

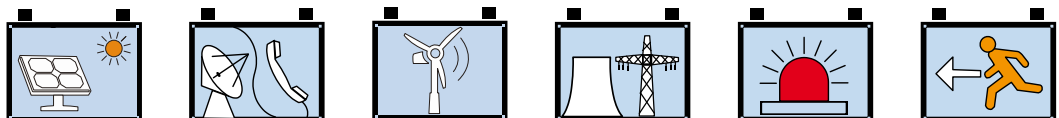
Guarantee

EverExceed[®]
power your applications

Economical OPzS Tubular ECO Range



**»Premium quality for
solar / wind applications«**



www.everexceed.com



EverExceed Economical OPzS Tubular ECO Range vented batteries are 15 years stationary batteries and were developed for Solar, RV/Marine & general purpose applications. They are distinguished by their economical design, lead selenium tubular plate design, and their high tolerance to cycling. The EverExceed Economical OPzS Tubular ECO Range lead Selenium blocks provide the best possible compromise in lead acid plate technology. By utilizing a proportion of selenium in the grid alloy, a dense fine grain structure is produced. This alloy is extremely corrosion-resistant and virtually eliminates inter-granular corrosion-one of the most common causes of cell failure.

A lead selenium cell, therefore, combines the advantages of both lead calcium and lead antimony cells while exhibiting none of the disadvantages.

Applicable Operating temperature range:

-40°C (-40°F) to +70°C (+158°F)

Ideal Operating temperature range:

+20°C (+68°F) to +35°C (+95°F)

Storage time from a fully charged condition:

12 months at 20°C ~25°C / 68°F~77°F.

For each 9°C / 15°F rise, reduce the storage time by half.

Innovative Features

Very high operational reliability under rough operating conditions;

Low maintenance due to reduced antimony in the alloy and high electrolyte reserve;

Optimized plate design produces increased capacities compared to DIN;

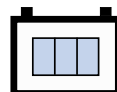
Nominal capacity 75-280 Ah C20;

15 years at 20°C (80% remaining capacity from C20);

Low gassing due to PbSbSnSe alloy (EN 50272-2);
Conforms to DIN 40 736 and DIN 40 737 T3;
Electrolyte: diluted sulphuric acid dN= 1.25 kg/l;
Completely recyclable.

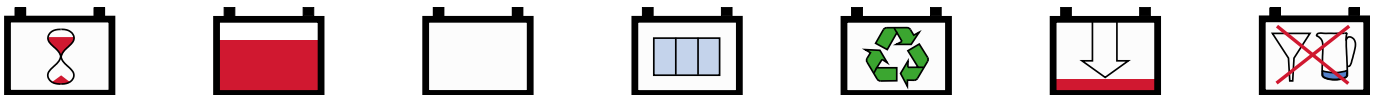
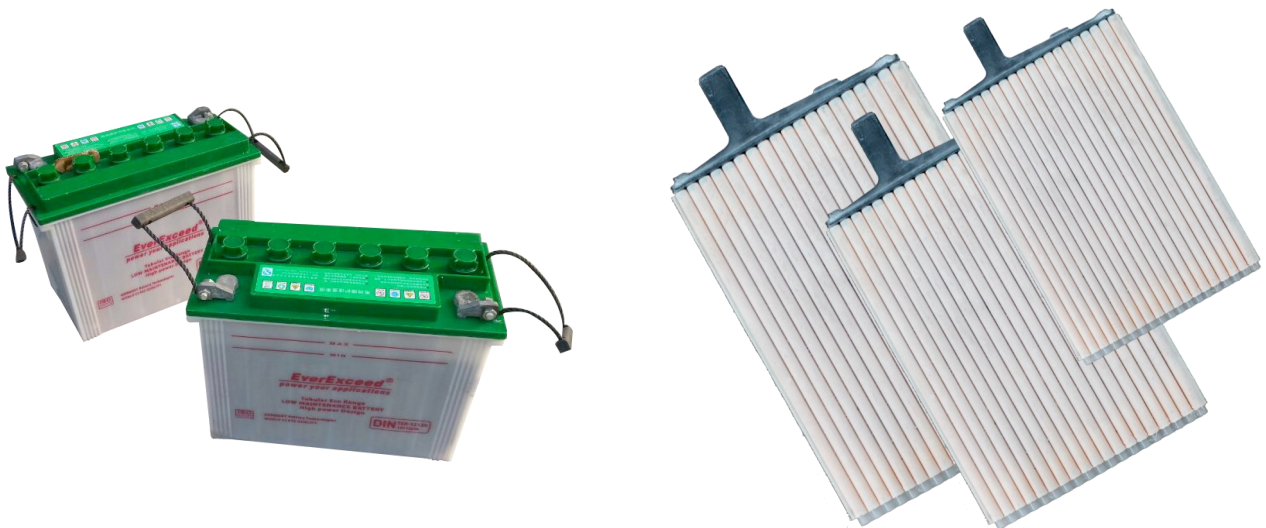
Construction

