

*High Temperature Battery Series*  
**Deep Cycle MAX Range VRLA**  
*Unique performance against high temperature*



*Premium quality for deep cycle application*  
**15 years of design life**



# How our High Temperature Battery (HTB) solution is the best?

## Excellent high temperature performance

The extremely powerful, compact AGM VRLA batteries of EverExceed Deep Cycle MAX Range is designed to cope with the most extreme temperatures and environments, is an ideal energy source for durability in photovoltaic, wind and telecom applications. The battery provides high performance and reliability in long duration cycling applications. We combined the market demand with design optimization, precision component selection and state-of-the-art manufacturing process to produce the most cost effective battery solution for today applications.

### Applicable Operating temperature range:

-40°C (-40°F) to + 80°C (+176°F)

### Ideal Operating temperature range:

+15°C (+59°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.

## Deep Cycle Max Range VRLA



20-300Ah

## Applications

Deep Cycle MAX range batteries Incorporate EverExceed advanced VRLA technology designed for long life and high performance in:

- Solar / Photovoltaic
- Water Pumping
- Wind Generation
- Communications
- Cathodic Protection
- Microwave
- Signaling
- Broadband

## Innovative Features

- Thick optimized positive plate design for maximum service life - 12 years @ 35°C(95°F), 15 years @ 25°(77°F);
- Nano-Carbon enhanced for improved durability.
- Advanced Corrosion-resistant lead high-tin (1.5%) low-calcium alloy;
- High-Compression Absorbed Glass Mat technology (AGM) for greater than 99% recombination efficiency. Using special AGM only for extreme high temperature applications.
- Proprietary Fixed Orifice Plate Pasting technology applying active materials on both sides of the grid for consistent cell-to-cell performance, higher density & capacity and uniform grid protection.
- Advanced deep cycle high tin lead alloy, reduces grid corrosion and promotes long battery life.
- The partition inter-cell welds provide low resistance connections, with minimal power loss.
- Flame arresting, low pressure safety release venting system for individual cells.
- Anti-high-temperature casing materials:
  - Standard: Reinforced anti-high-temperature ABS container and cover;
  - Optional: Flame-retardant U.L.94 V-0;
- One-way relief valve, Explosion Resistant.

## Designed in Quality Manufacturing

Quality manufacturing processes for the Deep Cycle MAX Range batteries incorporate the industry most advanced technologies including: an automated sealing detection system, a computer controlled "fill by weight" acid filler, and a temperature controlled water bath formation process. Each and every unit is capacity tested.

## No transport restrictions

Surface transport: Classified as non-hazardous material as related to DOT-CFR Title 49 parts 171-189.

Marine transport: Classified as non-hazardous material as per IMDG amendment 27.

Air transport: Complies with IATA/ICAO, Special provision A67.

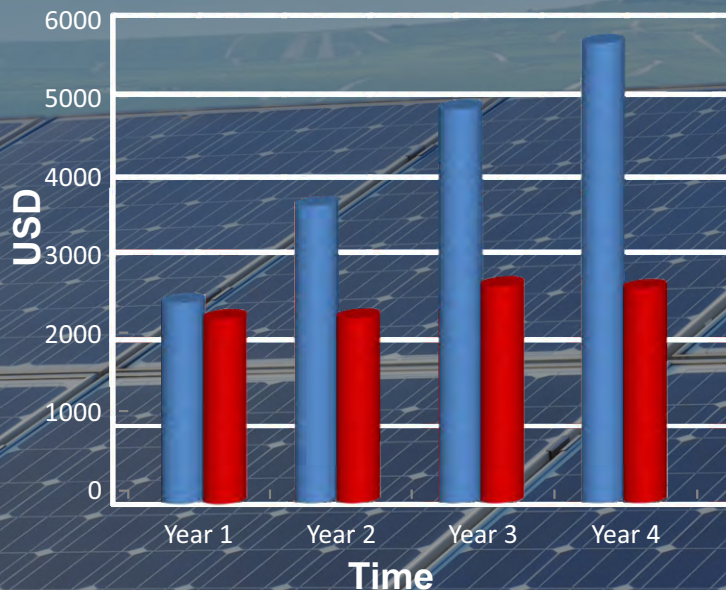
## Compliant Standards

- IEC 60896-21/22-2004
- IEC 61427-2005
- DIN 43539-T5
- BS 6290 PART 4

# Why choose our High Temperature Deep Cycle Max Range battery over regular Lead-acid Battery?

Item	Max Range battery	Regular VRLA battery
Technologies	AGM	AGM
Expected Service Life (35°C)	12 Years	6 Years
Operating temperature	-40°C to 80°C	-40°C to 55°C
Fast charge performance	◆◆◆	◆◆
PSOC performance	◆◆◆	◆
Water loss performance	◆◆◆	◆◆
Avoid thermal runaway	◆◆◆	◆◆
Cycle life	>80% DOD	◆◆
	<80% DOD	◆◆◆
Float life	◆◆◆	◆◆

