47.3	41.5	37.1	33.3	30.3	25.7	13.7
12T170FS	623.1	623.1	564.7	509.0	444.1	393.9	354.7	323.5	297.4	274.6	255.5	239.5	175.6	140.2	116.3	100.0	78.2	64.4	54.9	48.0	42.6	38.3	34.9	29.6	16.0
12T170F	825.1	627.6	501.5	419.5	360.0	314.4	283.5	265.7	250.1	236.2	223.8	212.6	157.7	124.8	104.1	89.7	71.0	59.0	50.9	45.0	40.4	36.6	33.3	28.5	16.6
12T190F	771.1	771.1	659.8	588																					

**Constant Power Discharge (Watts per cell) to 1.69Vpc at 20°C**

Battery Type	Standby Time (Minutes)										Standby Time (Hours)														
	5	10	15	20	25	30	35	40	45	50	55	1	1.5	2	2.5	3	4	5	6	7	8	9	10	12	24
12T30F	278.7	171.3	128.0	103.7	87.9	76.6	68.2	61.5	56.2	51.8	48.0	44.8	32.4	25.5	21.2	18.1	14.1	11.6	9.80	8.50	7.50	6.70	6.10	5.10	2.50
12T38F	301.1	196.3	148.9	121.1	102.6	89.4	79.3	71.4	65.0	59.8	55.3	57.5	36.8	28.8	23.8	20.3	15.8	13.0	11.1	9.60	8.60	7.70	7.00	6.00	3.30
12T62F	440.8	316.1	249.8	207.9	178.8	157.2	140.6	127.3	116.4	107.3	99.5	88.1	66.7	52.0	43.1	36.8	28.5	23.3	19.8	17.2	15.2	13.7	12.4	10.5	5.60
12T92F	579.3	416.2	329.6	275.0	257.1	209.0	187.2	169.8	155.6	143.7	133.6	124.9	90.6	71.6	59.9	51.0	39.9	33.0	28.2	24.7	22.0	19.9	18.2	15.6	8.70
12T100FC	416.7	416.7	352.5	312.0	270.0	239.0	214.7	195.2	179.2	165.7	154.3	144.4	105.0	83.1	69.0	59.2	46.3	38.2	32.6	28.5	25.3	22.9	20.8	17.8	9.80
12T101F	493.7	360.7	293.8	255.7	224.5	199.6	181.1	165.6	153.5	142.9	133.9	130.2	92.6	74.2	62.4	54.2	42.8	35.2	30.6	26.6	24.3	21.8	20.0	16.7	8.19
12T125F	515.8	419.7	350.8	305.4	273.9	250.4	230.3	212.4	196.3	181.4	168.4	158.8	117.7	93.8	78.8	68.2	54.0	45.0	38.7	33.9	30.3	27.0	24.4	20.9	10.5
12T155FS	722.0	536.1	448.0	389.1	345.7	310.3	281.5	257.4	237.3	220.7	206.5	193.4	148.3	117.7	98.3	84.6	66.5	55.2	47.3	41.5	37.1	33.3	30.3	25.7	13.7
12T170FS	623.1	623.1	558.7	504.0	439.6	390.0	352.0	321.1	295.0	274.0	255.4	239.1	175.6	139.6	116.1	99.6	64.1	54.7	47.8	42.5	38.2	34.8	29.6	16.0	
12T170F	802.2	615.1	494.2	414.3	357.6	314.2	283.5	265.7	250.1	236.2	223.8	212.6	157.7	124.8	104.1	89.7	71.0	59.0	50.9	45.0	40.4	36.6	33.3	28.5	16.6
12T190F	743.2	743.2	642.4	574.7	496.8	446.3	397.9	363.0	337.9	321.7	299.8	272.0	206.1	159.3	136.7	113.6	88.8	73.0	63.3	54.7	47.3	43.9	38.9	33.9	18.0