Positive plate	Tubular plate with low antimony / calcium / selenium alloy;
Negative plate	Flat plate grid;
Separation	Microporous combined with corrugated separator;
CASE material	Reinforced PP, flame retardant optional;
Cover material	Reinforced PP, flame retardant optional;
Specific gravity	1.250 S.G. @ 77F recommended others available;
Post design	Leak-proof with Brass embed;
Intercells	Fully insulated flexible copper cables or copper plated busbars;
Vent caps	Flip-top flame-arrester type;
Float Voltage	2.23 V/cell without need to equalize;
Equalize Voltage	2.33-2.40 V/cell.



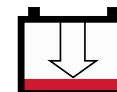
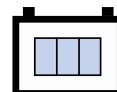
Economical OPzS Tubular ECO Range Electrical Specifications & Dimensions

DIN Type	Nom. Voltage (V)	Capacity C20 to 1.75VPC	Capacity C10 to 1.80VPC	Outline Dimensions (mm)			Weight with electrolyte (kg)	Terminal
				Length (L)	Width (W)	Height (H)		
TER 6-220	6	220	200	260	182	282	28.5	F-M8
TER 6-230	6	230	215	245	190	282	30.5	F-M8
TER 6-240	6	240	220	260	182	282	31.5	F-M8
TER 6-250	6	250	232	260	182	305	32.0	F-M8
TER 6-260	6	260	241	260	182	305	32.5	F-M8
TER 6-270	6	270	250	245	190	315	34.0	F-M8
TER 6-280	6	280	260	360	172	275	35.0	F-M8
TER 8-170	8	170	157	260	182	290	31.0	F-M8
TER 12-75	12	75	65	350	175	210	24.5	F-M6
TER 12-120	12	120	111	360	172	270	31.0	F-M8
TER 12-130	12	130	120	360	172	270	33.5	F-M8
TER 12-140	12	140	129	360	172	270	36.5	F-M8
TER 12-150	12	150	140	360	172	270	38.5	F-M8
TER 12-180	12	180	165	328	182	295	41.0	F-M8



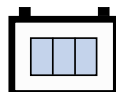
Economical OPzS Tubular ECO Range Discharge Data Ampere Hours @ 20°C