## Cost comparison between our High Temperature Max Range battery over regular Lead-acid Battery

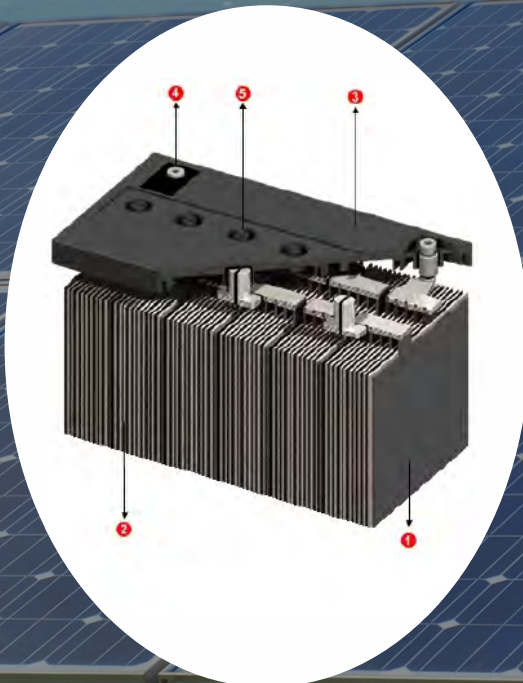


Initially the CAPEX of **HTB** series batteries are little higher than the regular VRLA Batteries, but user need to invest on additional air-condition system for the regular VRLA batteries to keep the site temperature as standard. Whereas our **HTB** series batteries only need a ventilation system with a fan which is a very low investment in compare to the air-condition system. Also the additional monthly cost of electricity adds up with the total cost of lead acid battery which is very high compare to the electricity cost for a ventilation fan.

- 2KW Outdoor site with AC cabinet in Spain with traditional VRLA battery
- 2KW Outdoor site in Spain with EverExceed Max VRLA battery

## Electrical Specifications & Dimensions

Battery Model	Nom. Voltage (V)	Capacity C20 1.75VPC @ 20°C	Capacity C100 1.80VPC @ 20°C	Short Circuit Amps	Internal Resistance Milli-ohms	Terminal Type	Battery Weight (kg/lb)		Outline Dimensions (mm/inch)					
									Length		Width		Height	
DM-1220	12	20	22	680	15.0	F-M5	6.2	13.6	181	7.13	76	2.99	167	6.57
DM-1228	12	28	31	890	13.5	F-M5	10.0	22.0	165	6.54	175	6.89	126	4.96
DM-1235	12	35	38	1270	11.0	F-M6	11.0	24.2	195	7.68	130	5.12	180	7.07
DM-1240	12	40	45	1600	10.0	F-M6	12.5	27.5	197	7.76	165	6.50	172	6.78
DM-1245	12	45	50	1700	9.0	F-M6	13.5	29.7	197	7.76	165	6.50	172	6.78
DM-1260	12	60	66	1900	7.4	F-M6	18.0	39.6	228	9.00	137	5.40	215	8.41
DM-1270	12	70	76	2000	6.5	F-M6	21.5	47.3	350	13.8	167	6.56	180	7.03
DM-1280	12	80	88	2400	6.0	F-M6	23.0	50.6	259	10.2	168	6.62	215	8.46
DM-1290	12	90	100	2600	5.2	F-M6	24.5	53.9	259	10.2	168	6.62	215	8.46
DM-12100	12	100	110	2800	5.0	F-M6	27.0	59.4	305	12.0	168	6.62	210	8.27
DM-12110	12	110	120	3000	4.8	F-M6	31.0	68.2	332	13.1	174	6.86	215	8.50
DM-12120	12	120	132	3400	4.6	F-M6	33.0	72.6	332	13.1	174	6.86	215	8.50
DM-12135	12	135	148	3700	4.0	F-M8	36.5	80.3	408	16.1	175	6.90	238	9.38
DM-12150	12	150	165	4100	3.5	F-M8	42.0	92.4	483	19.0	170	6.70	240	9.45
DM-12165	12	165	180	4300	3.4	F-M8	45.0	99.0	483	19.0	170	6.70	240	9.45
DM-12180	12	180	200	4350	3.2	F-M8	52.0	114	530	20.8	210	8.26	220	8.67
DM-12200	12	200	220	4400	3.0	F-M8	56.0	123	530	20.8	210	8.26	220	8.67
DM-12230	12	230	250	4600	2.8	F-M8	63.0	136	520	20.5	238	9.37	220	8.67
DM-12250	12	250	280	5200	2.6	F-M8	67.0	143	520	20.5	269	10.6	210	8.27
DM-12280	12	280	300	5700	2.5	F-M8	75.0	165	520	20.5	269	10.6	225	8.86
DM-12300	12	300	330	5900	2.4	F-M8	77.0	169	520	20.5	269	10.6	225	8.86



