

Data Catalogue

OPzS Standby Power

Eternity Technologies vented lead-acid batteries for the standby power market. Optimised design results in a low maintenance, reliable energy storage solution for critical and unstable conditions.

N Part of our Network Power range

Features

- High energy density

- Robust tubular positive electrode design, compliant with DIN 40736

- Minimal maintenance due to low antimony alloy and large electrolyte volume

- Operating temperature 15°C to 35°C

- Low self discharge rate of approximately 3% per month at 20°C

- EUROBAT design life: Long Life > 12 years

- Fully recyclable with low CO₂ footprint

- 20 year design life at 20°C



Applications

- Telecommunications/ Mobile Phone Stations

- Traffic Systems

- UPS Systems

- Emergency Lighting

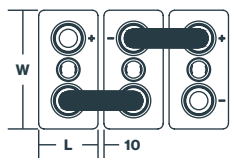
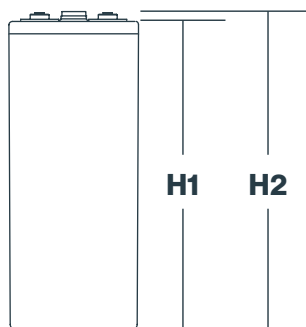
- Electrical Switching

Cell specification

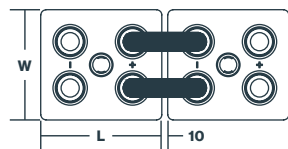
DIN Cell Type	Plate (Ah)	Length (mm)	Width (mm)	Height over lid (mm)	Height over pillar (mm)	Dry weight (kg)	Filled weight (kg)	Capacity (Ah) C10 -1.8V Cell at 20°C	Internal resistance (mohm)	Short circuit current (A)
4 OPzS-ET 200	50	105	208	367	392	12.9	17.7	225	0.89	2150
5 OPzS-ET 250	50	126	208	367	392	15.5	21.3	280	0.74	2650
6 OPzS-ET 300	50	147	208	367	392	18.3	25.2	335	0.63	3200
5 OPzS-ET 350	70	126	208	483.5	509	20.0	27.4	400	0.67	2850
6 OPzS-ET 420	70	147	208	483.5	509	23.4	32.2	480	0.57	3450
7 OPzS-ET 490	70	168	208	483.5	509	26.7	36.9	560	0.5	4050
6 OPzS-ET 600	100	147	208	656	681	32.1	41.1	690	0.47	4300
8 OPzS-ET 800	100	212	193	657	682	45.0	60.4	920	0.33	5700
10 OPzS-ET 1000	100	212	235	659	684	54.5	73.6	1150	0.27	7100
12 OPzS-ET 1200	100	212	277	658	683	63.8	86.7	1380	0.23	8550
12 OPzS-ET 1500	125	212	277	809	834	77.1	105.6	1650	0.23	8450
16 OPzS-ET 2000	125	215	400	784	809	103.8	146.2	2200	0.17	12150
20 OPzS-ET 2500	125	214	489	782	807	127.5	178.8	2750	0.13	15200
22 OPzS-ET 2750	125	214	578	784	809	138.4	200.8	3025	0.11	16750
24 OPzS-ET 3000	125	214	578	784	809	147.1	209.1	3300	0.11	18300

H1: Height over lid
H2: Height over pillar
M10 threaded terminal
Torque: 23Nm

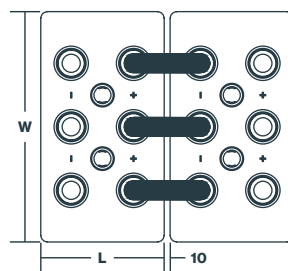
Not to scale



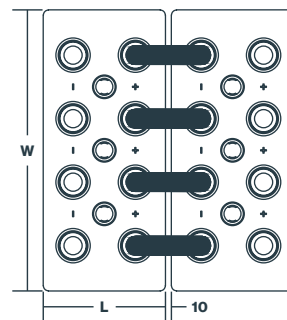
**4 OPzS-ET 200 to
6 OPzS-ET 600**



**8 OPzS-ET 800 to
12 OPzS-ET 1500**



16 OPzS-ET 2000



**20 OPzS-ET 2500 to
24 OPzS-ET 3000**

Constant current discharge data

1.90 VpC	Discharge in A at 20°C													
	3m	10m	15m	20m	30m	1h	1.5h	2h	3h	4h	5h	8h	10h	20h
4 OPzS-ET 200	114.6	114.6	109.3	102.7	96.7	79.1	66.7	57.8	45.7	38.0	32.7	23.7	19.2	10.6
5 OPzS-ET 250	138.4	138.4	132.1	124.7	118.3	96.9	82.1	71.6	56.3	46.8	40.5	29.3	23.9	13.2
6 OPzS-ET 300	160.1	160.1	153.7	145.2	137.8	114.5	97.2	85.2	66.7	55.4	48.1	34.8	28.6	15.8
5 OPzS-ET 350	160.0	160.0	154.7	151.6	140.0	121.1	106.3	92.9	76.8	64.3	56.0	40.8	34.0	19.2
6 OPzS-ET 420	184.6	184.6	178.3	175.1	163.5	141.4	124.5	110.8	92.2	77.1	67.2	48.9	40.8	23.0
7 OPzS-ET 490	211.3	211.3	203.9	200.8	187.0	161.7	143.7	127.8	107.8	90.1	78.4	57.2	47.7	26.8
6 OPzS-ET 600	231.4	231.4	226.3	218.2	204.0	177.6	158.3	143.1	118.7	102.5	92.4	69.0	58.7	33.1
8 OPzS-ET 800	325.5	325.5	314.4	308.4	285.1	250.7	219.4	196.1	160.7	139.5	125.4	92.0	78.3	44.2
10 OPzS-ET 1000	396.4	396.4	385.4	374.3	348.0	304.6	268.3	242.1	199.7	173.5	155.4	115.0	97.8	55.2
12 OPzS-ET 1200	462.4	462.4	452.3	436.2	406.9	354.6	316.3	287.1	237.7	206.5	185.3	138.0	116.8	66.3
12 OPzS-ET 1500	396.0	396.0	390.2	382.4	370.8	332.9	310.6	288.3	249.4	221.3	200.9	151.4	132.0	70.0
16 OPzS-ET 2000	575.9	575.9	563.2	549.5	528.0	463.5	426.3	392.1	332.4	295.3	267.9	202.4	176.0	93.3
20 OPzS-ET 2500	718.9	718.9	703.2	687.5	660.0	585.4	532.3	489.1	415.4	368.3	335.9	253.4	220.0	116.9
22 OPzS-ET 2750	791.5	791.5	773.4	756.3	726.0	637.3	585.8	538.5	456.8	405.4	369.1	278.3	242.0	128.1
24 OPzS-ET 3000	831.4	831.4	815.6	795.9	765.4	678.7	626.5	577.3	498.4	442.3	402.9	303.4	264.0	139.9