Battery Model	End	Discharge Data Amps @ 20°C						End	Discharge Data Ampere Hours @ 20°C									
	VPC	Discharge Time In Minutes						VPC	Discharge Time In Hours									
		5	10	15	30	45	60		1.5	2	3	4	5	8	10	12	20	24
TER 6-220	1.8	526	395	315	203	149	123	1.85	122	124	145	156	164	187	193	197	209	213
	1.75	607	442	337	210	155	128	1.8	126	128	150	162	170	194	200	204	216	220
	1.67	658	483	354	214	159	132	1.75	129	133	153	165	173	198	204	208	220	224
TER 6-230	1.8	550	413	329	212	156	129	1.85	127	129	151	163	172	196	202	206	219	223
	1.75	635	462	352	220	162	134	1.8	132	134	157	169	178	203	209	213	226	230
	1.67	688	505	370	224	166	138	1.75	134	139	160	173	181	207	213	218	230	235
TER 6-240	1.8	574	431	344	221	163	134	1.85	133	135	158	171	179	204	211	215	228	233
	1.75	662	482	368	229	169	140	1.8	137	140	164	177	185	212	218	223	236	240
	1.67	718	527	386	233	173	144	1.75	140	145	167	180	189	216	223	227	240	245
TER 6-250	1.8	598	449	358	231	169	140	1.85	138	140	164	178	186	213	219	224	238	242
	1.75	690	502	383	239	176	145	1.8	143	145	170	184	193	220	227	232	245	250
	1.67	748	549	402	243	181	150	1.75	146	151	174	188	197	225	232	236	250	255
TER 6-260	1.8	622	467	372	240	176	145	1.85	144	146	171	185	194	221	228	233	247	252
	1.75	717	522	398	248	183	151	1.8	149	151	177	191	201	229	236	241	255	260
	1.67	778	571	418	253	188	156	1.75	152	157	181	195	205	234	241	246	260	265
TER 6-270	1.8	645	485	387	249	183	151	1.85	149	152	178	192	201	230	237	242	256	262
	1.75	745	542	413	258	190	157	1.8	155	157	184	199	209	238	245	250	265	270
	1.67	807	593	434	263	195	162	1.75	158	163	188	203	213	243	250	255	270	275
TER 6-280	1.8	670	503	401	258	190	157	1.85	155	157	184	199	209	238	246	251	266	271
	1.75	773	563	429	267	197	163	1.8	160	163	191	206	216	247	255	260	275	280
	1.67	838	615	451	272	202	168	1.75	164	169	195	210	221	252	260	265	280	286
TER 8-170	1.8	407	305	243	157	115	95.1	1.85	94.0	95.5	112	121	127	145	149	152	162	165
	1.75	469	342	261	162	120	98.9	1.8	97.4	98.9	116	125	131	150	155	158	167	170
	1.67	509	373	274	165	123	102	1.75	99.3	102	118	128	134	153	158	161	170	173
TER 12-75	1.8	179	135	107	69.2	50.8	41.9	1.85	41.5	42.1	49.4	53.3	55.9	63.8	65.8	67.1	71.3	72.7
	1.75	207	151	115	71.6	52.9	43.6	1.8	43.0	43.6	51.2	55.2	58.0	66.2	68.2	69.6	73.7	75.1
	1.67	224	165	121	73.0	54.2	45.0	1.75	43.8	45.2	52.2	56.3	59.1	67.5	69.6	71.0	75.0	76.5
TER 12-120	1.8	287	215	172	111	81.3	67.1	1.85	66.3	67.4	79.0	85.3	89.5	102	105	107	114	116
	1.75	331	241	184	115	84.6	69.8	1.8	68.7	69.8	81.8	88.4	92.7	106	109	111	118	120
	1.67	359	263	193	117	86.7	72.0	1.75	70.1	72.3	83.5	90.1	94.6	108	111	114	120	122
TER 12-130	1.8	311	233	186	120	88.1	72.7	1.85	71.9	73.0	85.5	92.4	97.0	111	114	116	124	126
	1.75	359	261	199	124	91.6	75.6	1.8	74.5	75.6	88.7	95.7	100	115	118	121	128	130
	1.67	389	285	209	126	94.0	78.0	1.75	76.0	78.4	90.4	97.7	102	117	121	123	130	133
TER 12-140	1.8	335	251	200	129	94.8	78.3	1.85	77.4	78.6	92.1	99.5	104	119	123	125	133	136
	1.75	386	281	214	134	98.6	81.5	1.8	80.2	81.5	95.5	103	108	123	127	130	137	140
	1.67	419	307	225	136	101	84.0	1.75	81.8	84.4	97.4	105	110	126	130	132	140	143
TER 12-150	1.8	359	269	215	138	102	83.9	1.85	82.9	84.2	98.7	107	112	128	132	134	143	145
	1.75	414	301	230	143	106	87.3	1.8	85.9	87.3	102	110	116	132	136	139	147	150
	1.67	449	329	241	146	108	90.0	1.75	87.7	90.4	104	113	118	135	139	142	150	153
TER 12-180	1.8	430	323	258	166	122	101	1.85	99.5	101	118	128	134	153	158	161	171	174
	1.75	497	362	276	172	127	105	1.8	103	105	123	133	139	159	164	167	177	180
	1.67	538	395	290	175	130	108	1.75	105	108	125	135	142	162	167	170	180	184



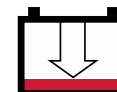
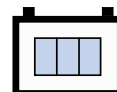
Economical OPzS Tubular ECO Range Discharge Data Amps @ 20°C