- Plates: High Tin Pb alloy, optimized for high corrosion resistance and deep cycle use.
- Separator: Highly porous glass micro-fibre separator, optimized for low internal resistance, for maximum Absorption of the electrolyte and for electrical separation.
- Standard housing: Reinforced special high temperature resistant ABS container and cover adopted.
- Terminals: Silver plated Copper female insert for easy and safe assembly and maintenance free connection with excellent conductivity.
- Valves: Release gas in case of excess pressure and protects the cell against atmosphere.

## Deep Cycle Max Range Discharge Ampere Data @ 25°C

Battery Model	End VPC	Discharge Data Amps @ 25°C			End VPC	Discharge Data Amps @ 25°C								
		Discharge Time In Minutes				Discharge Time In Hours								
		30	45	60		1.5	2	3	5	10	20	48	100	120
DM-1220	1.8	19.8	14.8	11.6	1.85	8.61	6.83	4.99	3.28	1.80	0.97	0.42	0.21	0.18
	1.75	20.6	15.1	12.0	1.8	8.87	7.04	5.14	3.39	1.86	1.00	0.44	0.22	0.18
	1.67	21.6	15.8	12.5	1.75	9.18	7.20	5.24	3.47	1.90	1.02	0.45	0.22	0.19
DM-1228	1.8	27.7	20.7	16.3	1.85	12.1	9.56	6.98	4.60	2.52	1.36	0.60	0.29	0.25
	1.75	28.8	21.1	16.8	1.8	12.4	9.85	7.20	4.74	2.60	1.40	0.61	0.30	0.26
	1.67	30.3	22.1	17.5	1.75	12.9	10.1	7.34	4.86	2.66	1.43	0.63	0.31	0.26
DM-1235	1.8	34.6	25.9	20.4	1.85	15.1	11.9	8.73	5.75	3.15	1.70	0.74	0.37	0.31
	1.75	36.1	26.4	21.0	1.8	15.5	12.3	9.00	5.93	3.25	1.75	0.77	0.38	0.32
	1.67	37.9	27.7	21.8	1.75	16.1	12.6	9.17	6.07	3.32	1.79	0.78	0.39	0.33
DM-1240	1.8	39.5	29.6	23.3	1.85	17.2	13.7	9.95	6.56	3.60	1.94	0.84	0.42	0.36
	1.75	41.2	30.2	23.9	1.8	17.8	14.0	10.3	6.77	3.71	2.00	0.87	0.44	0.36
	1.67	43.2	31.6	25.0	1.75	18.4	14.4	10.5	6.93	3.79	2.04	0.90	0.44	0.37
DM-1245	1.8	44.5	33.3	26.2	1.85	19.4	15.4	11.2	7.39	4.05	2.18	0.95	0.47	0.40
	1.75	46.4	34.0	26.9	1.8	20.0	15.8	11.6	7.62	4.18	2.25	0.98	0.49	0.41
	1.67	48.7	35.6	28.1	1.75	20.7	16.2	11.8	7.80	4.27	2.30	1.01	0.50	0.42
DM-1260	1.8	59.4	44.4	34.9	1.85	25.8	20.5	15.0	9.85	5.40	2.91	1.27	0.63	0.53
	1.75	61.8	45.3	35.9	1.8	26.6	21.1	15.4	10.2	5.57	3.00	1.31	0.65	0.55
	1.67	64.9	47.4	37.5	1.75	27.5	21.6	15.7	10.4	5.69	3.06	1.34	0.66	0.56
DM-1270	1.8	69.3	51.8	40.8	1.85	30.1	23.9	17.5	11.5	6.30	3.39	1.48	0.73	0.62
	1.75	72.1	52.8	41.9	1.8	31.1	24.6	18.0	11.9	6.50	3.50	1.53	0.76	0.64
	1.67	75.7	55.3	43.7	1.75	32.1	25.2	18.3	12.1	6.64	3.57	1.56	0.77	0.65
DM-1280	1.8	79.1	59.2	46.6	1.85	34.4	27.3	19.9	13.1	7.20	3.88	1.69	0.84	0.71
	1.75	82.4	60.3	47.9	1.8	35.5	28.1	20.6	13.5	7.42	4.00	1.75	0.86	0.74
	1.67	86.6	63.2	49.9	1.75	36.7	28.8	21.0	13.9	7.58	4.08	1.79	0.88	0.75
DM-1290	1.8	89.0	66.6	52.4	1.85	38.7	30.7	22.4	14.8	8.10	4.36	1.91	0.94	0.80
	1.75	92.7	67.9	53.9	1.8	39.9	31.7	23.1	15.2	8.35	4.50	1.97	0.97	0.83
	1.67	97.4	71.2	56.2	1.75	41.3	32.4	23.6	15.6	8.54	4.59	2.01	0.99	0.84
DM-12100	1.8	98.9	74.0	58.2	1.85	43.0	34.1	24.9	16.4	9.00	4.85	2.12	1.05	0.89
	1.75	103	75.5	59.9	1.8	44.4	35.2	25.7	16.9	9.28	5.00	2.19	1.08	0.92
	1.67	108	79.1	62.4	1.75	45.9	36.0	26.2	17.3	9.49	5.10	2.23	1.10	0.94