1.87 VpC	Discharge in A at 20°C													
	3m	10m	15m	20m	30m	1h	1.5h	2h	3h	4h	5h	8h	10h	20h
4 OPzS-ET 200	141.9	140.9	131.4	124.1	112.5	88.6	74.0	63.5	49.9	41.0	35.0	24.9	20.7	11.1
5 OPzS-ET 250	172.2	170.1	159.5	150.0	137.4	108.8	91.2	78.7	61.5	50.6	43.4	30.9	25.7	13.9
6 OPzS-ET 300	200.4	197.2	185.5	176.0	161.1	128.3	108.1	93.7	72.8	59.9	51.6	36.8	30.7	16.6
5 OPzS-ET 350	200.0	196.8	189.5	183.2	168.4	142.1	121.1	105.1	84.0	70.0	60.8	43.9	36.6	20.3
6 OPzS-ET 420	227.9	225.8	218.4	212.0	196.2	165.6	142.4	124.5	100.9	84.1	73.0	52.7	44.0	24.4
7 OPzS-ET 490	261.0	258.9	249.4	242.0	225.1	189.1	164.8	143.7	117.3	97.7	85.2	61.5	51.2	28.4
6 OPzS-ET 600	283.1	281.1	270.9	260.8	242.5	210.0	183.7	165.4	132.9	112.6	99.9	74.0	63.2	35.0
8 OPzS-ET 800	407.4	400.4	382.2	369.0	340.7	293.2	254.8	224.4	180.0	153.7	135.5	99.2	84.3	46.6
10 OPzS-ET 1000	488.2	484.2	465.0	447.9	415.6	358.1	311.7	278.4	222.9	189.6	168.5	124.1	104.9	58.3
12 OPzS-ET 1200	566.1	562.1	541.9	521.8	485.5	419.0	367.7	330.4	265.9	226.6	199.4	148.1	125.9	70.0
12 OPzS-ET 1500	506.6	505.7	496.0	483.4	464.9	406.7	373.7	341.6	288.3	249.4	223.2	167.9	143.6	77.5
16 OPzS-ET 2000	737.2	735.3	714.8	696.2	661.0	565.2	513.3	462.5	383.3	331.5	298.2	223.9	191.6	102.7
20 OPzS-ET 2500	920.3	919.3	893.8	869.2	765.1	707.1	642.3	578.5	479.3	415.4	373.2	278.9	239.6	129.6
22 OPzS-ET 2750	1013.4	1013.4	984.1	956.9	910.5	777.4	705.8	636.3	527.4	456.8	410.4	307.5	264.2	142.2
24 OPzS-ET 3000	1063.9	1059.0	1034.3	1004.8	957.5	828.4	754.6	682.7	575.3	498.4	448.2	334.9	287.6	154.7

1.85 VpC	Discharge in A at 20°C													
	3m	10m	15m	20m	30m	1h	1.5h	2h	3h	4h	5h	8h	10h	20h
4 OPzS-ET 200	160.9	157.7	146.1	137.7	124.1	94.9	78.9	67.4	52.8	43.1	36.7	25.9	21.7	11.6
5 OPzS-ET 250	195.5	191.2	177.5	168.0	151.1	116.2	97.2	83.5	65.0	53.1	45.3	32.0	26.9	14.5
6 OPzS-ET 300	227.9	222.6	206.7	196.1	177.0	137.8	115.6	99.3	77.0	63.0	54.0	38.1	32.2	17.3
5 OPzS-ET 350	226.3	222.1	212.6	204.2	187.4	155.8	130.5	112.6	88.8	73.9	64.0	46.0	38.4	21.1
6 OPzS-ET 420	257.4	253.2	244.7	236.3	218.4	181.5	154.0	134.0	106.5	88.6	76.8	55.2	46.1	25.2
7 OPzS-ET 490	294.8	289.5	280.0	270.5	250.4	207.1	177.5	155.3	124.7	103.7	89.6	64.5	53.8	29.4
6 OPzS-ET 600	317.6	313.5	300.4	290.2	268.9	231.4	200.9	179.6	142.1	119.7	104.5	77.3	66.3	36.2
8 OPzS-ET 800	462.0	450.9	426.6	409.5	377.1	321.5	278.0	243.6	193.1	162.8	142.5	104.1	88.4	48.3
10 OPzS-ET 1000	550.8	543.7	517.5	497.3	460.0	393.4	341.0	301.6	239.1	200.7	176.5	129.1	110.0	60.4
12 OPzS-ET 1200	635.6	627.5	601.4	579.2	537.9	462.4	401.9	358.6	284.1	238.7	209.5	154.1	133.0	72.4
12 OPzS-ET 1500	581.4	578.5	565.9	551.3	528.0	455.2	415.4	376.6	313.5	268.9	238.8	178.6	151.4	82.5
16 OPzS-ET 2000	845.8	841.9	816.4	793.0	750.9	633.6	572.0	510.4	417.5	357.9	318.8	237.6	202.4	109.5
20 OPzS-ET 2500	1055.8	1050.9	1021.4	992.0	938.9	791.6	715.0	637.4	522.5	447.9	398.8	296.6	253.4	137.5
22 OPzS-ET 2750	1164.6	1159.6	1124.3	1089.0	1033.5	871.2	785.5	700.8	574.8	493.1	438.6	326.7	278.3	151.3
24 OPzS-ET 3000	1221.5	1216.6	1182.1	1147.6	1083.6	927.9	839.3	752.6	626.5	537.9	478.7	356.6	303.4	164.5

Constant current discharge data

1.83 VpC	Discharge in A at 20°C													
	3m	10m	15m	20m	30m	1h	1.5h	2h	3h	4h	5h	8h	10h	20h
4 OPzS-ET 200	179.8	174.5	160.9	150.4	132.5	99.6	82.0	69.8	54.7	44.6	37.9	26.3	22.0	11.9
5 OPzS-ET 250	218.7	212.4	195.5	182.8	162.7	122.6	101.1	86.5	67.3	54.9	46.8	32.5	27.4	14.8
6 OPzS-ET 300	255.5	244.9	227.9	213.1	190.8	144.2	119.8	103.2	79.7	65.1	55.7	38.7	32.8	17.7
5 OPzS-ET 350	250.5	244.2	232.6	224.2	204.2	166.3	137.9	118.9	92.5	76.4	65.8	46.8	39.1	21.4
6 OPzS-ET 420	286.9	279.6	269.0	258.5	237.4	193.1	162.5	140.3	110.8	91.6	78.9	56.1	46.8	25.6
7 OPzS-ET 490	327.5	320.2	307.5	295.8	271.5	220.8	188.1	162.7	130.0	107.8	92.0	65.5	54.6	30.0
6 OPzS-ET 600	352.1	346.0	329.8	316.6	293.3	248.6	214.1	189.8	149.2	124.8	108.6	78.9	67.4	36.9
8 OPzS-ET 800	510.5	498.4	469.1	447.9	411.5	345.8	295.2	257.8	201.2	167.8	146.6	106.2	89.8	49.2
10 OPzS-ET 1000	610.3	600.2	567.9	543.7	501.4	423.7	363.2	319.8	250.2	208.8	181.6	132.1	112.0	61.5
12 OPzS-ET 1200	703.1	691.0	659.8	633.6	587.3	497.6	429.1	378.7	297.2	248.8	216.6	158.1	135.0	73.8
12 OPzS-ET 1500	653.2	648.4	632.8	614.4	584.3	497.9	451.3	405.7	332.9	283.4	250.4	185.4	157.2	85.7
16 OPzS-ET 2000	951.4	944.5	913.2	883.9	831.1	692.3	619.9	549.5	443.9	378.4	334.4	246.4	209.2	113.4
20 OPzS-ET 2500	1183.5	1178.6	1144.2	1104.9	1041.1	865.3	775.9	687.5	555.9	473.4	418.4	307.4	262.2	142.4
22 OPzS-ET 2750	1305.8	1295.7	1255.4	1215.0	1144.5	951.9	853.1	756.3	611.1	520.3	460.8	338.8	288.4	157.3
24 OPzS-ET 3000	1369.3	1359.4	1324.9	1280.6	1201.8	1014.6	910.2	812.7	664.9	566.4	502.4	369.4	314.2	171.4

