



MAXON[®]
BATTERIES

MXG12-105

Gel Deep Cycle Battery

SPECIFICATIONS

Nominal Voltage	12V (6 cells per unit)	
Design Floating Life @ 25°C	10 Years	
Nominal Capacity @ 25°C (20 hour rate @ 5.25A)	105.4Ah	
Rated Capacity	10 Hour rate (9.45A)	95Ah
	5 Hour rate (17.1A)	85Ah
	3 Hour rate (25.73)	75Ah
	1 Hour rate (56.16)	55Ah
Internal Resistance	Full Charged Battery @ 25°C	≤5.0mΩ
Ambient Temperature	Discharge	-15°C~50°C
	Charge	0°C~40°C
	Storage	15°C~40°C
Capacity affected by Temperature (10 hour rate)	40°C	103%
	25°C	100%
	0°C	86%
Self-Discharge @ 12°C per Month	3%	
Charge (Constant Voltage) @ 25°C	Standby Use	Initial Charging Current Less than 27.0A Voltage 13.5-13.8V
	Cycle Use	Initial Charging Current Less than 27.0A Voltage 14.4 -15.0V



12V
Voltage

105Ah
Capacity

Gel
Technology

Deep
Cycle

The Maxon MXG range of Hybrid Gel Deep Cycle batteries are a competitively priced battery that doesn't compromise quality. Using Japanese Technology they have an extremely high cycle rate (1200 Cycles @50% DOD) compared to standard AGM & Gel batteries and are well known for their reliability.

The MXG12 series batteries are a rechargeable 12V Hybrid Gel deep cycle battery. They are highly suitable for all deep cycling applications such as Solar, Camping, Caravan, and Marine because of their high cycling ability and fast recharging capability. They are also used in a range of standby and industrial equipment applications.

GENERAL FEATURES

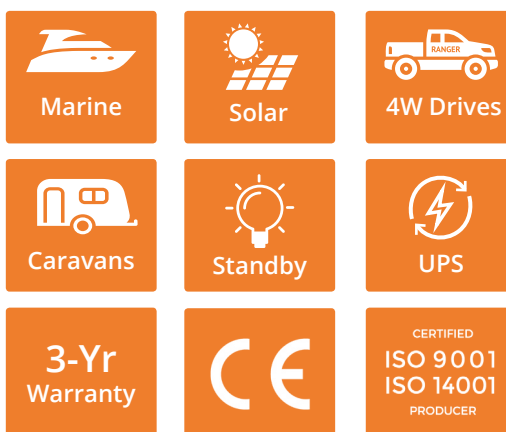
- High Performance Gel hybrid battery
- Integrated design to ensure the best in uniformity and reliability
- High cycle ability 1200 cycles @50% DOD extreme vibration resistant
- Advanced AGM separators

DIMENSIONS & WEIGHT

Length (mm)	306
Width (mm)	169
Height (mm)	208
Total Height (mm)	214
Weight (kg)	27.5

APPLICATIONS

- Caravan, Camper vans and 4WD
- Portable power
- Marine equipment
- Solar systems
- Standby systems



COMPLIED STANDARDS

IEC 60896-21/22	JIS C8704
IEC61427	BS6290 part4
GB/T 19638	CE/ISO

BATTERY DISCHARGE TABLE

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

F.V/Time	15min	30min	45min	1h	2h	3h	5h	8h	10h	20h
1.60V	159.60	99.33	71.19	62.90	38.33	28.04	18.06	11.03	9.83	5.45
1.65V	152.88	96.60	69.30	61.22	37.59	27.51	17.75	10.92	9.73	5.40
1.70V	146.27	93.98	67.41	59.54	36.96	26.99	17.54	10.82	9.64	5.34
1.75V	139.65	91.35	65.52	57.86	36.02	26.36	17.22	10.71	9.54	5.29
1.80V	132.93	88.62	63.63	56.18	35.18	25.73	17.01	10.61	9.45	5.25

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

F.V/Time	15min	30min	45min	1h	2h	3h	5h	8h	10h	20h
1.60V	283.4	176.3	126.5	111.7	68.1	49.8	32.0	19.6	17.5	9.7
1.65V	271.6	171.6	123.1	108.7	66.8	48.9	31.6	19.4	17.3	9.6
1.70V	259.8	166.9	119.7	105.7	65.6	47.9	31.1	19.2	17.1	9.5
1.75V	248.0	162.2	116.4	102.7	64.0	46.8	30.7	19.0	17.0	9.4
1.80V	236.2	157.4	113.0	99.7	62.4	45.7	30.2	18.8	16.8	9.3

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.

