



MAXON[®]
BATTERIES

MXEG12-300

The Endurance Series

SPECIFICATIONS

Nominal Voltage	12V	
Design Floating Life @ 25°C	15 Years	
Nominal Capacity @ 25° (100 hour rate @ 3.09A)	310Ah	
Capacity @ 25°C	20 hour rate (13.50A)	270Ah
	10 hour rate (25.75A)	255Ah
	5 hour rate (43.4A)	215Ah
Internal Resistance	Full Charged Battery @ 25°C	≈ 2.10mΩ
Ambient Temperature	Discharge	20° - 55°
	Charge	20° - 55°
	Storage	20° - 55°
Capacity affected by Temperature (10 hour rate)	40°C	103%
	25°C	100%
	0°C	86%
	-15°C	67%
Self-Discharge @ 25°C per Month	3%	
Charge (Constant Voltage) @ 25°C	Standby Use	Initial Charging Current Less than 51.0A Voltage 13.6-13.8V
	Cycle Use	Initial Charging Current Less than 51.0A Voltage 14.4-14.9V



12V
Voltage

300Ah
Capacity

Gel
Technology

Deep
Cycle

The Maxon Endurance Series is a Gel AGM Hybrid battery. It uses a thick plate design with advanced AGM separators and a newly developed silicone gel electrolyte imported from Germany. This makes them an ultra-high-performance battery.

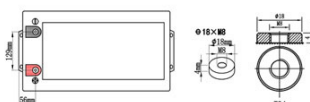
They have the ability to be discharged deeper with twice the cycle life of standard AGM batteries, giving them a more reliable performance under an extreme temperature range (-20°C to 55°C). They are highly suited to Mobility, 4WD, Solar, Marine and standby applications.

GENERAL FEATURES

- Long life and higher stability under high temperature
- High cycle ability 2,200 cycles @ 30% DOD
- Integrated design to ensure the best in uniformity and reliability
- Operates in high temperature range -40°C~60°C
- Extreme Vibration Resistant
- Advanced AGM Separators

DIMENSIONS & WEIGHT

Length (mm)	520
Width (mm)	268
Height (mm)	215
Total Terminal Height (mm)	220
Weight (kg)	77



APPLICATIONS

- Caravan, Camper Vans and 4WD
- Mobility & Wheel Chairs
- Marine
- Golf Trolleys
- Solar Systems
- Standby Systems



Marine



Solar



4W Drives



Caravans



Mobility



UPS



Standby



CE



CERTIFIED
ISO 9001
ISO 14001
PRODUCER

COMPLIED STANDARDS

IEC 60896-21/22
IEC61427
GB/T 19638

JIS C8704
BS6290 part4
CE/ISO

BATTERY DISCHARGE TABLE

Discharge Constant Current per Cell (Amperes at 25°C)

F.V/Time	5min	10min	15min	30min	45min	1h	1.5h	2h	3h	5h	8h	10h	20h	48h	100h
10.20	788	600	452	240	223	156	123	103.4	64.7	45.0	32.0	26.13	13.58	5.90	3.12
10.50	700	550	423	230	213	150	119	99.6	62.7	43.4	30.3	25.75	13.50	5.84	3.09
10.80	650	500	395	222	203	144	114	95.7	60.5	41.8	28.8	25.25	13.38	5.78	3.05

Discharge Constant Power per Cell (Watts at 25°C)

F.V/Time	5min	10min	15min	30min	45min	1h	1.5h	2h	3h	5h	8h	10h	20h	48h	100h
10.20	7825	6625	4768	2995	2250	1955	1426	1073	800	516	383	325	170	61.31	32.42
10.50	7525	5625	4280	2926	2200	1925	1404	1038	774	500	378	315	165	60.69	32.11
10.80	7000	5250	4086	2863	2125	1838	1340	1003	748	482	373	300	161	60.07	31.69

Note: The above data are average values, and can be obtained within 3 charge/discharge cycles. These are not minimum values. Cell and battery designs/specifications are subject to modification without notice.