## Deep Cycle Max Range Discharge Ampere Data @ 25°C

Battery Model	End VPC	Discharge Data Amps @ 25°C			End VPC	Discharge Data Amps @ 25°C								
		Discharge Time In Minutes				Discharge Time In Hours								
		30	45	60		1.5	2	3	5	10	20	48	100	120
DM-12110	1.8	109	81.3	64.1	1.85	47.3	37.5	27.4	18.1	9.90	5.33	2.33	1.15	0.98
	1.75	113	83.0	65.9	1.8	48.8	38.7	28.3	18.6	10.2	5.50	2.41	1.19	1.01
	1.67	119	87.0	68.7	1.75	50.5	39.6	28.8	19.1	10.4	5.61	2.45	1.21	1.03
DM-12120	1.8	119	88.7	69.9	1.85	51.6	41.0	29.9	19.7	10.8	5.82	2.55	1.26	1.07
	1.75	124	90.6	71.8	1.8	53.2	42.2	30.8	20.3	11.1	6.00	2.63	1.30	1.10
	1.67	130	94.9	74.9	1.75	55.1	43.2	31.5	20.8	11.4	6.12	2.68	1.32	1.12
DM-12135	1.8	134	99.8	78.6	1.85	58.1	46.1	33.7	22.2	12.2	6.54	2.86	1.41	1.20
	1.75	139	102	80.8	1.8	59.9	47.5	34.7	22.9	12.5	6.75	2.95	1.46	1.24
	1.67	146	107	84.3	1.75	62.0	48.6	35.4	23.4	12.8	6.89	3.01	1.49	1.26
DM-12150	1.8	148	111	87.4	1.85	64.6	51.2	37.4	24.6	13.5	7.27	3.18	1.57	1.33
	1.75	155	113	89.8	1.8	66.6	52.8	38.6	25.4	13.9	7.50	3.28	1.62	1.38
	1.67	162	119	93.6	1.75	68.9	54.0	39.3	26.0	14.2	7.65	3.35	1.65	1.40
DM-12165	1.8	163	122	96.1	1.85	71.0	56.3	41.1	27.1	14.9	8.00	3.50	1.73	1.47
	1.75	170	125	98.8	1.8	73.2	58.1	42.4	27.9	15.3	8.25	3.61	1.78	1.51
	1.67	179	130	103	1.75	75.7	59.4	43.3	28.6	15.7	8.42	3.68	1.82	1.54
DM-12180	1.8	177	130	102	1.85	77.4	61.4	44.8	29.5	16.2	8.72	3.82	1.89	1.60
	1.75	178	133	105	1.8	79.8	63.3	46.2	30.4	16.7	9.00	3.93	2.00	1.70
	1.67	185	136	108	1.75	82.5	64.7	47.2	31.2	17.1	9.18	4.01	2.01	1.71
DM-12200	1.8	198	148	116	1.85	86.1	68.3	49.9	32.8	18.0	9.70	4.24	2.10	1.78
	1.75	206	151	120	1.8	88.7	70.4	51.4	33.9	18.6	10.0	4.38	2.16	1.83
	1.67	216	158	125	1.75	91.8	72.0	52.4	34.7	19.0	10.2	4.46	2.20	1.87
DM-12230	1.8	228	170	134	1.85	99.0	78.5	57.4	37.7	20.7	11.2	4.89	2.41	2.05
	1.75	237	174	138	1.8	102	80.9	59.1	39.0	21.3	11.5	5.03	2.49	2.11
	1.67	249	182	143	1.75	106	82.8	60.3	39.8	21.8	11.7	5.12	2.53	2.14
DM-12250	1.8	247	185	146	1.85	108	85.3	62.3	41.1	22.5	12.1	5.29	2.61	2.22
	1.75	258	189	150	1.8	111	88.0	64.3	42.3	23.2	12.5	5.47	2.7	2.29
	1.67	271	198	156	1.75	115	90.0	65.5	43.4	23.7	12.8	5.60	2.76	2.35
DM-12280	1.8	277	207	163	1.85	121	95.6	69.8	46.0	25.2	13.6	5.95	2.94	2.49
	1.75	288	211	168	1.8	124	98.5	72.0	47.4	26.0	14.0	6.13	3.02	2.57
	1.67	303	221	175	1.75	129	101	73.4	48.6	26.6	14.3	6.26	3.09	2.62
DM-12300	1.8	297	222	175	1.85	130	102	74.8	49.3	27.0	14.6	6.37	3.15	2.67
	1.75	308	226	180	1.8	133	105	77.1	50.8	27.8	15.0	6.57	3.23	2.75
	1.67	325	237	187	1.75	138	108	78.6	52.1	28.5	15.3	6.70	3.31	2.81