1.80 VpC	Discharge in A at 20°C													
	3m	10m	15m	20m	30m	1h	1.5h	2h	3h	4h	5h	8h	10h	20h
4 OPzS-ET 200	209.2	199.8	182.9	169.3	147.2	106.2	86.7	73.5	57.4	46.7	39.5	26.9	22.5	12.4
5 OPzS-ET 250	254.6	243.0	222.9	206.0	179.6	131.0	106.7	91.2	70.7	57.6	48.9	33.4	28.0	15.4
6 OPzS-ET 300	297.9	284.1	259.7	240.6	211.0	154.8	127.2	109.2	83.8	68.2	58.2	39.6	33.5	18.4
5 OPzS-ET 350	287.4	277.9	264.2	252.6	227.4	181.1	148.4	126.3	98.0	80.2	68.4	48.0	40.0	22.0
6 OPzS-ET 420	331.3	319.6	304.9	292.2	265.8	211.0	175.1	149.8	117.1	95.9	82.1	57.6	48.0	26.4
7 OPzS-ET 490	378.3	365.6	348.7	333.9	303.2	242.0	202.9	173.3	137.4	112.0	95.7	67.2	56.0	30.9
6 OPzS-ET 600	403.9	393.7	373.4	357.2	329.8	275.0	235.4	205.0	158.3	130.9	113.6	81.4	69.0	38.0
8 OPzS-ET 800	578.3	570.2	533.8	506.5	462.0	382.2	322.5	280.0	213.3	176.9	153.7	109.2	92.0	50.7
10 OPzS-ET 1000	701.1	683.9	644.6	614.3	563.9	468.1	397.5	346.0	265.3	219.9	190.7	136.2	115.0	63.3
12 OPzS-ET 1200	805.8	786.7	746.4	715.2	659.8	551.0	470.4	410.0	317.3	262.9	226.6	163.2	138.0	76.0
12 OPzS-ET 1500	761.9	754.1	733.8	709.5	669.7	561.0	504.7	448.4	363.0	306.7	268.9	195.1	165.0	90.5
16 OPzS-ET 2000	1109.8	1100.0	1056.0	1016.9	952.4	780.3	693.2	608.2	484.0	408.7	358.8	259.1	220.0	120.3
20 OPzS-ET 2500	1365.2	1350.4	1321.0	1276.8	1188.4	975.3	868.2	761.2	605.0	510.7	447.9	324.1	275.0	150.3
22 OPzS-ET 2750	1522.6	1507.5	1457.0	1401.6	1310.8	1073.9	953.9	836.9	665.5	561.6	493.1	357.0	302.5	165.4
24 OPzS-ET 3000	1595.8	1581.0	1531.8	1477.6	1379.1	1142.7	1019.6	897.4	726.0	612.7	537.9	389.1	330.0	181.3

1.75 VpC	Discharge in A at 20°C													
	3m	10m	15m	20m	30m	1h	1.5h	2h	3h	4h	5h	8h	10h	20h
4 OPzS-ET 200	255.5	237.6	215.5	195.6	166.1	114.6	91.7	77.3	60.0	48.7	41.1	28.1	23.2	12.7
5 OPzS-ET 250	310.6	289.5	263.1	237.7	203.9	141.6	113.1	95.9	74.0	60.0	50.8	34.8	28.8	15.8
6 OPzS-ET 300	363.6	338.2	307.4	278.8	239.6	167.5	134.6	114.5	87.6	71.0	60.5	41.3	34.6	18.9
5 OPzS-ET 350	350.5	332.6	311.6	295.8	260.0	200.0	161.1	135.8	102.4	83.9	71.6	49.6	41.2	22.6
6 OPzS-ET 420	404.0	384.0	359.7	340.7	303.8	233.1	189.9	160.4	122.4	100.2	85.9	59.5	49.5	27.1
7 OPzS-ET 490	462.8	439.5	412.1	389.9	346.6	266.3	218.7	186.0	143.7	117.3	100.3	69.4	57.7	31.6
6 OPzS-ET 600	487.1	468.8	443.4	422.1	386.6	310.5	261.8	223.2	169.5	138.0	117.7	84.2	71.0	39.0
8 OPzS-ET 800	710.7	684.4	636.9	598.5	539.9	434.7	356.9	306.3	228.5	186.0	158.7	113.2	93.8	52.0
10 OPzS-ET 1000	850.4	819.1	767.7	725.3	659.7	530.6	441.8	377.3	283.5	231.0	197.7	141.2	118.0	65.0
12 OPzS-ET 1200	975.1	938.8	887.4	844.1	772.6	621.5	524.8	446.2	338.5	275.0	234.7	168.2	142.0	78.0
12 OPzS-ET 1500	937.6	924.0	895.9	858.0	799.8	656.1	580.4	508.6	400.9	335.8	292.1	205.8	172.8	94.5
16 OPzS-ET 2000	1364.0	1344.4	1290.7	1232.0	1139.1	912.3	798.8	689.3	534.8	447.8	389.2	274.8	229.8	126.1
20 OPzS-ET 2500	1704.0	1679.5	1615.6	1537.1	1424.1	1144.2	996.9	861.3	667.9	558.8	487.1	343.8	287.8	158.1
22 OPzS-ET 2750	1870.5	1845.3	1779.7	1694.0	1562.9	1255.4	1099.1	947.8	735.1	615.1	535.4	378.1	315.6	173.4
24 OPzS-ET 3000	1970.1	1940.6	1871.6	1783.0	1650.0	1339.7	1172.2	1014.6	801.9	670.8	584.1	412.7	344.8	189.1

Constant current discharge data

1.70 VpC	Discharge in A at 20°C													
	3m	10m	15m	20m	30m	1h	1.5h	2h	3h	4h	5h	8h	10h	20h
4 OPzS-ET 200	298.6	271.3	240.8	216.6	180.8	120.9	94.9	79.1	61.6	49.7	41.7	28.3	23.4	12.8
5 OPzS-ET 250	363.5	330.7	293.7	264.2	221.9	149.0	117.3	98.3	75.9	61.2	51.7	35.0	29.2	16.0
6 OPzS-ET 300	427.2	388.0	344.5	309.6	261.9	176.0	139.9	117.7	89.9	72.5	61.5	41.7	34.9	19.1
5 OPzS-ET 350	414.7	387.4	356.8	332.6	288.4	212.6	169.5	141.1	105.3	85.7	73.2	49.6	42.0	23.2
6 OPzS-ET 420	477.9	446.2	411.4	384.0	336.5	247.9	199.4	166.7	126.6	103.1	87.9	61.0	50.4	27.9
7 OPzS-ET 490	546.3	510.3	471.2	439.5	384.6	284.2	230.3	193.4	147.9	120.5	102.5	71.1	58.9	32.4
6 OPzS-ET 600	570.3	542.9	514.5	486.0	439.4	342.0	283.1	236.4	175.5	141.0	119.7	85.5	71.7	39.7
8 OPzS-ET 800	833.1	793.6	736.0	685.5	612.7	476.2	383.2	325.5	239.6	192.1	161.8	115.3	95.6	52.9
10 OPzS-ET 1000	996.7	949.3	888.7	833.2	749.5	582.1	475.1	400.5	296.6	239.1	200.7	143.2	120.0	66.2
12 OPzS-ET 1200	1143.3	1087.9	1027.4	971.0	879.4	682.9	566.1	472.4	351.5	283.1	238.7	171.2	143.0	79.4
12 OPzS-ET 1500	1111.3	1091.9	1053.1	999.7	922.1	745.4	645.4	556.1	429.0	356.2	308.6	212.6	176.6	97.1
16 OPzS-ET 2000	1618.2	1588.9	1520.4	1437.3	1315.1	1036.4	886.8	753.9	572.0	475.2	411.6	283.6	235.6	129.1
20 OPzS-ET 2500	2023.2	1983.9	1895.5	1797.3	1640.2	1296.4	1109.8	942.9	715.0	594.2	514.6	354.6	294.6	162.1
22 OPzS-ET 2750	2223.4	2183.0	2087.3	1976.3	1799.9	1426.8	1220.1	1033.5	786.5	653.4	565.7	390.2	323.7	177.5
24 OPzS-ET 3000	2339.6	2295.2	2196.7	2083.4	1901.2	1517.0	1305.2	1113.1	858.0	712.2	616.7	425.6	352.7	194.1

