



EnerRocket™
CONTINUOUSLY SAFEGUARDING

ESH 12-450W FR

SMF VRLA RECHARGEABLE BATTERY

HIGH RATE
LONG
LIFE
SERIES

APPLICATIONS

UPS Systems
Telecommunication Systems
Fire Alarm Safety & Security Systems
Medical Equipment

COMPLIANCE STANDARDS

IEC 60896 PART 21 & 22
Design Life as per Eurobat Standards

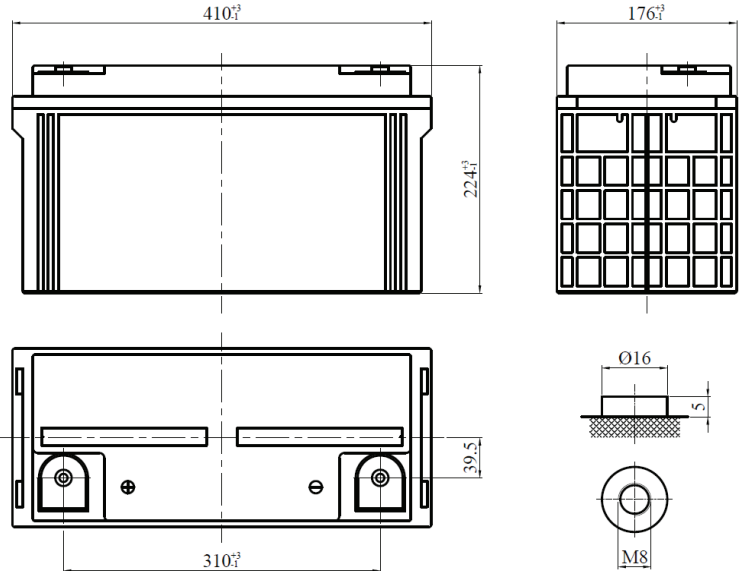
TECHNICAL FEATURES



- Non-Spillable Sealed Construction
- Thin Plate Pure Lead Grid
- Absorbent Glass Mat System (AGM System)
- ABS (Acrylonitrile Butadiene Styrene) construction
- Gas Recombination
- Venting System for low internal pressure
- Low Self-Discharge
- Heavy-Duty, Highly Optimized Grids
- High Power Output
- Maintenance Free Operation

CHARACTERISTICS

Nominal Voltage	12V	
Design Life	12 Years	
Capacity (25°C)	15min 1.67ECV	450w
Internal Resistance(25°C, 100% Charge)	≤4.0 mΩ	
Self Discharge (20°C)	1 month	Remaining Capacity 97%
Operating Temperature	Discharge	-20°C - 60°C
	Charge	-10°C - 60°C
	Storage	-20°C - 60°C
Normal Operating Temperature	25°C ± 3°C	
Maximum Discharge current (25°C)	840A (5sec)	
Maximum Charging current (25°C)	37A	
Charge Methods	14.4 to 14.7V	
Constant Voltage Charge 25°C	Temp.Compensation -30mV/°C	
Cyclic Use		
Charge Methods	13.4 to 13.8V	
Constant Voltage Charge 25°C	Temp. Compensation -20mV/°C	
Standby Use		



SPECIFICATIONS

Length	Width	Height	Total Height	Weight (kg)
410mm	176mm	224mm	224mm	36.5 ± 5%

CONSTANT CURRENT DISCHARGE (Amperes) AT 25 °C

End Voltage Volt/Cell	3min	5min	10min	15min	20min	25min	30min	45min	60min
1.60V	487	414	340	266	223	189	160	111	86.1
1.65V	471	405	318	255	211	179	151	105	81.6
1.67V	465	402	309	250	206	175	147	103	79.8
1.70V	446	384	294	244	198	168	143	99.8	77.7
1.75V	427	368	287	234	191	161	135	94.5	74.6
1.80V	406	362	282	223	183	157	131	92.4	72.5

CONSTANT POWER DISCHARGE (Watts) AT 25 °C

End Voltage Volt/Cell	3min	5min	10min	15min	20min	25min	30min	45min	60min
1.60V	904	764	593	475	403	341	294	203	161
1.65V	886	741	575	457	386	324	278	197	156
1.67V	879	732	568	450	379	317	271	194	154
1.70V	856	699	548	440	371	311	269	191	151
1.75V	832	667	538	424	358	301	261	185	147
1.80V	813	643	510	406	338	287	249	180	143