**Constant Power Discharge (Watts per cell) to 1.71Vpc at 20°C**

Battery Type	Standby Time (Minutes)										Standby Time (Hours)														
	5	10	15	20	25	30	35	40	45	50	55	1	1.5	2	2.5	3	4	5	6	7	8	9	10	12	24
12T30F	278.2	170.3	127.1	102.9	87.2	76.1	67.7	61.1	55.8	51.4	47.7	44.6	32.2	25.4	21.1	18.1	14.1	11.5	9.80	8.50	7.50	6.70	6.10	5.10	2.50
12T38F	295.2	194.5	148.1	120.7	102.3	89.1	79.1	71.2	64.9	59.6	55.2	51.4	36.7	28.7	23.7	20.2	15.7	12.9	10.9	9.60	8.50	7.70	7.00	6.00	3.30
12T62F	430.5	310.7	246.3	205.5	176.9	155.2	139.4	126.3	115.5	106.6	98.9	87.8	66.4	52.1	43.0	36.7	28.4	23.3	19.7	17.1	15.2	13.6	12.4	10.5	5.60
12T92F	566.3	409.1	325.0	271.7	234.5	207.0	185.6	168.5	154.5	142.7	132.8	124.2	90.2	71.4	59.3	50.9	39.9	32.9	28.2	24.7	22.0	19.9	18.2	15.5	8.70
12T100FC	408.1	408.1	346.7	307.6	267.0	236.6	212.8	193.7	178.0	164.7	153.5	143.7	104.8	83.1	69.1	59.4	46.5	38.4	32.8	28.7	25.6	23.1	21.1	18.0	9.90
12T101F	482.3	355.7	290.5	253.4	222.8	198.3	180.1	164.8	152.9	142.3	133.4	130.0	92.6	74.2	62.4	54.2	42.6	35.0	30.4	26.6	24.3	21.8	20.0	16.7	8.19
12T125F	515.8	411.6	345.2	301.7	271.5	248.6	228.9	211.0	195.2	180.0	168.0	157.9	116.9	93.5	78.4	67.9	53.7	44.8	38.7	33.9	30.3	27.0	24.4	20.9	10.5
12T155FS	706.1	529.6	443.0	385.6	343.1	308.2	279.8	256.0	236.2	219.7	205.1	191.8	147.7	117.2	97.9	84.5	66.5	55.2	47.3	41.5	36.8	33.3	30.3	25.7	13.7
12T170FS	623.1	623.1	551.8	498.2	435.3	386.7	349.4	319.0	293.5	272.1	254.1	238.3	175.3	139.2	116.0	99.4	77.7	64.0	54.6	47.7	42.0	38.2	35.0	29.6	16.0
12T170F	778.3	600.6	485.9	408.2	353.6	311.9	283.3	265.7	250.1	236.2	223.8	212.6	157.7	124.8	104.1	89.7	71.0	59.0	50.9	45.0	40.4	36.6	33.3	28.5	16.6
12T190F	732.9	732.9	635.2	569.5	493.0	443.4	395.7	361.3	336.5	320.4	298.7	270.9	206.1	159.3	136.7	113.6	88.4	72.6	62.9	54.7	47.3	43.9	38.9	33.9	18.0