## Deep Cycle Max Range Discharge Watts Per Cell (WPC) Data @ 25°C

Battery Model	End VPC	Discharge Data Amps @ 25°C			End VPC	Discharge Data Watts Per Cell @ 25°C									
		Discharge Time In Minutes				Discharge Time In Hours									
		30	45	60		1.5	2	3	5	10	20	48	100	120	
DM-1220	1.8	37.9	28.4	22.6	1.85	16.5	13.2	9.60	6.39	3.55	1.98	0.87	0.43	0.36	
	1.75	39.2	28.9	23.2	1.8	17.0	13.6	9.89	6.59	3.66	2.04	0.89	0.44	0.37	
	1.67	41.0	30.1	24.1	1.75	17.4	13.8	10.1	6.65	3.70	2.08	0.91	0.45	0.38	
DM-1228	1.8	53.1	39.7	31.7	1.85	23.1	18.4	13.4	8.95	4.97	2.77	1.21	0.60	0.51	
	1.75	54.8	40.4	32.4	1.8	23.8	19.0	13.9	9.22	5.13	2.86	1.25	0.62	0.52	
	1.67	57.4	42.1	33.8	1.75	24.3	19.3	14.1	9.32	5.19	2.91	1.27	0.63	0.53	
DM-1235	1.8	66.4	49.6	39.6	1.85	28.9	23.0	16.8	11.2	6.22	3.46	1.51	0.75	0.63	
	1.75	68.5	50.5	40.5	1.8	29.8	23.7	17.3	11.5	6.41	3.57	1.56	0.77	0.65	
	1.67	71.7	52.6	42.2	1.75	30.4	24.2	17.6	11.6	6.48	3.64	1.59	0.79	0.67	
DM-1240	1.8	75.8	56.7	45.2	1.85	33.0	26.3	19.2	12.8	7.10	3.95	1.73	0.85	0.73	
	1.75	78.2	57.6	46.3	1.8	34.0	27.1	19.8	13.1	7.32	4.08	1.78	0.88	0.75	
	1.67	81.9	60.1	48.2	1.75	34.7	27.6	20.1	13.3	7.41	4.16	1.82	0.90	0.76	
DM-1245	1.8	85.4	63.8	50.9	1.85	37.2	29.6	21.6	14.4	7.99	4.45	1.95	0.96	0.82	
	1.75	88.1	64.9	52.1	1.8	38.3	30.5	22.3	14.8	8.24	4.59	2.01	0.99	0.84	
	1.67	92.2	67.7	54.3	1.75	39.1	31.1	22.6	15.0	8.34	4.68	2.05	1.01	0.86	
DM-1260	1.8	114	85.1	67.9	1.85	49.6	39.5	28.8	19.2	10.7	5.94	2.60	1.28	1.09	
	1.75	118	86.6	69.5	1.8	51.1	40.7	29.7	19.8	11.0	6.12	2.68	1.32	1.12	
	1.67	123	90.2	72.4	1.75	52.1	41.4	30.2	20.0	11.1	6.24	2.73	1.35	1.14	
DM-1270	1.8	133	99.2	79.3	1.85	57.8	46.1	33.6	22.4	12.4	6.93	3.03	1.50	1.27	
	1.75	137	101	81.0	1.8	59.6	47.5	34.6	23.1	12.8	7.14	3.12	1.54	1.31	
	1.67	143	105	84.5	1.75	60.8	48.3	35.2	23.3	13.0	7.28	3.19	1.57	1.33	
DM-1280	1.8	142	106	84.9	1.85	62.0	49.3	36.0	24.0	13.3	7.42	3.25	1.60	1.36	
	1.75	147	108	86.8	1.8	63.9	50.9	37.1	24.7	13.7	7.65	3.35	1.65	1.40	
	1.67	154	113	90.5	1.75	65.1	51.8	37.7	25.0	13.9	7.80	3.41	1.68	1.43	
DM-1290	1.8	171	128	102	1.85	74.4	59.2	43.2	28.8	16.0	8.90	3.89	1.92	1.63	
	1.75	176	130	104	1.8	76.7	61.0	44.5	29.7	16.5	9.18	4.02	1.98	1.68	
	1.67	184	135	109	1.75	78.1	62.1	45.2	29.9	16.7	9.36	4.10	2.02	1.72	
DM-12100	1.8	190	142	113	1.85	82.6	65.8	48.0	32.0	17.8	9.89	4.33	2.14	1.81	
	1.75	196	144	116	1.8	85.2	67.8	49.5	32.9	18.3	10.2	4.46	2.20	1.87	
	1.67	205	150	121	1.75	86.8	69.0	50.3	33.3	18.5	10.4	4.55	2.25	1.91	