1.65 VpC	Discharge in A at 20°C													
	3m	10m	15m	20m	30m	1h	1.5h	2h	3h	4h	5h	8h	10h	20h
4 OPzS-ET 200	338.6	300.7	261.8	233.4	191.4	124.1	96.7	80.3	62.5	50.2	42.2	28.3	23.4	12.8
5 OPzS-ET 250	414.2	367.7	320.2	285.3	234.6	153.2	119.4	100.0	76.9	61.9	52.2	35.0	29.2	16.0
6 OPzS-ET 300	485.5	431.5	376.3	333.9	276.7	181.3	142.1	119.8	91.2	73.5	62.1	41.7	34.9	19.1
5 OPzS-ET 350	477.9	438.9	398.9	367.4	312.6	222.1	175.8	144.2	108.4	87.3	73.6	49.6	42.0	23.2
6 OPzS-ET 420	550.7	506.4	461.0	424.1	365.0	259.5	206.8	170.9	129.8	104.5	88.3	61.0	50.4	27.9
7 OPzS-ET 490	629.7	579.0	527.2	485.0	417.4	295.8	238.8	197.6	151.1	121.5	103.0	71.1	58.9	32.4
6 OPzS-ET 600	652.5	613.9	584.5	549.0	489.1	369.4	298.3	246.6	179.6	143.1	120.8	87.7	72.5	40.0
8 OPzS-ET 800	955.4	899.8	833.1	768.4	680.4	507.5	403.4	338.7	246.7	196.1	163.8	117.3	96.7	53.4
10 OPzS-ET 1000	1139.9	1074.3	1007.8	937.1	833.2	625.4	500.4	417.6	304.6	243.1	202.8	146.3	121.1	66.7
12 OPzS-ET 1200	1304.5	1228.9	1168.5	1098.0	978.1	738.4	596.3	493.6	360.6	288.1	241.8	175.3	145.1	80.1
12 OPzS-ET 1500	1290.9	1261.8	1203.5	1140.4	1038.5	827.9	699.8	594.0	448.4	370.8	320.3	216.4	178.6	98.0
16 OPzS-ET 2000	1877.3	1833.3	1735.6	1637.8	1476.4	1153.8	962.1	805.7	598.4	494.8	426.3	288.4	237.6	130.0
20 OPzS-ET 2500	2347.3	2293.3	2175.4	2052.7	1851.3	1438.8	1198.2	1006.7	748.4	618.8	533.3	360.4	296.6	163.0
22 OPzS-ET 2750	2576.3	2515.8	2389.8	2253.6	2031.8	1583.1	1320.9	1109.2	821.8	679.6	586.9	396.3	326.7	179.5
24 OPzS-ET 3000	2713.9	2649.9	2516.9	2379.0	2142.5	1684.5	1413.6	1187.0	897.4	741.8	640.3	432.4	356.6	196.0

1.60 VpC	Discharge in A at 20°C													
	3m	10m	15m	20m	30m	1h	1.5h	2h	3h	4h	5h	8h	10h	20h
4 OPzS-ET 200	373.2	324.9	280.7	247.1	199.8	127.2	97.6	81.3	63.0	50.0	42.0	28.3	23.4	12.8
5 OPzS-ET 250	458.6	398.3	343.4	302.2	245.1	156.4	120.5	101.1	77.6	61.6	52.0	35.0	29.2	16.0
6 OPzS-ET 300	538.5	468.6	403.9	355.1	288.4	186.6	144.2	120.9	91.8	72.9	61.8	41.7	34.9	19.1
5 OPzS-ET 350	542.1	490.5	440.0	396.8	335.8	228.4	180.0	146.3	110.5	87.8	72.8	49.6	42.0	23.2
6 OPzS-ET 420	624.5	565.5	507.4	458.9	390.3	266.9	211.0	174.1	131.9	104.8	87.3	61.0	50.4	27.9
7 OPzS-ET 490	714.3	646.6	580.1	524.1	446.9	304.3	244.1	200.8	154.3	122.6	102.0	71.1	58.9	32.4
6 OPzS-ET 600	733.6	682.9	654.5	610.9	535.8	393.7	309.5	255.7	181.6	144.1	120.8	87.7	72.5	40.0
8 OPzS-ET 800	1076.7	1002.9	927.1	846.2	745.1	529.8	420.6	345.8	250.7	197.1	163.8	117.3	96.7	53.4
10 OPzS-ET 1000	1281.1	1195.4	1124.8	1039.0	912.9	658.7	520.5	429.7	307.7	244.1	202.8	146.3	121.1	66.7
12 OPzS-ET 1200	1465.6	1364.9	1309.5	1223.9	1072.8	786.7	618.5	511.7	362.6	288.1	241.8	175.3	145.1	80.1
12 OPzS-ET 1500	1470.4	1426.8	1354.0	1281.2	1155.0	905.6	744.4	623.1	462.0	379.5	327.1	217.4	178.6	98.0
16 OPzS-ET 2000	2136.4	2077.8	1950.7	1838.2	1642.7	1261.3	1021.8	844.8	616.0	506.5	435.1	290.4	237.6	130.0
20 OPzS-ET 2500	2676.3	2597.8	2440.6	2298.2	2052.7	1571.4	1281.7	1060.7	770.0	633.5	544.1	363.4	296.6	163.0
22 OPzS-ET 2750	2944.3	2858.6	2682.2	2530.9	2258.7	1729.3	1406.6	1164.6	847.0	695.8	599.0	399.3	326.7	179.5
24 OPzS-ET 3000	3088.2	2999.6	2827.2	2664.6	2379.0	1847.0	1502.2	1246.1	924.0	759.5	653.1	435.4	356.6	196.0

Constant power discharge data

1.90 VpC	Discharge in W at 20°C													
	3m	10m	15m	20m	30m	1h	1.5h	2h	3h	4h	5h	8h	10h	20h
4 OPzS-ET 200	217.6	217.6	208.2	196.6	185.0	152.5	128.3	111.4	88.8	74.0	64.0	46.6	38.0	21.1
5 OPzS-ET 250	263.1	263.1	252.5	237.7	226.1	186.0	158.5	138.4	109.9	91.3	79.4	57.7	47.2	26.3
6 OPzS-ET 300	305.3	305.3	293.7	277.8	265.0	219.4	187.6	165.4	129.3	108.1	94.5	68.7	56.5	31.5
5 OPzS-ET 350	305.3	305.3	295.8	290.5	268.4	233.7	204.2	180.0	149.5	125.3	109.5	80.5	67.3	38.3
6 OPzS-ET 420	352.4	352.4	340.7	334.4	312.3	272.2	240.5	213.1	179.3	149.8	131.9	96.6	80.7	46.0
7 OPzS-ET 490	402.6	402.6	389.9	382.5	357.1	311.7	277.9	247.2	209.2	175.4	154.3	113.1	94.1	53.7
6 OPzS-ET 600	440.4	440.4	432.3	416.0	389.6	340.9	305.4	278.0	230.3	199.9	181.6	136.0	115.7	66.1
8 OPzS-ET 800	620.7	620.7	600.5	588.4	545.9	483.3	422.6	379.1	313.4	272.0	245.7	182.0	154.7	88.1
10 OPzS-ET 1000	754.6	754.6	735.4	715.2	665.8	587.1	518.5	468.1	388.4	337.9	304.6	227.0	193.7	110.0
12 OPzS-ET 1200	880.4	880.4	863.3	833.0	779.6	682.9	609.4	555.0	461.3	402.9	362.6	272.0	231.7	132.0
12 OPzS-ET 1500	752.2	752.2	741.5	727.0	706.6	635.7	596.9	553.2	481.4	428.0	391.1	297.0	260.1	138.8
16 OPzS-ET 2000	1095.1	1095.1	1070.7	1046.2	1007.1	884.9	817.4	752.9	641.4	571.0	521.2	397.0	347.1	184.8
20 OPzS-ET 2500	1365.2	1365.2	1335.7	1306.3	1257.1	1119.6	1021.4	938.9	801.4	713.0	653.1	497.0	433.1	231.8
22 OPzS-ET 2750	1502.4	1502.4	1467.1	1436.9	1381.4	1215.0	1124.3	1033.5	881.3	784.5	717.9	545.5	476.9	254.1
24 OPzS-ET 3000	1581.0	1581.0	1551.5	1512.1	1457.9	1295.4	1201.8	1108.2	962.4	856.0	783.1	595.0	520.1	277.8