**Constant Power Discharge (Watts per cell) to 1.73Vpc at 20°C**

Battery Type	Standby Time (Minutes)										Standby Time (Hours)														
	5	10	15	20	25	30	35	40	45	50	55	1	1.5	2	2.5	3	4	5	6	7	8	9	10	12	24
12T30F	277.9	169.2	126.1	102.1	86.5	75.4	67.2	60.6	55.4	51.1	47.4	44.3	32.1	25.3	21.0	18.0	14.0	11.5	9.80	8.50	7.50	6.70	6.00	5.10	2.50
12T38F	288.8	192.6	147.2	120.2	102.0	88.7	78.9	71.0	64.7	59.4	55.0	51.2	36.5	28.6	23.5	20.1	15.6	12.8	10.9	9.50	8.50	7.60	6.90	5.90	3.30
12T62F	419.8	305.1	242.7	202.9	175.0	154.2	138.1	125.2	114.7	105.8	98.3	87.5	66.1	51.9	42.9	36.6	28.4	23.2	19.7	17.1	15.2	13.6	12.4	10.5	5.60
12T92F	552.9	401.7	320.1	268.1	231.8	204.8	183.8	167.0	153.3	141.7	131.9	123.4	89.8	71.1	59.1	50.8	39.8	32.9	28.1	24.6	21.9	19.8	18.1	15.5	8.60
12T100FC	399.0	399.0	340.5	302.9	263.5	233.9	210.7	192.0	176.5	163.5	152.4	142.9	104.5	83.0	69.1	59.4	46.6	38.5	33.0	28.9	25.7	23.2	21.2	18.1	10.1
12T101F	472.1	351.3	287.3	251.0	221.0	196.9	178.9	163.8	152.1	141.6	132.8	130.0	92.1	73.7	62.0	53.9	42.4	34.9	30.2	26.4	24.3	21.8	19.8	16.7	8.19
12T125F	510.7	400.7	338.8	297.9	268.8	246.3	226.7	209.0	192.9	177.9	167.0	156.1	116.1	92.9	77.8	67.3	53.1	44.5	38.7	33.9	30.3	27.0	24.4	20.9	10.5
12T155FS	688.4	522.2	437.4	381.6	340.0	305.6	277.8	254.3	234.7	218.4	204.0	190.9	146.8	116.6	97.4	84.0	66.1	54.9	47.1	41.3	36.8	33.3	30.3	25.7	13.7
12T170FS	622.0	622.0	543.8	491.5	430.2	382.8	346.2	316.4	291.4	270.4	252.6	236.9	174.5	138.7	115.4	99.1	77.5	63.8	54.5	47.6	42.3	38.0	34.6	29.5	15.9
12T170F	753.5	585.1	476.0	401.3	348.5	308.3	282.9	265.2	249.8	236.1	223.8	212.6	157.7	124.8	104.1	89.7	71.0	59.0	50.9	45.0	40.4	36.6	33.3	28.5	16.6
12T190F	723.9	723.9	628.2	564.1	489.0	440.3	393.0	359.1	334.8	318.8	297.3	269.7	205.0	158.2	135.8	113.0	88.0	72.4	62.5	54.3	47.3	43.9	38.6	33.9	18.0

**Constant Power Discharge (Watts per cell) to 1.75Vpc at 20°C**

Battery Type	Standby Time (Minutes)										Standby Time (Hours)														
	5	10	15	20	25	30	35	40	45	50	55	1	1.5	2	2.5	3	4	5	6	7	8	9	10	12	24
12T30F	277.0	168.0	125.0	101.0	85.6	75.0	66.5	60.1	54.9	50.7	47.1	43.9	31.9	25.2	20.9	17.9	14.0	11.5	9.72	8.44	7.67	6.87	6.20	5.00	2.50
12T38F	281.0	189.0	146.0	119.0	102.0	88.0	78.6	70.8	64.4	59.3	54.9	51.0	36.4	28.4	23.4	19.9	15.8	12.7	10.8	9.43	8.64	7.81	7.18	5.90	3.30
12T62F	421.0	306.0	243.0	204.0	176.0	155.0	139.0	126.0	115.0	105.0	97.6	86.6	65.8	52.4	42.8	36.9	28.6	23.4	19.9	17.3	15.3	13.7	12.5	10.4	5.55
12T92F	537.0	392.0	313.0	263.0	228.0	202.0	182.0	165.0	151.0	140.6	130.9	122.0	89.4	70.7	58.9	50.5	39.6	32.8	28.0	24.6	22.5	20.4	18.6	15.4	8.60
12T100FC	393.9	393.9	337.7	301.1	261.1	231.3	208.4	188.9	175.6	162.1	151.2	142.0	104.0	82.0	69.0	58.3	45.5	37.5	32.0	28.1	24.8	22.5	20.3	18.2	10.1
12T101F	460.0	345.9	283.5	248.2	218.8	195.1	177.5	162.6	151.0	140.7	132.1	130.2	91.6	73.3	61.6	53.5	42.2	34.7	30.0	26.4	24.3	21.6	19.8	16.7	8.19
12T125F	494.1	389.9	331.6	293.1	265.5	243.4	224.0	206.4	189.9	175.3	165.1	154.1	115.3	92.3	77.2	66.7	52.5	44.2	38.6	33.9	30.4	27.1	24.4	20.9	10.5
12T155FS	668.6	513.5	431.1	377.0	336.3	302.6	275.2	252.2	232.9	216.8	202.8	189.8	146.0	115.9	96.7	83.4	65.7	54.5	46.7	41.0	36.5	33.1	30.1	25.5	13.6
12T170FS	607.6	607.6	535.2	485.2	425.5	379.5	343.4	314.1	289.5	268.4	250.8	235.7	173.5	138.2	115.0	98.9	77.4	63.7	54.4	47.5	42.2	38.0	34.6	29.4	15.9
12T170F	727.6	567.6	464.9	393.6	342.3	303.7	281.3	264.1	248.9	235.4	223.2	212.2	157.7	124.8	104.1	89.7	71.0	59.0	50.9	45.0	40.4	36.6	33.3	28.5	16.6
12T190F	712.8	712.8	619.9	557.9	484.2	436.3	390.0	356.5	332.4	316.8	295.8	268.8	203												