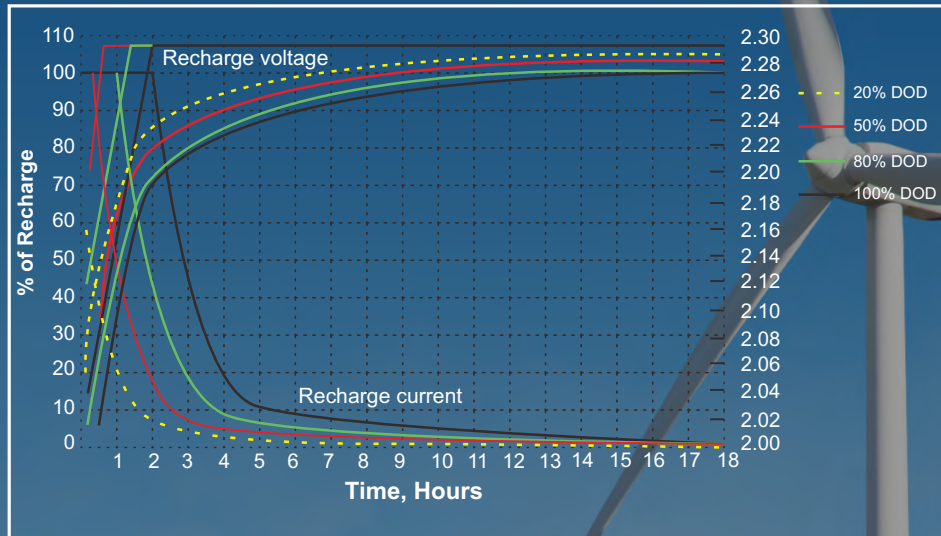
## Deep Cycle Max Range Discharge Watts Per Cell (WPC) Data @ 25°C