1.87 VpC	Discharge in W at 20°C													
	3m	10m	15m	20m	30m	1h	1.5h	2h	3h	4h	5h	8h	10h	20h
4 OPzS-ET 200	265.0	262.9	247.1	233.4	213.4	168.2	140.9	122.0	96.2	79.5	68.3	48.9	40.6	22.2
5 OPzS-ET 250	321.2	319.1	300.1	283.2	259.9	206.0	174.3	151.1	118.3	98.2	84.5	60.5	50.5	27.7
6 OPzS-ET 300	374.2	371.0	348.8	329.7	305.3	243.8	205.7	179.2	139.9	115.6	100.6	72.1	60.4	33.1
5 OPzS-ET 350	373.7	369.5	355.8	345.3	318.9	269.5	230.5	201.1	162.1	134.7	118.9	86.1	72.0	40.3
6 OPzS-ET 420	426.2	424.1	410.4	398.8	371.3	314.4	271.1	238.4	194.1	162.5	142.4	103.4	86.4	48.3
7 OPzS-ET 490	488.2	483.9	469.1	455.4	423.7	359.2	313.8	275.8	226.1	189.1	165.9	120.5	100.8	56.4
6 OPzS-ET 600	528.7	526.6	509.4	491.1	458.6	397.8	350.1	315.6	255.7	218.2	194.8	145.1	123.8	69.5
8 OPzS-ET 800	761.3	751.2	717.8	694.5	642.0	557.1	485.3	429.7	346.8	297.2	263.9	194.1	165.8	92.6
10 OPzS-ET 1000	912.9	906.9	872.6	843.3	783.8	679.9	595.2	531.6	429.7	367.2	326.8	242.1	206.8	116.0
12 OPzS-ET 1200	1057.7	1052.6	1017.4	983.1	916.6	795.8	700.1	631.6	511.7	438.2	388.8	290.1	248.8	139.0
12 OPzS-ET 1500	947.3	945.4	927.9	903.6	813.4	764.8	704.6	645.4	549.4	477.5	430.0	326.1	281.5	153.4
16 OPzS-ET 2000	1378.7	1373.8	1334.7	1300.4	1158.7	1060.9	968.0	874.1	728.4	634.6	574.0	435.1	375.5	203.4
20 OPzS-ET 2500	1723.7	1718.8	1669.6	1635.3	1340.6	1330.8	1212.9	1095.1	913.4	795.5	717.9	542.1	469.5	256.3
22 OPzS-ET 2750	1900.7	1895.7	1840.2	1789.8	1593.2	1462.1	1331.0	1205.0	1004.3	874.2	789.5	597.9	518.3	281.3
24 OPzS-ET 3000	1989.9	1980.0	1935.7	1876.6	1674.6	1556.4	1423.4	1290.4	1093.4	954.5	862.9	651.1	563.5	306.4

1.85 VpC	Discharge in W at 20°C													
	3m	10m	15m	20m	30m	1h	1.5h	2h	3h	4h	5h	8h	10h	20h
4 OPzS-ET 200	297.5	293.3	273.4	257.6	231.3	178.7	149.3	128.3	101.0	83.2	71.1	50.5	42.4	22.9
5 OPzS-ET 250	361.4	356.1	330.7	312.8	283.2	219.8	183.8	158.5	124.7	102.6	88.0	62.4	52.7	28.5
6 OPzS-ET 300	420.9	414.5	385.9	365.7	331.8	258.7	218.4	188.7	147.4	120.9	104.7	74.4	63.1	34.1
5 OPzS-ET 350	417.9	412.6	395.8	382.1	351.6	293.7	248.4	214.7	170.5	142.1	124.2	89.9	75.3	41.6
6 OPzS-ET 420	475.8	471.6	456.8	441.0	410.4	341.8	292.2	255.3	203.6	170.9	148.7	107.6	90.3	49.9
7 OPzS-ET 490	545.2	538.9	522.0	504.0	469.1	390.9	337.1	294.8	237.7	199.7	174.3	125.7	105.3	58.2
6 OPzS-ET 600	587.5	583.5	561.1	540.8	504.3	436.3	380.5	340.9	271.9	230.3	204.0	151.2	129.9	71.7
8 OPzS-ET 800	854.3	838.1	795.6	764.3	706.7	605.6	526.7	464.0	370.0	313.4	277.0	203.2	172.9	95.6
10 OPzS-ET 1000	1018.9	1008.8	964.4	929.1	861.5	741.4	645.6	574.0	458.0	386.4	342.0	253.2	215.9	120.0
12 OPzS-ET 1200	1178.5	1168.5	1123.1	1082.8	1007.3	872.3	760.5	681.9	543.9	459.3	406.9	302.2	259.9	143.0
12 OPzS-ET 1500	1077.4	1072.5	1048.2	1024.0	980.3	849.3	777.4	706.6	594.0	510.5	457.1	345.5	295.1	162.1
16 OPzS-ET 2000	1564.4	1559.6	1515.6	1471.6	1398.2	1183.1	1070.7	958.2	791.0	679.6	610.1	459.6	395.0	216.1
20 OPzS-ET 2500	1954.5	1944.6	1895.5	1841.5	1748.2	1478.1	1340.6	1198.2	992.0	850.5	763.1	573.6	494.0	271.1
22 OPzS-ET 2750	2157.8	2147.8	2087.3	2021.7	1920.9	1623.4	1472.2	1315.9	1089.0	936.7	839.9	632.2	542.5	297.5
24 OPzS-ET 3000	2260.7	2250.9	2191.8	2132.7	2014.5	1728.8	1571.2	1413.6	1187.0	1019.6	917.1	689.6	592.0	324.1

Constant power discharge data

1.83 VpC	Discharge in W at 20°C													
	3m	10m	15m	20m	30m	1h	1.5h	2h	3h	4h	5h	8h	10h	20h
4 OPzS-ET 200	329.1	321.7	297.5	277.6	247.1	186.1	154.6	132.5	104.2	85.6	73.1	51.2	43.0	23.6
5 OPzS-ET 250	401.5	389.9	361.4	338.1	301.1	229.3	190.2	163.8	127.8	105.4	90.4	63.4	53.5	29.3
6 OPzS-ET 300	468.6	454.8	420.9	394.4	354.1	270.3	225.8	195.1	151.6	125.1	108.1	75.5	63.9	35.0
5 OPzS-ET 350	457.9	449.5	429.5	413.7	377.9	310.5	260.0	224.2	175.8	146.3	127.4	91.2	76.2	42.3
6 OPzS-ET 420	524.3	514.8	495.8	477.9	441.0	361.8	305.9	265.8	212.0	176.2	153.0	109.7	91.5	50.7
7 OPzS-ET 490	599.1	588.5	566.3	546.3	504.0	414.2	354.0	307.5	247.2	207.1	177.5	127.8	106.7	59.2
6 OPzS-ET 600	644.3	636.2	608.8	585.5	543.9	465.8	403.9	359.2	284.1	238.5	209.0	154.2	131.9	73.0
8 OPzS-ET 800	928.1	918.0	866.4	828.0	762.3	646.0	557.1	488.3	384.2	321.5	284.1	207.3	174.9	97.3
10 OPzS-ET 1000	1114.7	1104.6	1049.1	1004.7	930.1	791.9	685.0	604.3	476.1	399.5	352.1	257.2	218.9	122.1
12 OPzS-ET 1200	1284.3	1274.2	1218.8	1173.5	1087.9	931.8	807.9	717.2	567.1	476.5	418.0	307.2	262.9	146.1
12 OPzS-ET 1500	1189.0	1184.1	1159.9	1130.7	1077.4	921.1	837.6	755.1	628.0	535.8	476.6	357.2	304.8	167.9
16 OPzS-ET 2000	1740.4	1730.7	1676.9	1628.0	1535.1	1280.9	1148.9	1021.8	837.0	714.8	636.5	474.2	405.8	222.0
20 OPzS-ET 2500	2165.6	2155.8	2101.8	2033.0	1920.1	1600.9	1438.8	1281.7	1047.0	894.7	797.5	592.2	508.8	278.9
22 OPzS-ET 2750	2384.7	2369.6	2304.0	2233.5	2112.5	1759.5	1583.1	1406.6	1149.5	983.1	878.3	652.4	559.6	308.6
24 OPzS-ET 3000	2502.1	2487.3	2433.1	2354.3	2216.4	1876.6	1689.4	1512.1	1251.0	1068.8	957.5	711.2	609.8	335.9