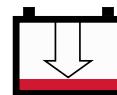
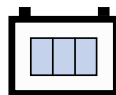
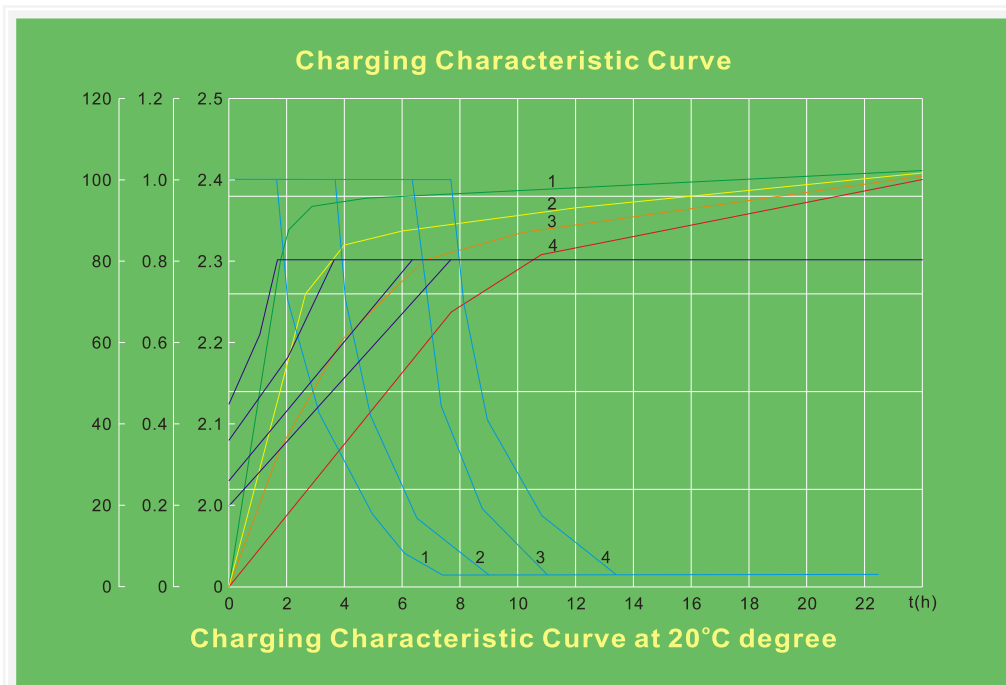
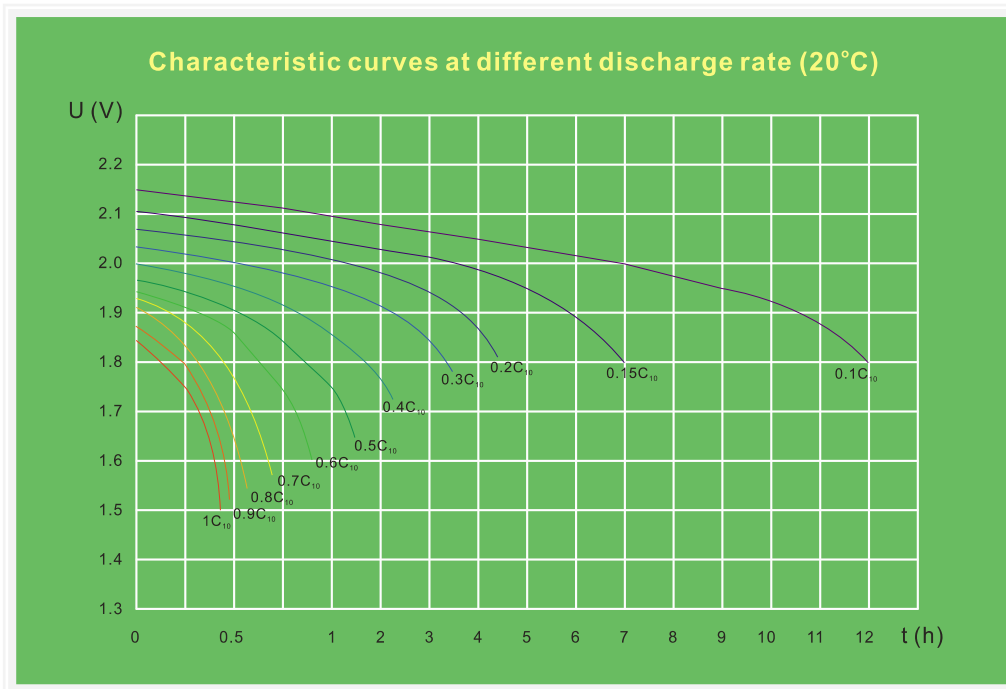
Battery Model	End	Discharge Data Amps @ 20°C						End	Discharge Data Ampere @ 20°C									
	VPC	Discharge Time In Minutes						VPC	Discharge Time In Hours									
		5	10	15	30	45	60		1.5	2	3	4	5	8	10	12	20	24
TER 6-220	1.8	526	395	315	203	149	123	1.85	81.1	61.8	48.3	39.1	32.8	23.4	19.3	16.4	10.5	8.88
	1.75	607	442	337	210	155	128	1.8	84.0	64.0	50.0	40.5	34.0	24.3	20.0	17.0	10.8	9.18
	1.67	658	483	354	214	159	132	1.75	85.7	66.3	51.0	41.3	34.7	24.7	20.4	17.3	11.0	9.35
TER 6-230	1.8	550	413	329	212	156	129	1.85	84.7	64.6	50.4	40.9	34.3	24.5	20.2	17.2	10.9	9.29
	1.75	635	462	352	220	162	134	1.8	87.8	66.9	52.3	42.3	35.5	25.4	20.9	17.8	11.3	9.60
	1.67	688	505	370	224	166	138	1.75	89.6	69.3	53.3	43.2	36.3	25.9	21.3	18.1	11.5	9.78
TER 6-240	1.8	574	431	344	221	163	134	1.85	88.4	67.4	52.6	42.6	35.8	25.5	21.1	17.9	11.4	9.7
	1.75	662	482	368	229	169	140	1.8	91.6	69.8	54.6	44.2	37.1	26.5	21.8	18.5	11.8	10.0
	1.67	718	527	386	233	173	144	1.75	93.5	72.3	55.6	45.1	37.8	27.0	22.3	18.9	12.0	10.2
TER 6-250	1.8	598	449	358	231	169	140	1.85	92.1	70.2	54.8	44.4	37.3	26.6	21.9	18.6	11.9	10.1
	1.75	690	502	383	239	176	145	1.8	95.5	72.7	56.8	46.0	38.6	27.6	22.7	19.3	12.3	10.4
	1.67	748	549	402	243	181	150	1.75	97.4	75.3	58.0	46.9	39.4	28.1	23.2	19.7	12.5	10.6
TER 6-260	1.8	622	467	372	240	176	145	1.85	95.8	73.0	57.0	46.2	38.8	27.7	22.8	19.4	12.4	10.5
	1.75	717	522	398	248	183	151	1.8	99.3	75.6	59.1	47.9	40.2	28.7	23.6	20.1	12.8	10.9
	1.67	778	571	418	253	188	156	1.75	101	78.4	60.3	48.8	41.0	29.2	24.1	20.5	13.0	11.1
TER 6-270	1.8	645	485	387	249	183	151	1.85	99.5	75.8	59.2	48.0	40.3	28.7	23.7	20.1	12.8	10.9
	1.75	745	542	413	258	190	157	1.8	103	78.5	61.4	49.7	41.7	29.8	24.5	20.9	13.3	11.3
	1.67	807	593	434	263	195	162	1.75	105	81.4	62.6	50.7	42.6	30.3	25.0	21.3	13.5	11.5
TER 6-280	1.8	670	503	401	258	190	157	1.85	103	78.6	61.4	49.8	41.8	29.8	24.6	20.9	13.3	11.3