Battery Model	End VPC	Discharge Data Amps @ 25°C			End VPC	Discharge Data Watts Per Cell @ 25°C								
		Discharge Time In Minutes				Discharge Time In Hours								
		30	45	60		1.5	2	3	5	10	20	48	100	120
DM-12110	1.8	209	156	125	1.85	90.9	72.4	52.8	35.2	19.5	10.9	4.77	2.35	2.00
	1.75	215	159	127	1.8	93.7	74.6	54.4	36.2	20.1	11.2	4.90	2.42	2.05
	1.67	225	165	133	1.75	95.5	75.9	55.3	36.6	20.4	11.4	4.99	2.46	2.09
DM-12120	1.8	228	170	136	1.85	99.1	79.0	57.6	38.3	21.3	11.9	5.21	2.57	2.18
	1.75	235	173	139	1.8	102	81.4	59.4	39.5	22.0	12.2	5.34	2.64	2.24
	1.67	246	180	145	1.75	104	82.8	60.3	39.9	22.2	12.5	5.47	2.70	2.29
DM-12135	1.8	256	191	153	1.85	112	88.8	64.8	43.1	24.0	13.4	5.86	2.89	2.46
	1.75	264	195	156	1.8	115	91.6	66.8	44.5	24.7	13.8	6.04	2.98	2.53
	1.67	277	203	163	1.75	117	93.2	67.9	44.9	25.0	14.0	6.13	3.02	2.57
DM-12150	1.8	285	213	170	1.85	124	98.7	72.0	47.9	26.6	14.8	6.48	3.20	2.71
	1.75	294	216	174	1.8	128	102	74.2	49.4	27.5	15.3	6.69	3.30	2.81
	1.67	307	226	181	1.75	130	104	75.4	49.9	27.8	15.6	6.83	3.37	2.86
DM-12165	1.8	313	234	187	1.85	136	109	79.2	52.7	29.3	16.3	7.13	3.52	2.99
	1.75	323	238	191	1.8	141	112	81.6	54.4	30.2	16.8	7.35	3.63	3.08
	1.67	338	248	199	1.75	143	114	82.9	54.9	30.6	17.2	7.53	3.72	3.15
DM-12180	1.8	320	235	190	1.85	140	111	80.9	53.8	30.0	16.7	7.29	3.60	3.06
	1.75	335	246	197	1.8	142	113	82.2	54.4	30.3	17.0	7.44	3.67	3.12
	1.67	341	255	204	1.75	148	119	86.3	57.4	31.9	17.8	7.77	3.84	3.26
DM-12200	1.8	379	284	226	1.85	165	132	96.0	63.9	35.5	19.8	8.66	4.28	3.63
	1.75	392	289	232	1.8	170	136	98.9	65.9	36.6	20.4	8.93	4.41	3.74
	1.67	410	301	241	1.75	174	138	101	66.5	37.0	20.8	9.10	4.49	3.81
DM-12230	1.8	417	312	249	1.85	182	145	106	70.3	39.1	21.8	9.54	4.71	4.00
	1.75	431	318	255	1.8	187	149	109	72.5	40.3	22.4	9.80	4.84	4.11
	1.67	451	331	266	1.75	191	152	111	73.2	40.8	22.9	10.0	4.95	4.20
DM-12250	1.8	474	354	283	1.85	207	164	120	79.9	44.4	24.7	10.81	5.34	4.53
	1.75	490	361	289	1.8	213	170	124	82.4	45.8	25.5	11.16	5.51	4.68
	1.67	512	376	302	1.75	217	173	126	83.2	46.3	26.0	11.38	5.62	4.77
DM-12280	1.8	531	397	317	1.85	231	184	134	89.5	49.7	27.7	12.12	5.98	5.08
	1.75	548	404	324	1.8	238	190	139	92.2	51.3	28.6	12.51	6.18	5.24
	1.67	574	421	338	1.75	243	193	141	93.2	51.9	29.1	12.73	6.29	5.34
DM-12300	1.8	569	425	340	1.85	247	197	144	95.9	53.2	29.7	13.0	6.40	5.44
	1.75	587	433	347	1.8	255	203	149	98.7	54.9	30.6	13.4	6.62	5.61
	1.67	615	451	362	1.75	260	207	151	99.8	55.6	31.2	13.6	6.74	5.72

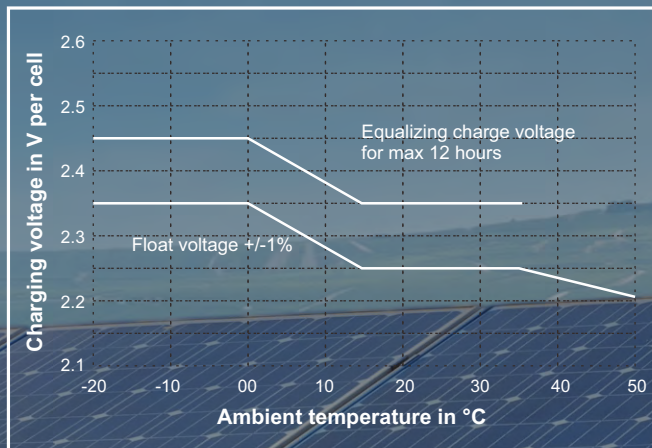


# Characteristic Curves for Deep cycle MAX Range battery

## Recharge Characteristics 2.27 VPC float @ 25°C (77°F)

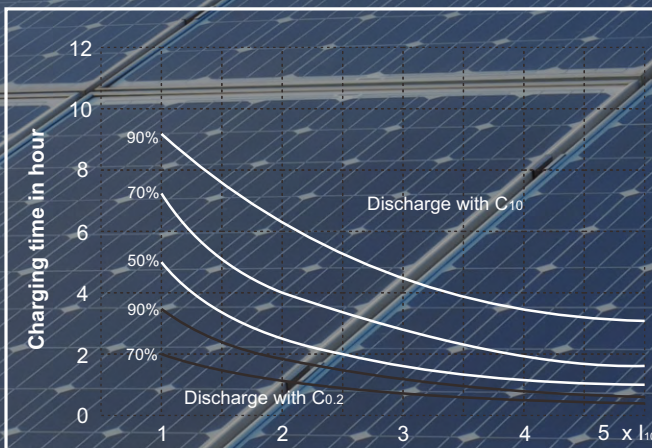


## Float Voltage & Charging



**Constant Voltage charging is recommended**  
**Recommended float voltage: 2.27VPC @ 25°C(77°F)**  
**Float Voltage Range: 2.24VPC @ 35°C(95°F)**  
**Equalize voltage: 2.35VPC for 12 Hours**

For charging 2.27 V/cell is recommended. The charging voltage must be compensated according to the curve for continuously different battery ambient temperature.