1.80 VpC	Discharge in W at 20°C													
	3m	10m	15m	20m	30m	1h	1.5h	2h	3h	4h	5h	8h	10h	20h
4 OPzS-ET 200	377.5	363.8	333.3	309.1	269.2	197.7	161.9	137.7	108.3	89.2	76.0	52.3	43.8	24.4
5 OPzS-ET 250	459.6	441.7	405.7	375.1	328.6	242.0	200.8	171.2	134.2	109.9	94.1	64.7	54.5	30.3
6 OPzS-ET 300	537.5	515.2	473.9	438.9	386.9	286.2	237.5	204.6	159.0	130.4	112.4	77.0	65.2	36.3
5 OPzS-ET 350	517.9	504.2	481.1	462.1	417.9	335.8	278.9	237.9	185.3	152.6	131.6	93.2	77.8	43.4
6 OPzS-ET 420	597.1	580.2	554.9	532.7	486.3	391.4	328.1	282.7	222.6	183.6	158.2	111.8	93.4	52.0
7 OPzS-ET 490	682.6	663.5	635.0	608.6	555.8	448.0	378.3	326.5	259.9	214.5	183.8	130.0	108.8	60.6
6 OPzS-ET 600	728.6	713.3	679.9	652.5	604.8	510.4	440.4	385.6	300.4	249.6	218.2	158.3	133.9	74.8
8 OPzS-ET 800	1051.4	1036.3	971.6	923.0	846.2	707.7	602.5	525.7	404.4	336.7	295.2	212.3	178.9	99.7
10 OPzS-ET 1000	1261.0	1240.8	1175.2	1119.7	1034.0	867.5	743.5	649.6	503.4	418.6	366.2	264.3	223.9	125.1
12 OPzS-ET 1200	1450.5	1425.3	1359.9	1304.5	1208.8	1022.4	880.4	770.6	601.4	500.6	435.2	316.3	267.9	149.1
12 OPzS-ET 1500	1368.5	1358.8	1329.7	1290.9	1222.9	1028.8	928.9	828.9	678.4	576.5	509.6	373.7	318.4	176.6
16 OPzS-ET 2000	1994.7	1984.9	1911.6	1852.9	1740.4	1427.6	1276.0	1124.4	905.4	768.5	679.6	495.7	424.4	234.7
20 OPzS-ET 2500	2450.4	2435.7	2391.5	2322.8	2170.5	1782.6	1596.0	1404.5	1129.5	960.5	848.6	620.7	530.4	292.7
22 OPzS-ET 2750	2737.6	2722.5	2636.8	2551.1	2389.8	1966.3	1754.5	1547.8	1245.3	1053.7	934.7	683.7	583.8	322.7
24 OPzS-ET 3000	2871.5	2851.8	2773.0	2689.3	2516.9	2093.3	1876.6	1659.9	1359.4	1152.5	1019.6	744.7	637.3	353.6

1.75 VpC	Discharge in W at 20°C													
	3m	10m	15m	20m	30m	1h	1.5h	2h	3h	4h	5h	8h	10h	20h
4 OPzS-ET 200	448.9	421.6	383.8	349.1	299.6	210.3	169.3	144.0	113.6	92.2	78.5	54.3	45.0	24.9
5 OPzS-ET 250	546.3	512.5	467.0	424.8	366.6	258.9	209.2	179.6	139.5	114.1	97.3	67.1	56.0	31.0
6 OPzS-ET 300	639.3	599.0	547.0	497.2	431.5	306.4	249.1	214.1	165.4	134.6	115.6	79.8	66.9	37.1
5 OPzS-ET 350	616.8	589.5	554.7	527.4	468.4	365.3	298.9	252.6	192.6	158.9	136.8	95.9	79.9	44.3
6 OPzS-ET 420	711.0	679.4	640.4	608.7	545.4	426.2	351.3	300.7	232.1	189.9	164.6	115.0	95.9	53.2
7 OPzS-ET 490	813.6	776.6	732.2	695.2	623.4	487.1	405.7	346.6	270.5	221.9	191.2	134.2	112.0	62.1
6 OPzS-ET 600	854.4	830.0	788.4	753.9	695.1	568.2	486.0	416.0	318.6	260.8	224.3	162.4	138.0	76.5
8 OPzS-ET 800	1243.5	1213.2	1132.3	1066.6	970.5	794.6	661.2	572.2	429.7	351.8	304.3	218.4	182.0	102.1
10 OPzS-ET 1000	1493.0	1447.6	1366.9	1296.3	1185.3	970.4	818.1	704.1	534.6	436.8	377.3	272.4	229.0	127.1
12 OPzS-ET 1200	1707.4	1662.0	1576.4	1505.9	1390.1	1138.2	971.0	832.0	637.6	519.8	449.3	325.4	276.0	153.1
12 OPzS-ET 1500	1640.3	1625.7	1582.1	1528.7	1426.8	1174.4	1043.4	923.0	738.6	623.1	548.4	391.1	331.0	183.4
16 OPzS-ET 2000	2385.8	2366.2	2278.2	2195.1	2033.8	1632.9	1437.3	1251.6	987.6	831.1	730.4	522.1	440.0	244.4
20 OPzS-ET 2500	2980.8	2956.3	2853.1	2736.3	2543.8	2047.8	1792.4	1561.6	1232.6	1036.2	914.4	653.1	551.0	306.4
22 OPzS-ET 2750	3272.0	3246.8	3141.0	3014.9	2788.0	2248.6	1976.3	1719.2	1356.2	1139.4	1005.3	717.9	604.0	336.8
24 OPzS-ET 3000	3447.8	3413.3	3304.9	3171.9	2945.4	2398.7	2108.1	1842.1	1477.6	1241.2	1098.4	784.1	660.0	366.4

Constant power discharge data

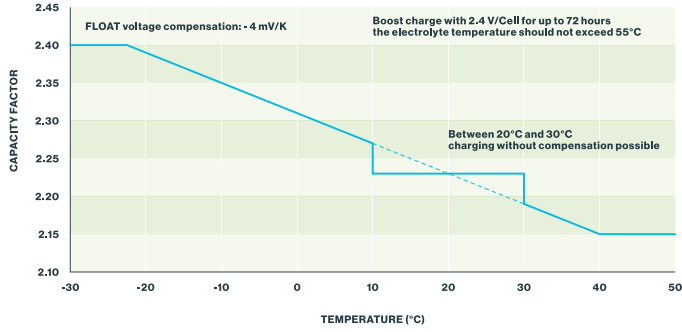
1.70 VpC	Discharge in W at 20°C													
	3m	10m	15m	20m	30m	1h	1.5h	2h	3h	4h	5h	8h	10h	20h
4 OPzS-ET 200	509.9	467.9	418.5	377.5	319.6	217.6	174.5	146.1	115.7	93.7	79.5	54.5	45.3	25.0
5 OPzS-ET 250	621.3	570.6	510.3	460.7	390.9	268.4	215.5	181.7	142.6	115.2	98.4	67.4	56.3	31.2
6 OPzS-ET 300	730.4	668.9	597.9	539.6	461.2	318.0	256.6	217.3	168.6	136.8	116.6	80.3	67.4	37.3
5 OPzS-ET 350	708.4	667.4	618.9	581.1	508.4	384.2	310.5	261.1	197.9	161.1	138.9	96.7	81.3	45.5
6 OPzS-ET 420	816.5	770.1	714.2	669.9	592.9	448.4	365.0	310.2	237.4	194.1	167.7	117.1	97.5	54.5
7 OPzS-ET 490	934.0	880.2	816.8	766.0	677.3	512.5	422.6	358.2	277.9	227.2	195.5	137.4	114.1	63.6
6 OPzS-ET 600	975.1	936.6	891.9	847.3	775.2	616.9	519.5	437.3	329.8	265.9	227.3	164.4	139.0	77.7
8 OPzS-ET 800	1420.4	1369.9	1278.9	1198.0	1081.8	860.4	703.6	604.6	448.9	361.9	308.4	221.4	185.0	103.1
10 OPzS-ET 1000	1699.8	1634.2	1543.4	1452.6	1321.5	1054.2	872.6	742.5	555.8	450.9	382.3	275.4	231.0	129.1
12 OPzS-ET 1200	1954.2	1873.6	1782.9	1697.3	1551.2	1233.9	1037.5	875.3	660.8	533.9	454.3	329.4	278.0	155.1
12 OPzS-ET 1500	1892.6	1873.2	1810.1	1732.5	1611.2	1310.3	1140.4	994.9	779.4	652.2	572.6	401.8	337.8	187.3
16 OPzS-ET 2000	2757.3	2728.0	2615.6	2493.3	2292.9	1818.7	1569.3	1344.4	1041.3	869.2	774.4	535.8	449.8	249.3
20 OPzS-ET 2500	3447.3	3403.1	3260.7	3118.3	2862.9	2273.7	1964.3	1684.4	1301.3	1085.3	955.6	669.8	562.8	313.3
22 OPzS-ET 2750	3791.3	3746.0	3589.7	3428.3	3141.0	2505.7	2157.8	1845.3	1426.8	1194.9	1048.7	737.1	618.1	343.8
24 OPzS-ET 3000	3984.6	3935.4	3777.8	3615.2	3319.7	2664.6	2310.0	1984.9	1561.3	1300.3	1142.7	803.8	673.8	375.3