	1.75	773	563	429	267	197	163	1.8	107	81.5	63.7	51.6	43.3	30.9	25.5	21.6	13.7	11.7
	1.67	838	615	451	272	202	168	1.75	109	84.4	64.9	52.6	44.1	31.5	26.0	22.1	14.0	11.9
TER 8-170	1.8	407	305	243	157	115	95.1	1.85	62.7	47.7	37.3	30.2	25.4	18.1	14.9	12.7	8.08	6.87
	1.75	469	342	261	162	120	98.9	1.8	64.9	49.5	38.7	31.3	26.3	18.7	15.5	13.1	8.35	7.10
	1.67	509	373	274	165	123	102	1.75	66.2	51.2	39.4	31.9	26.8	19.1	15.8	13.4	8.50	7.23
TER 12-75	1.8	179	135	107	69.2	50.8	41.9	1.85	27.6	21.1	16.5	13.3	11.2	7.98	6.58	5.59	3.56	3.03
	1.75	207	151	115	71.6	52.9	43.6	1.8	28.6	21.8	17.1	13.8	11.6	8.27	6.82	5.80	3.68	3.13
	1.67	224	165	121	73.0	54.2	45.0	1.75	29.2	22.6	17.4	14.1	11.8	8.43	6.96	5.91	3.75	3.19
TER 12-120	1.8	287	215	172	111	81.3	67.1	1.85	44.2	33.7	26.3	21.3	17.9	12.8	10.5	8.95	5.70	4.85
	1.75	331	241	184	115	84.6	69.8	1.8	45.8	34.9	27.3	22.1	18.5	13.2	10.9	9.27	5.89	5.01
	1.67	359	263	193	117	86.7	72.0	1.75	46.7	36.2	27.8	22.5	18.9	13.5	11.1	9.46	6.00	5.10
TER 12-130	1.8	311	233	186	120	88.1	72.7	1.85	47.9	36.5	28.5	23.1	19.4	13.8	11.4	9.70	6.18	5.25
	1.75	359	261	199	124	91.6	75.6	1.8	49.6	37.8	29.6	23.9	20.1	14.3	11.8	10.0	6.38	5.43
	1.67	389	285	209	126	94.0	78.0	1.75	50.6	39.2	30.1	24.4	20.5	14.6	12.1	10.2	6.50	5.53
TER 12-140	1.8	335	251	200	129	94.8	78.3	1.85	51.6	39.3	30.7	24.9	20.9	14.9	12.3	10.4	6.65	5.65
	1.75	386	281	214	134	98.6	81.5	1.8	53.5	40.7	31.8	25.8	21.6	15.4	12.7	10.8	6.87	5.84
	1.67	419	307	225	136	101	84.0	1.75	54.5	42.2	32.5	26.3	22.1	15.7	13.0	11.0	7.00	5.95
TER 12-150	1.8	359	269	215	138	102	83.9	1.85	55.3	42.1	32.9	26.7	22.4	16.0	13.2	11.2	7.13	6.06
	1.75	414	301	230	143	106	87.3	1.8	57.3	43.6	34.1	27.6	23.2	16.5	13.6	11.6	7.37	6.26
	1.67	449	329	241	146	108	90.0	1.75	58.4	45.2	34.8	28.2	23.7	16.9	13.9	11.8	7.50	6.38
TER 12-180	1.8	430	323	258	166	122	101	1.85	66.3	50.5	39.5	32.0	26.8	19.1	15.8	13.4	8.55	7.27
	1.75	497	362	276	172	127	105	1.8	68.7	52.4	40.9	33.1	27.8	19.8	16.4	13.9	8.84	7.51
	1.67	538	395	290	175	130	108	1.75	70.1	54.2	41.7	33.8	28.4	20.2	16.7	14.2	9.00	7.65