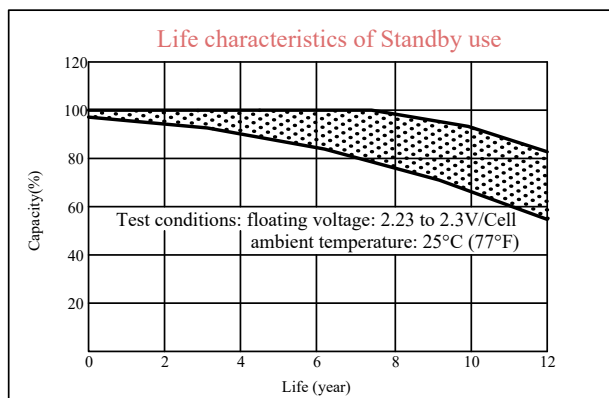
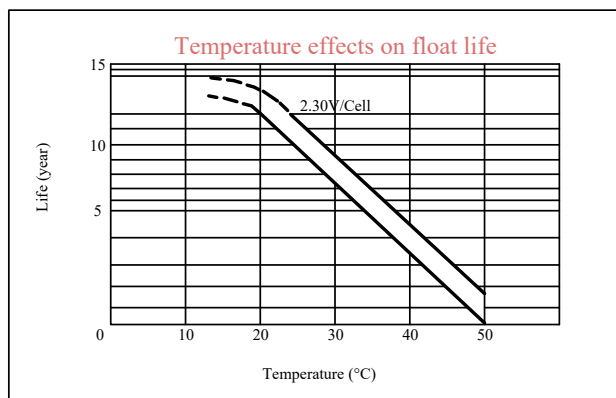
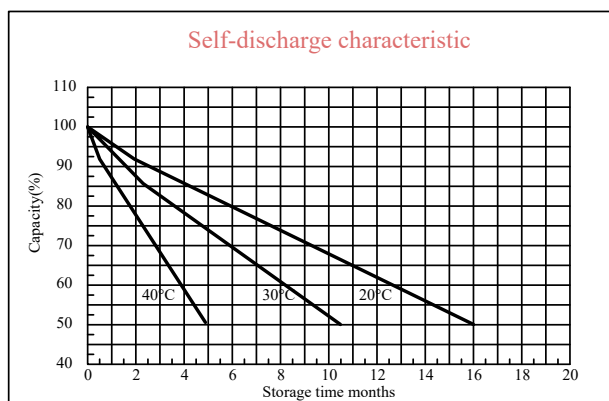
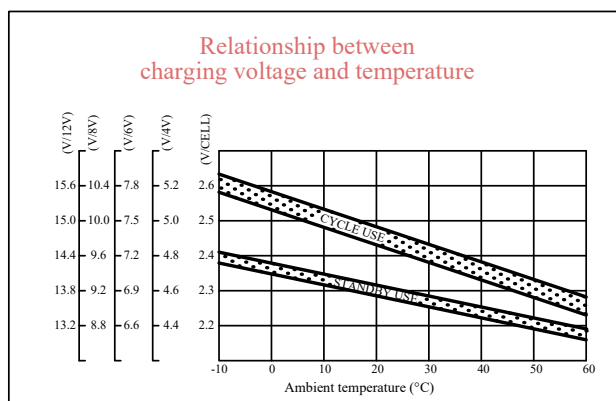
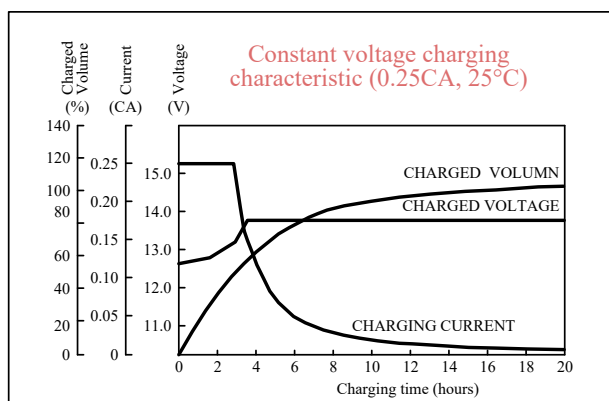
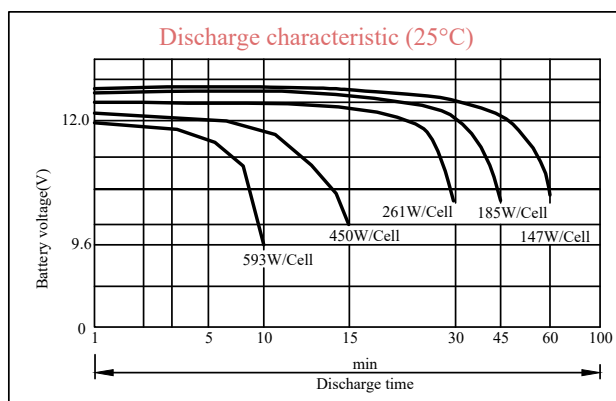
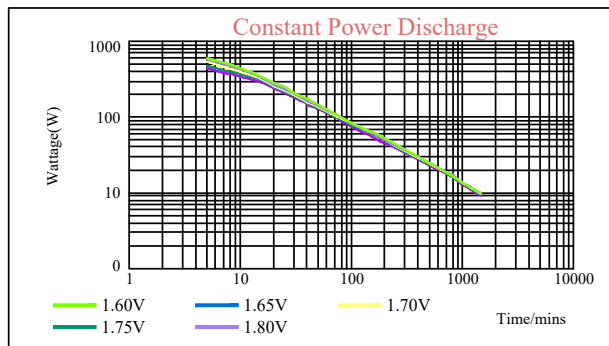
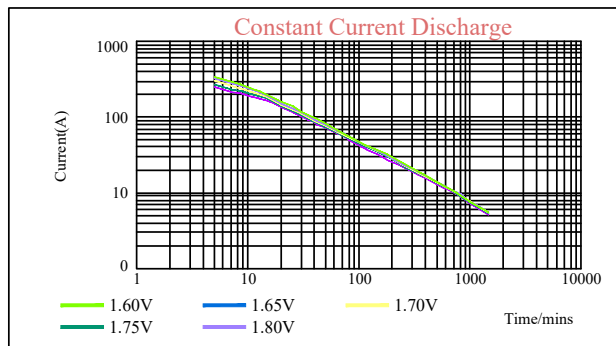


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Note:
GPSGC reserves the right to make changes to the above values without any notice.
All data and discharge characteristics are average values based on actual discharge cycle tests performed and not minimum values.

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