1.65 VpC	Discharge in W at 20°C													
	3m	10m	15m	20m	30m	1h	1.5h	2h	3h	4h	5h	8h	10h	20h
4 OPzS-ET 200	563.6	505.7	444.7	398.5	331.2	221.8	175.6	148.2	116.7	94.3	80.0	54.5	45.3	25.0
5 OPzS-ET 250	688.9	617.1	543.1	486.0	405.7	273.7	217.7	183.8	143.7	116.2	99.1	67.4	56.3	31.2
6 OPzS-ET 300	807.8	725.1	637.1	570.3	479.2	324.4	258.7	220.5	170.7	137.8	117.7	80.3	67.4	37.3
5 OPzS-ET 350	794.7	737.9	676.8	626.3	541.1	396.8	318.9	266.3	202.1	164.2	140.0	96.7	81.3	45.5
6 OPzS-ET 420	916.7	851.3	780.7	722.6	630.9	462.1	375.6	315.4	242.6	196.2	167.7	117.1	97.5	54.5
7 OPzS-ET 490	1048.2	973.1	892.8	826.3	721.7	528.3	433.2	364.5	283.2	228.2	195.5	137.4	114.1	63.6
6 OPzS-ET 600	1080.7	1029.9	990.4	935.6	846.3	657.5	541.9	455.6	336.9	268.9	229.3	168.4	140.0	78.2
8 OPzS-ET 800	1582.2	1511.4	1410.3	1309.2	1177.8	904.8	734.0	623.8	461.0	369.0	310.4	224.4	187.0	104.1
10 OPzS-ET 1000	1891.4	1805.7	1709.9	1598.9	1442.5	1114.7	910.9	769.7	568.9	457.0	385.4	280.4	233.0	130.1
12 OPzS-ET 1200	2165.7	2065.0	1979.3	1873.6	1692.3	1314.5	1082.8	910.6	673.9	541.9	458.3	336.4	280.0	156.1
12 OPzS-ET 1500	2135.3	2106.2	2023.7	1936.3	1781.0	1431.6	1222.9	1048.2	807.5	674.6	592.1	406.7	339.7	189.3
16 OPzS-ET 2000	3104.4	3060.4	2913.8	2781.8	2532.4	1994.7	1676.9	1422.7	1080.4	900.5	787.1	542.7	451.7	251.3
20 OPzS-ET 2500	3884.4	3830.4	3653.6	3491.5	3177.2	2489.7	2092.0	1777.7	1350.4	1124.6	987.1	677.7	563.8	314.3
22 OPzS-ET 2750	4260.2	4199.7	4013.2	3831.7	3483.8	2737.6	2304.0	1956.2	1482.3	1235.2	1084.0	745.2	621.1	345.9
24 OPzS-ET 3000	4487.0	4423.0	4226.0	4043.7	3674.3	2915.8	2467.6	2093.3	1615.5	1349.6	1182.1	812.7	677.7	378.3

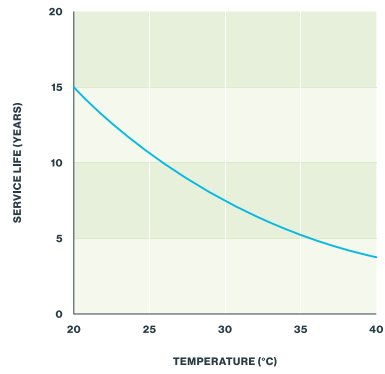
1.60 VpC	Discharge in W at 20°C													
	3m	10m	15m	20m	30m	1h	1.5h	2h	3h	4h	5h	8h	10h	20h
4 OPzS-ET 200	604.6	533.1	465.8	414.3	340.7	223.9	175.6	148.2	117.8	94.1	80.0	54.5	45.3	25.0
5 OPzS-ET 250	742.8	653.0	569.5	506.1	417.4	276.8	217.7	184.9	144.8	116.2	99.1	67.4	56.3	31.2
6 OPzS-ET 300	871.4	767.5	670.0	594.7	491.9	328.6	258.7	221.6	170.7	136.8	117.7	80.3	67.4	37.3
5 OPzS-ET 350	877.9	803.2	729.5	665.3	571.6	403.2	323.2	267.4	205.3	165.3	140.0	96.7	81.3	45.5
6 OPzS-ET 420	1011.7	927.3	840.8	768.0	665.7	469.5	380.8	318.6	245.8	197.3	167.7	117.1	97.5	54.5
7 OPzS-ET 490	1157.0	1061.9	961.5	878.0	760.8	537.8	439.5	367.7	287.4	230.3	195.5	137.4	114.1	63.6
6 OPzS-ET 600	1182.1	1121.3	1085.7	1024.9	913.2	694.1	557.1	468.8	337.9	269.9	229.3	168.4	140.0	78.2
8 OPzS-ET 800	1738.9	1642.9	1536.7	1415.4	1268.8	935.2	757.2	632.9	466.1	370.0	310.4	224.4	187.0	104.1
10 OPzS-ET 1000	2068.0	1962.1	1866.2	1740.1	1553.5	1160.1	938.2	786.8	573.0	458.0	385.4	280.4	233.0	130.1
12 OPzS-ET 1200	2367.2	2241.2	2165.7	2049.9	1828.2	1390.1	1131.1	937.8	675.9	539.9	458.3	336.4	280.0	156.1
12 OPzS-ET 1500	2363.4	2319.7	2222.6	2135.3	1946.0	1543.2	1286.0	1087.1	828.9	689.1	600.8	407.6	339.7	189.3
16 OPzS-ET 2000	3436.9	3378.2	3197.3	3060.4	2767.1	2151.1	1764.9	1476.4	1104.9	919.1	798.8	544.6	451.7	251.3
20 OPzS-ET 2500	4306.7	4223.2	4002.2	3825.4	3457.1	2681.3	2209.8	1851.3	1379.9	1149.1	1001.8	681.6	563.8	314.3
22 OPzS-ET 2750	4739.2	4643.4	4396.3	4214.8	3806.5	2949.4	2425.0	2031.8	1522.6	1260.4	1099.1	748.2	621.1	345.9
24 OPzS-ET 3000	4969.7	4876.1	4634.8	4437.8	4009.3	3147.3	2590.7	2172.1	1659.9	1379.1	1201.8	816.6	677.7	378.3