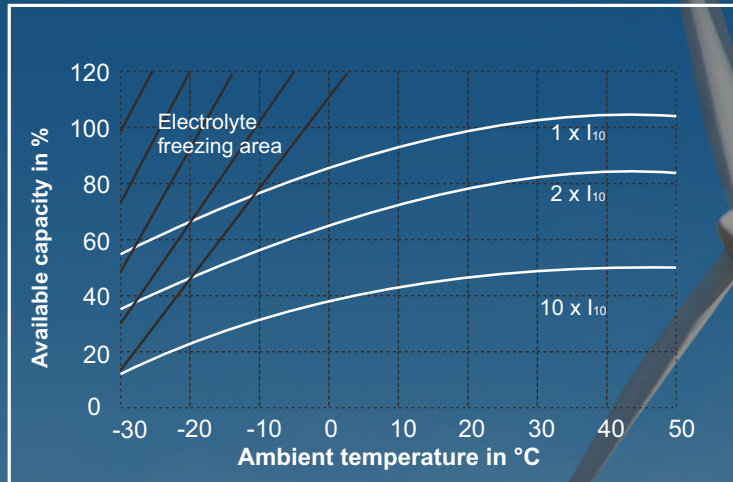


### Temperature compensation:

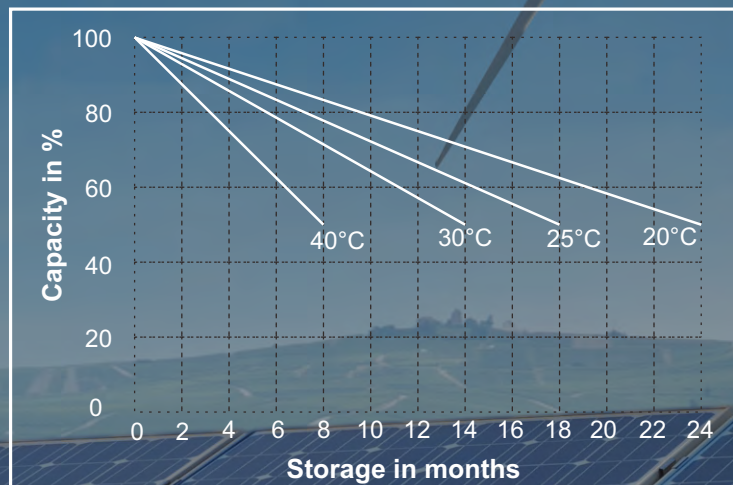
Apply for temperature range of 0°C / 32°F to 40°C / 104°F.  
 Subtract 3 mV / °C / cell or 1.7 mV / °F / cell, above 25°C / 77°F.  
 Add 3mV / °C / cell or 1.7 mV / °F / cell, below 25°C / 77°F.

Recharging time in dependence of charging current (guide values) for up to 50, 70 and 90% of capacity at 25°C and with a charging voltage of 2.27 V/cell.

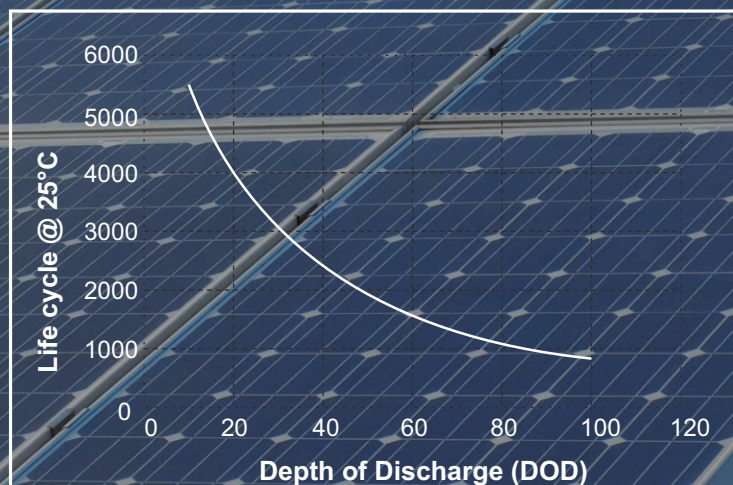
## Characteristic Curves for Deep cycle MAX Range battery



Extracted capacity in relation to the temperature.



Self-discharge in relation to the storage temperature.



Life cycle in relation to the depth of discharge @25°C.

*High Temperature Battery Series*  
**Deep Cycle MAX Range VRLA**  
*Unique performance against high temperature*



*Supplied Worldwide*  
*by EverExceed Corporation*