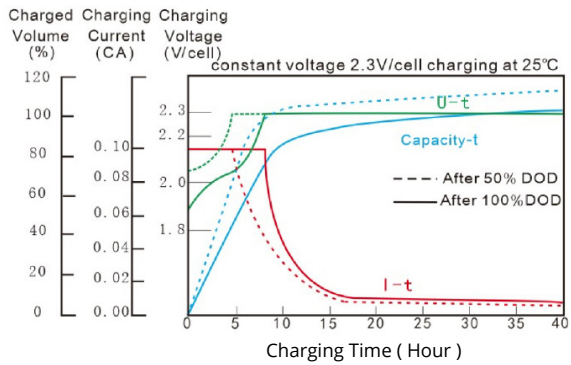


BENEFITS

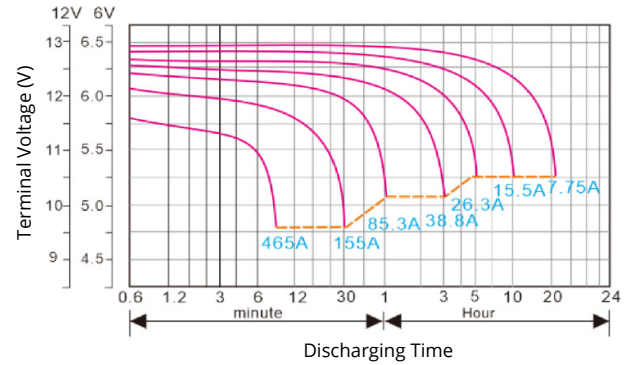
- ✓ Ultra high performance Gel Hybrid
- ✓ Designed for deeper discharge
- ✓ High Cycling up to 2,200 cycles @ 30% DOD
- ✓ Operates in high temperature range -20°C~55°C
- ✓ Excellent for energy storage
- ✓ Fully sealed, allows for safe operation in any position
- ✓ Impact & fire resistant ABS case
- ✓ Up to 3 years replacement warranty
- ✓ Resistant to heavy vibrations
- ✓ Low self discharge
- ✓ Relief Valve with flame integrated arrestors
- ✓ Japanese Technology

PERFORMANCE CHARACTERISTICS

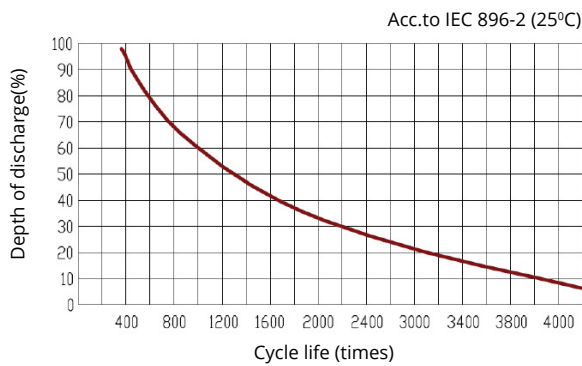
Charge Characteristics (25°C/77°F)



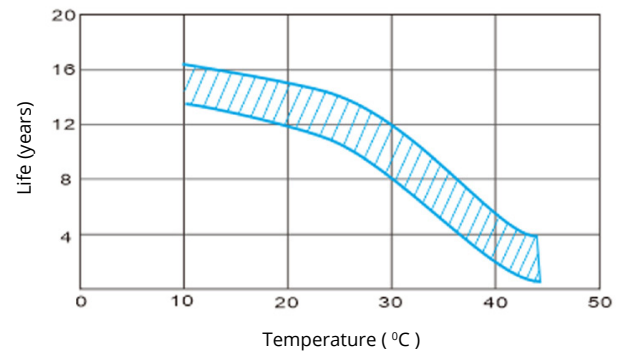
Discharge Characteristic (25°C/77°F)



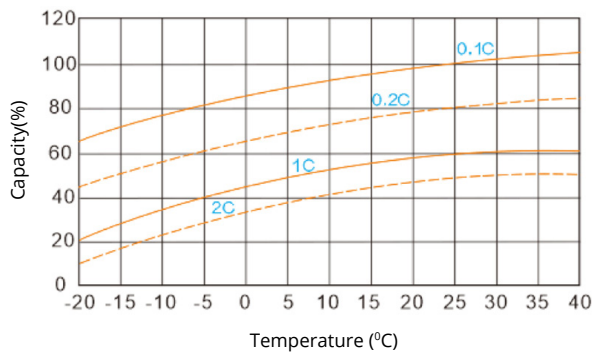
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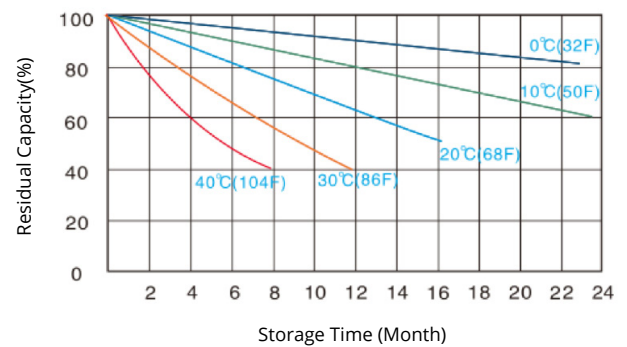
Temperature vs Float Life



Capacity Curve At Different Temperature



Self Discharge Characteristics



BATTERY CONSTRUCTION

Component	Positive plate	Negative plate	Container & Cover	Safety valve	Terminal	Separator	Electrolyte	Pillar seal
Features	Thick high Sn low Ca grid with special paste	Balanced Pb-Ca grid for improved recombination efficiency	Fire resistance ABS (UL94-V0)	Flame Si-Rubber and aging resistance	Female Copper Insert M8	Advanced PVC /AGM separator for high pressure cell design	Silicon Gel import from Germany	Two layers epoxy resin seal