OPzS Standby Power

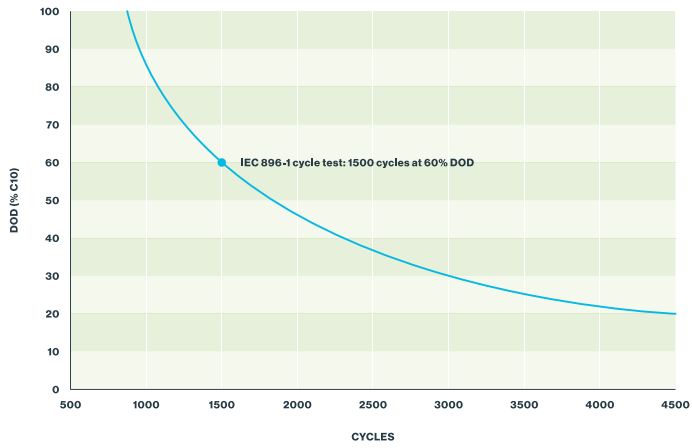
Charging voltage vs. Temperature



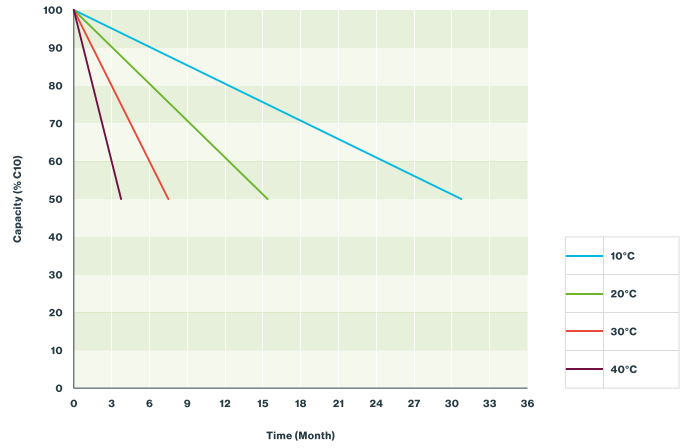
Service life vs. Temperature



Depth of discharge vs. Cycles



Self discharge



Ventilation

Lead Acid batteries generate hydrogen and oxygen during overcharging (electrolysis water decomposition)

1 Ah decomposes 0.336g water and generates 0.00042 m³ H₂

Air becomes explosive if hydrogen content ≥ 4% and when ignited

Dilution by fresh air necessary to bring H₂ to less than 4%

Ventilation calculation acc. to EN 50272-2

$$Q = v \cdot q \cdot s \cdot n \cdot I_{\text{gas}} \cdot C_{\text{n}} / 100 \text{ [m}^3/\text{h]}$$

Q = Quantity fresh air [m³/h]

v = necessary dilution of H₂ factor 24 (100% - 4%)/4% = 24)

$$q = 0.42 \cdot 10^{-3} \text{ m}^3/\text{Ah generated H}$$

s = 5, general safety factor

n = number of cells

I_{gas} = current producing gas in mA per Ah rate capacity for float or boost charge current

C_{rt} = capacity C₁₀ (Ah) to 1.80 VpC @ 20°C

Maintenance and control

Eternity OPzS vented stationary lead-acid batteries require minimal maintenance.

Check the Electrolyte level at regular intervals and ensure it is within the limits shown on the side of the container. Top up with distilled water only when required.

To avoid leakage currents keep the battery clean and dry.

Tests to be carried out in accordance with IEC 60896-11.

Every 6 months the following checks must be actioned:

- Check the electrolyte level of all cells
 - Check and record the total battery voltage
 - Check and record the voltage and density and electrolyte temperature of selected pilot cells
 - Check and record the ambient temperature
-

Once a year the following checks must be actioned:

- Check the electrolyte level of all cells
 - Check and record the total battery voltage
 - Check and record the voltage and density and electrolyte temperature of selected pilot cells
 - Check and record the ambient temperature
 - Check all bolts and connectors are tightened to the correct torque 23Nm
-

Simplified formula

$$Q = 0.05 \cdot n \cdot I_{\text{gas}} \cdot C_{\text{n}} / 100 \text{ [m}^3/\text{h]}$$

I_{gas} -values [mA per Ah] to be used:

	Float	Boost
Vented (Sb < 3%):	5	20
VRLA:	1	8

Values taking into account temperatures up to 40°C

Results of calculation

Q = m³/h (per 100Ah and per cell)

Charging mode:	Float	Boost
EN 50272-2 (June 2001):	0.005	0.04

OPzS Standby Power

Positive plate

High energy density tubular design with low antimony alloy for extended watering intervals

Negative plate

Industry leading negative plate design

Separator

High-porosity and corrosion-resistant ensures maximum capacity for the lifetime of the cell

Container

Manufactured from Styrene-Acrylonitrile resin (SAN) which is durable and heat resistant



Terminal

Maintains an airtight seal even when the plates expand and grow throughout the lifetime of the cell

Gauntlet

Non-woven, high-capacity polyester gauntlet

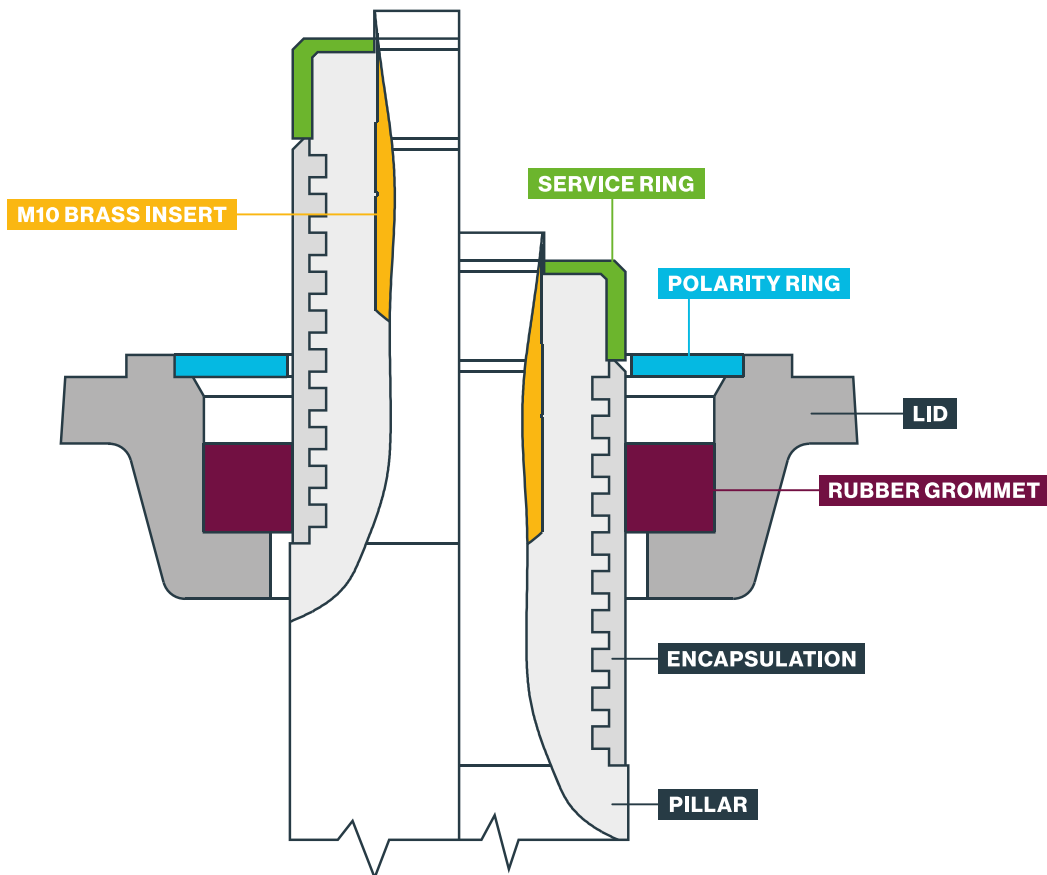
Electrolyte

Acid density of 1.24kg/l ensures low self-discharge rates and long design life of the cell

Lid

Manufactured from Acrylonitrile-Butadiene-Styrene (ABS) which is durable and heat resistant

Pillar sealing design



POWER FOR TOMORROW TODAY

The Eternity Technologies range is built using only the highest quality and most efficient production processes at our state-of-the-art manufacturing centre in the UAE.

It is this innovation, modern design criteria and industry-leading machinery that allows Eternity Technologies to not only meet the needs of the global industrial market with increased reliability but define it for the future.



Service



Accessories



Bloc Batteries



Chargers



Network Power



Motive Power



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