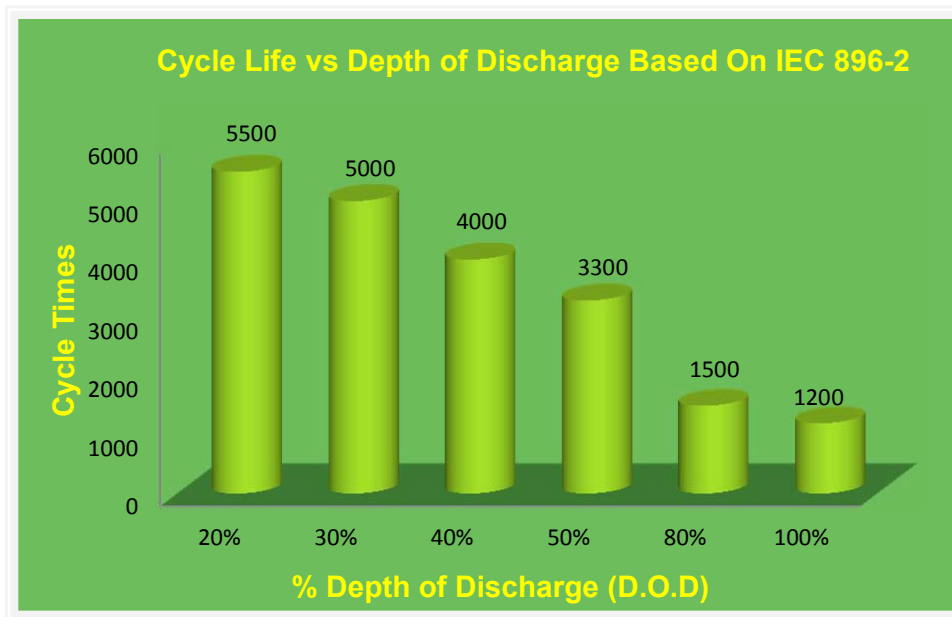


Economical OPzS Tubular ECO Range Discharge Data Watts @ 20°C

Battery Model	End	Discharge Data Watts @ 20°C						End	Discharge Data Watts @ 20°C									
	VPC	Discharge Time In Minutes						VPC	Discharge Time In Hours									
		5	10	15	30	45	60		1.5	2	3	4	5	8	10	12	20	24
TER 6-220	1.8	836	695	579	373	287	237	1.85	166	133	97	77	63.8	43.5	36.4	30.9	20.5	17.4
	1.75	934	726	611	386	293	244	1.8	176	141	101	79.7	66.2	45.6	37.9	32.4	21.1	17.8
	1.67	1039	764	644	398	303	254	1.75	178	143	104	81.5	67.5	46.4	38.6	33	21.5	18.3
TER 6-230	1.8	874	727	605	390	300	248	1.85	174	139	101	80.5	66.7	45.5	38.1	32.3	21.4	18.2
	1.75	976	759	639	404	306	255	1.8	184	147	106	83.3	69.2	47.7	39.6	33.9	22.1	18.6
	1.67	1086	799	673	416	317	266	1.75	186	150	109	85.2	70.6	48.5	40.4	34.5	22.5	19.1
TER 6-240	1.8	912	758	632	407	313	259	1.85	181	145	106	84.0	69.6	47.5	39.7	33.7	22.4	19.0
	1.75	1019	792	667	421	320	266	1.8	192	154	110	87.0	72.2	49.7	41.3	35.3	23.0	19.4
	1.67	1134	834	703	434	331	277	1.75	194	156	113	88.9	73.6	50.6	42.1	36.0	23.5	20.0
TER 6-250	1.8	950	790	658	424	326	269	1.85	189	151	110	87.5	72.5	49.4	41.4	35.1	23.3	20.7
	1.75	1061	825	694	439	333	277	1.8	200	160	115	90.6	75.2	51.8	43.1	36.8	24.0	21.1
	1.67	1181	868	732	452	344	289	1.75	202	163	118	92.6	76.7	52.7	43.9	37.5	24.4	21.7
TER 6-260	1.8	988	821	684	441	339	280	1.85	196	157	115	91.0	75.4	51.4	43.0	36.5	24.2	21.5
	1.75	1104	858	722	456	346	288	1.8	208	167	119	94.2	78.2	53.9	44.8	38.3	24.9	22.0
	1.67	1228	903	761	470	358	300	1.75	210	169	123	96.3	79.8	54.8	45.6	39.0	25.4	22.6
TER 6-270	1.8	1026	853	711	458	352	291	1.85	204	163	119	94.5	78.3	53.4	44.7	37.9	25.2	22.3
	1.75	1146	891	750	474	360	299	1.8	216	173	124	97.8	81.2	56.0	46.5	39.8	25.9	22.8
	1.67	1275	938	790	488	372	312	1.75	218	176	128	100	82.8	56.9	47.4	40.5	26.4	23.5
TER 6-280	1.8	1064	885	737	475	365	302	1.85	211	169	123	98.0	81.2	55.4	46.3	39.3	26.1	23.2