### Constant Power Discharge (Watts per cell) to 1.80Vpc at 20°C

Battery Type	Standby Time (Minutes)											Standby Time (Hours)													
	5	10	15	20	25	30	35	40	45	50	55	1	1.5	2	2.5	3	4	5	6	7	8	9	10	12	24
12T30F	276.0	164.0	122.0	96.0	83.6	72.9	65.0	58.8	53.7	49.7	46.2	43.1	31.4	24.9	20.7	17.8	13.9	11.4	9.66	8.38	7.62	6.80	6.14	4.70	2.40
12T38F	280.0	184.0	143.0	117.0	101.0	87.8	78.1	70.4	64.1	58.9	54.5	50.7	36.0	28.1	23.1	19.6	15.2	12.5	10.6	9.26	8.48	8.03	7.68	5.80	3.20
12T62F	392.0	290.0	233.0	196.0	170.0	151.0	135.0	123.0	113.0	102.9	95.7	84.9	65.0	52.0	42.4	36.7	28.5	23.4	19.8	17.2	15.2	13.7	12.4	10.4	5.49
12T92F	502.0	373.0	300.0	253.0	221.0	196.0	177.0	161.0	148.0	137.7	128.4	120.0	88.2	70.0	58.5	50.2	39.4	32.6	27.9	24.4	22.4	20.2	18.4	15.3	8.40
12T100FC	365.3	365.3	316.7	284.5	248.5	220.4	199.0	181.0	169.0	157.8	147.4	137.4	102.2	80.2	68.2	57.3	44.9	37.0	31.7	27.7	24.5	22.1	20.1	18.2	10.1
12T101F	419.6	326.3	269.3	237.2	210.0	187.8	171.3	157.3	146.4	136.6	128.3	126.8	88.9	71.1	59.8	51.9	41.5	34.4	29.5	26.1	23.3	21.3	19.5	16.4	8.21
12T125F	449.9	358.6	307.6	275.2	251.2	230.7	211.8	194.4	178.8	167.8	156.2	145.5	113.3	88.4	74.6	65.1	52.1	42.6	37.2	33.1	29.6	26.8	24.4	20.8	10.5
12T155FS	606.6	483.5	408.2	359.5	321.9	290.4	264.8	243.1	224.8	209.6	196.0	183.6	141.6	112.4	93.9	81.0	63.7	52.9	45.4	39.8	35.5	32.1	29.2	24.8	13.2
12T170FS	571.6	571.6	510.8	463.5	409.5	366.5	333.1	305.6	282.2	262.1	245.2	230.7	170.3	136.0	113.3	97.6	76.4	63.0	53.8	47.0	41.7	37.5	34.1	29.1	15.6
12T170F	650.1	518.0	429.0	367.9	322.1	293.5	274.2	257.5	242.9	230.0	218.4	207.9	153.9	122.8	103.0	88.9	70.6	58.8	50.8	45.0	40.4	36.6	33.3	28.5	16.6
12T190F	666.8	666.8	587.6	533.0	467.5	420.8	378.8	347.4	323.0	310.2	290.0	263.6	200.8	154.6	133.3	110.5	86.3	71.0	61.4	53.7	46.6	43.0	38.0	33.5	17.8