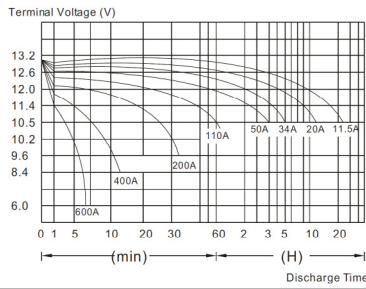


BENEFITS

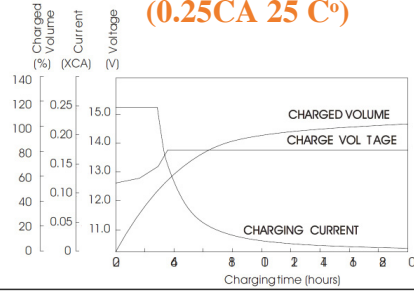
- ✓ High performance Gel / AGM Hybrid
- ✓ High Cycling up to 1,200 cycles @ 50% DOD
- ✓ Excellent for energy storage
- ✓ Fully sealed, allows for safe operation in any position
- ✓ Impact & fire resistant ABS case
- ✓ Up to 3 years replacement warranty
- ✓ Resistant to heavy vibrations
- ✓ Low self-discharge Relief Valve with flame-integrated arrestors
- ✓ Japanese Technology

PERFORMANCE CHARACTERISTICS

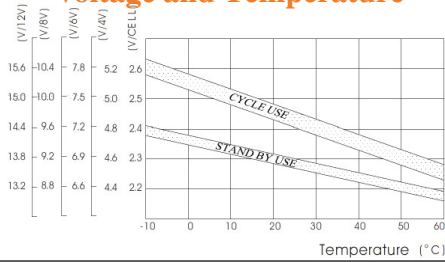
Discharge Characteristics



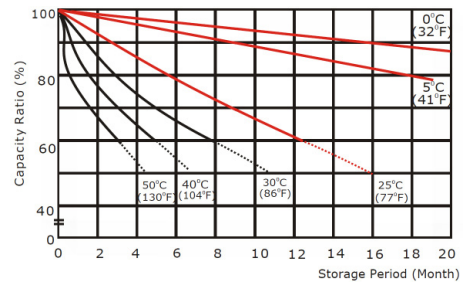
Constant Voltage Charging Characteristics (0.25CA 25 C°)



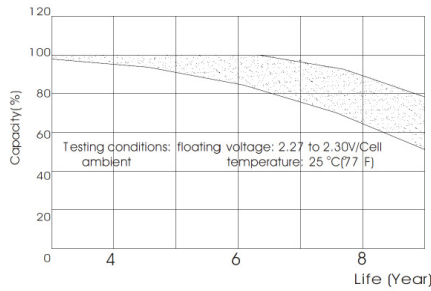
Relationship between Charging voltage and Temperature



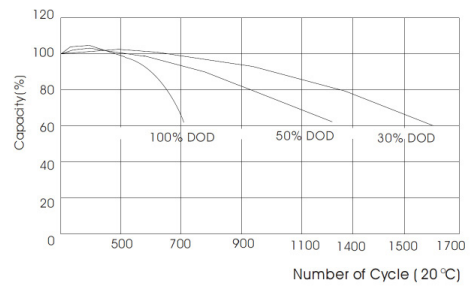
Self-discharge Characteristics



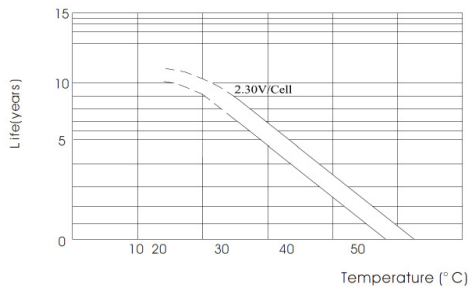
Float service life



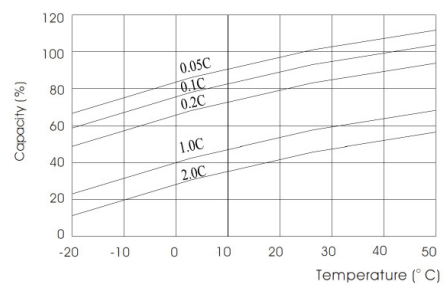
Cycle service life @ different DOD



Temperature Effects on Float Life



Temperature Effects on Capacity



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	ABS (UL94-V0)	Flame Si-Rubber and aging resistance	F2	Advanced AGM separator for high pressure cell design	Dilute high purity sulfuric acid	Two layers epoxy resin seal