	1.75	1189	924	778	491	373	311	1.8	224	179	129	101	84.3	58.0	48.2	41.2	26.9	23.7
	1.67	1323	973	820	507	386	323	1.75	227	182	132	104	85.9	59.1	49.1	42.0	27.4	24.4
TER 8-170	1.8	646	537	448	288	222	183	1.85	128	103	75.0	59.5	49.3	33.6	28.1	23.9	15.8	14.1
	1.75	722	561	472	298	226	189	1.8	136	109	78.1	61.6	51.2	35.2	29.3	25.0	16.3	14.4
	1.67	803	591	498	308	234	196	1.75	138	111	80.4	63.0	52.2	35.9	29.8	25.5	16.6	14.8
TER 12-75	1.8	285	237	197	127	97.9	80.8	1.85	56.6	45.4	33.1	26.3	21.8	14.8	12.4	10.5	6.99	6.20
	1.75	318	248	208	132	100	83.2	1.8	60.0	48.1	34.4	27.2	22.6	15.5	12.9	11.0	7.20	6.35
	1.67	354	261	220	136	103	86.6	1.75	60.7	48.8	35.5	27.8	23.0	15.8	13.2	11.3	7.33	6.52
TER 12-120	1.8	456	379	316	203	157	129	1.85	90.6	72.6	52.9	42.0	34.8	23.7	19.9	16.9	11.2	9.92
	1.75	509	396	333	211	160	133	1.8	96.0	76.9	55.1	43.5	36.1	24.9	20.7	17.7	11.5	10.15
	1.67	567	417	351	217	165	139	1.75	97.1	78.0	56.7	44.5	36.8	25.3	21.1	18.0	11.7	10.44
TER 12-130	1.8	494	411	342	220	170	140	1.85	98.1	78.6	57.3	45.5	37.7	25.7	21.5	18.3	12.1	10.8
	1.75	552	429	361	228	173	144	1.8	104.0	83.3	59.7	47.1	39.1	26.9	22.4	19.1	12.5	11.0
	1.67	614	452	381	235	179	150	1.75	105.2	84.5	61.5	48.2	39.9	27.4	22.8	19.5	12.7	11.3
TER 12-140	1.8	532	442	368	237	183	151	1.85	106	84.6	61.7	49.0	40.6	27.7	23.2	19.7	13.0	11.6
	1.75	594	462	389	246	186	155	1.8	112	89.7	64.3	50.7	42.1	29.0	24.1	20.6	13.4	11.8
	1.67	661	486	410	253	193	162	1.75	113	91.0	66.2	51.9	43.0	29.5	24.6	21.0	13.7	12.2
TER 12-150	1.8	570	474	395	254	196	162	1.85	113	90.7	66.2	52.5	43.5	29.7	24.8	21.1	14.0	12.4
	1.75	637	495	417	263	200	166	1.8	120	96.2	68.9	54.4	45.1	31.1	25.8	22.1	14.4	12.7
	1.67	709	521	439	271	207	173	1.75	121	97.5	70.9	55.6	46.0	31.6	26.3	22.5	14.7	13.0
TER 12-180	1.8	684	569	474	305	235	194	1.85	136	109	79.3	63.0	52.2	35.6	29.8	25.3	16.8	14.9
	1.75	764	594	500	316	240	200	1.8	144	115	82.6	65.2	54.2	37.3	31.0	26.5	17.3	15.2
	1.67	850	625	527	326	248	208	1.75	146	117	85.1	66.7	55.2	38.0	31.6	27.0	17.6	15.7