### Constant Power Discharge (Watts per cell) to 1.85Vpc at 20°C

Battery Type	Standby Time (Minutes)											Standby Time (Hours)													
	5	10	15	20	25	30	35	40	45	50	55	1	1.5	2	2.5	3	4	5	6	7	8	9	10	12	24
12T30F	275.0	161.0	118.0	96.0	81.4	71.0	63.4	57.4	52.5	48.6	45.2	42.2	30.9	24.6	20.5	17.6	13.8	11.3	9.60	8.30	7.55	6.74	6.08	4.90	2.33
12T38F	279.0	177.0	140.0	116.0	99.6	87.1	77.6	69.9	63.7	58.6	54.2	50.4	35.7	27.8	22.8	19.4	15.0	12.2	10.4	9.08	8.32	7.88	7.54	5.70	3.20
12T62F	363.0	273.0	222.0	188.0	164.0	146.0	131.0	120.0	110.0	100.6	93.7	83.2	64.1	51.5	42.1	36.5	28.4	23.3	19.8	17.2	15.2	13.6	12.4	10.3	5.41
12T92F	466.0	352.0	286.0	244.0	213.0	189.0	172.0	157.0	144.0	134.6	125.7	117.0	86.9	69.2	57.9	46.8	39.1	32.4	27.7	24.2	22.2	20.0	18.3	15.1	8.20
12T100FC	334.0	334.0	293.0	265.3	231.6	205.5	187.0	170.7	161.1	152.4	142.7	131.8	99.5	78.0	66.8	56.1	44.1	36.4	31.1	27.2	24.1	21.7	19.8	17.8	9.80
12T101F	361.3	296.0	247.6	219.7	195.5	175.4	160.6	147.9	138.0	129.0	121.4	118.8	84.1	67.4	56.7	49.2	39.3	32.8	28.5	25.2	22.4	20.1	18.4	15.6	8.23
12T125F	391.5	318.3	278.1	251.4	228.7	207.5	187.9	175.0	160.7	148.2	138.3	131.0	103.7	82.2	70.3	60.5	48.2	39.5	35.0	31.0	28.0	25.2	22.8	19.5	10.5
12T155FS	520.4	438.1	374.0	332.0	298.6	270.0	247.1	227.4	210.8	196.9	185.3	174.2	133.8	106.3	88.8	76.6	60.4	50.1	43.0	37.7	33.6	30.4	27.7	23.5	12.5
12T170FS	527.6	527.6	470.3	433.1	384.3	345.0	316.8	292.5	269.8	251.6	235.7	221.5	163.0	132.5	110.2	95.4	74.6	61.4	52.4	45.8	40.6	36.6	33.3	28.4	15.3
12T170F	563.0	456.2	383.8	331.7	299.8	278.6	260.5	244.9	231.3	219.0	207.4	195.5	144.8	116.5	98.0	84.9	67.6	56.4	48.9	43.3	38.8	35.1	32.0	27.5	16.4
12T190F	615.4	615.4	550.8	504.3	444.9	402.6	363.9	332.7	311.7	303.3	283.8	255.7	197.5	151.2	131.4	108.3	84.7	69.7	59.9	52.3	45.7	41.9	37.3	33.0	17.5

## Temperature Correction Factors

Correction factors for capacity at different temperatures are shown in the table below (the reference temperature is 20°C).

Duration of Discharge	Temperature								
	0°C	5°C	10°C	15°C	20°C	25°C	30°C	35°C	40°C
5 minutes to 59 minutes	0.80	0.86	0.91	0.96	1	1.04	1.06	1.09	1.10
1 hour to 24 hours	0.86	0.90	0.94	0.97	1	1.03	1.05	1.06	1.07



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