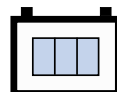
BATTERY CYCLING ABILITY

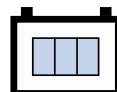
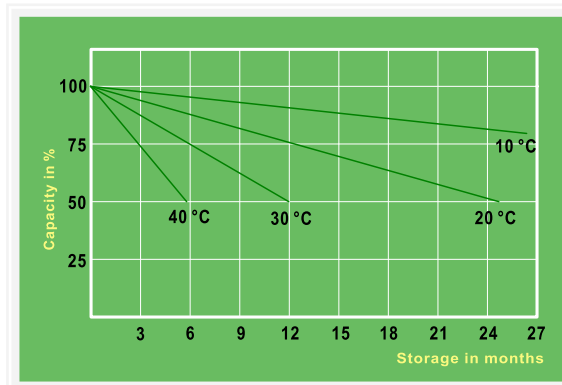
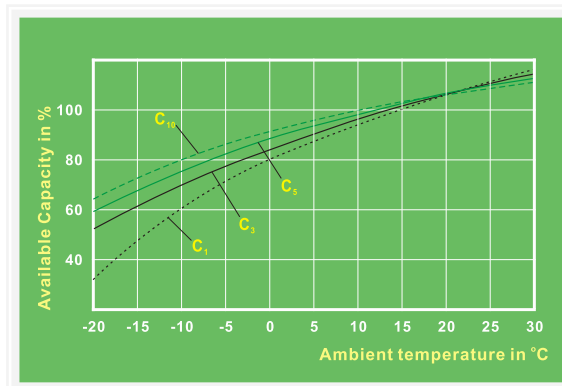
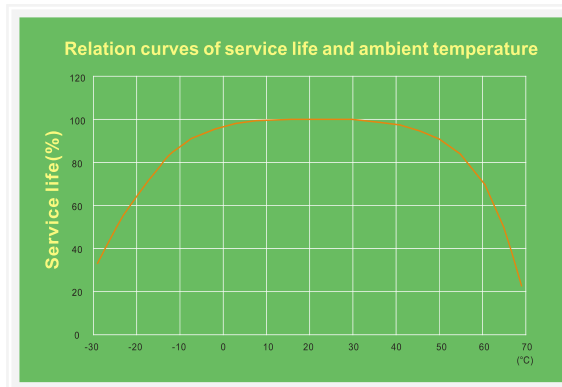
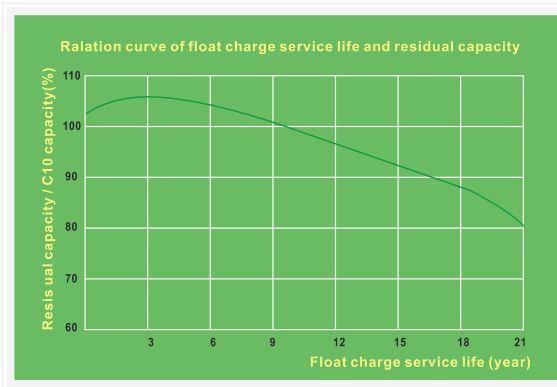
The EverExceed's Economical OPzS Tubular ECO Range Battery excels in cycling applications. This Range are capable of 5500+ charge / discharge cycles depending on the depth of discharge.

TYPICAL CYCLIC PERFORMANCE

CAPACITY WITHDRAWN	CYCLES
100%	1200
80%	1500
50%	3300
40%	4000
30%	5000
20%	5500

3300 cycles to 50% DoD and 5000 to over 30% DoD





EverExceed[®]
power your applications



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