



EnerRocket™

CONTINUOUSLY SAFEGUARDING

ESC 120-12 FR

SMF VRLA RECHARGEABLE BATTERY

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

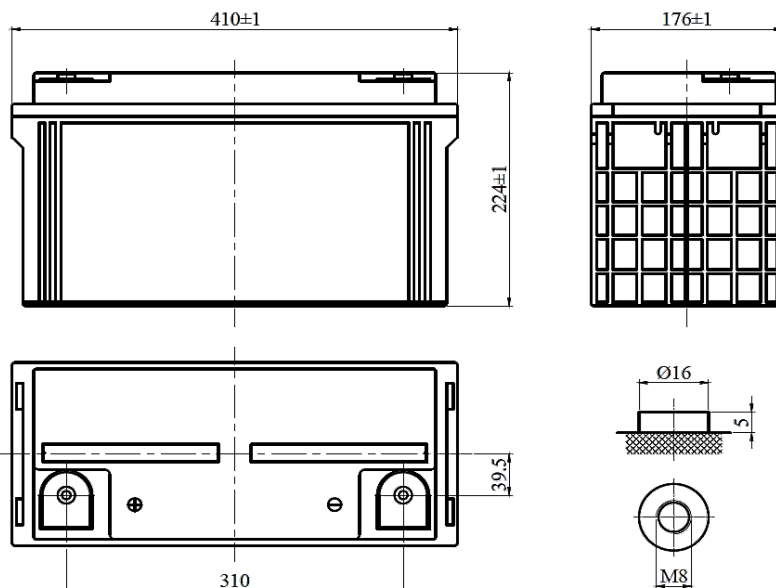
TECHNICAL FEATURES



ABS



- Non-Spillable Sealed Construction
- Absorptive 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



SPECIFICATIONS

Length	Width	Height	Total Height	Weight (kg)
410 mm	176 mm	224 mm	224 mm	33.5 Kg ±5%

CHARACTERISTICS

Nominal Voltage	12 V	
Design Life	12 Years	
Capacity 25° (77°F)	10 Hour rate	120 Ah
Internal Resistance (25°C, 100% Charge)		<5.3 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 ± 2°C
Maximum Discharge current		950A (5sec)
Maximum Charging current		36A
Short Circuit Current		2250A
Charge Methods		14.4 to 14.7V
Constant Voltage Charge 77°F (25°C) - Cycle Use		Temp. Compensation -30mV/°C
Charge Methods		13.4 to 13.8V
Constant Voltage Charge 77°F (25°C) - Standby Use		Temp. Compensation -20mV/°C

CONSTANT CURRENT DISCHARGE (Amperes) AT 25 °C

End Cell Voltage / Cell	10 min	15 min	20 Min	30 min	60 Min	1.5 h	2 h	3 h	4 h	5 h	10 h
1.60	225	209	132	117	73.3	53.6	42.2	29.9	24.6	20.3	12.4
1.65	240	201	126	114	72.8	52.5	41.4	29.3	24.3	20.1	12.3
1.70	228	193	121	110	71.3	51.4	40.5	28.7	24.1	19.7	12.2
1.75	214	184	116	106	69.1	50.2	39.5	28.0	24.0	19.2	12.1
1.80	199	177	110	104	67.0	48.8	38.4	27.2	22.2	18.9	12.0

CONSTANT POWER DISCHARGE (Watts) AT 25 °C

End Cell Voltage / Cell	10 min	15 Min	20 Min	30 min	60 min	1.5 h	2 h	3 h	4 h	5 h	10 h
1.60	460	367	243	225	147	101.2	82.0	58.0	46.9	40.7	21.9
1.65	437	354	228	218	145	99.2	80.0	57.3	45.5	40.5	21.9
1.70	414	343	219	211	143	96.2	79.0	56.6	44.6	40.2	21.6
1.75	392	331	213	204	139	93.2	77.0	56.0	43.7	40.0	21.5
1.80	367	319	203	198	134	91.5	75.0	55.0	43.0	39.6	21.4



EnerRocket™

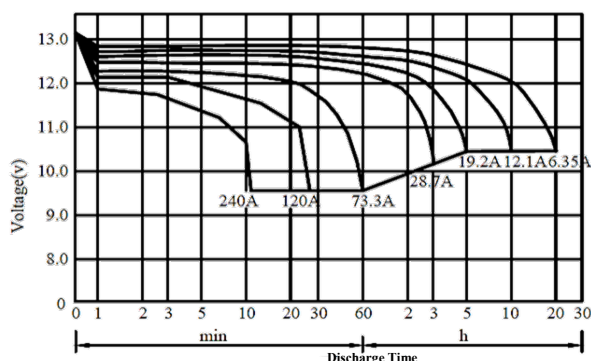
CONTINUOUSLY SAFEGUARDING

ESC 120-12 FR

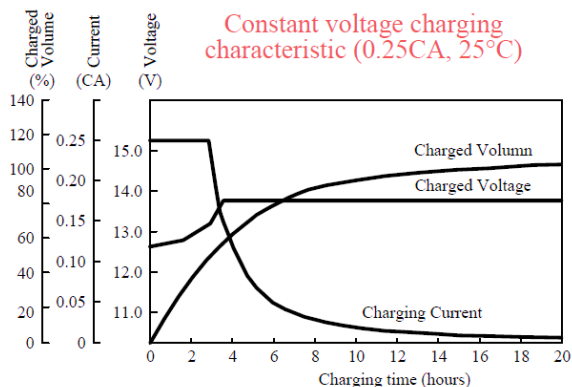
SMF VRLA RECHARGEABLE BATTERY

LONG LIFE SERIES

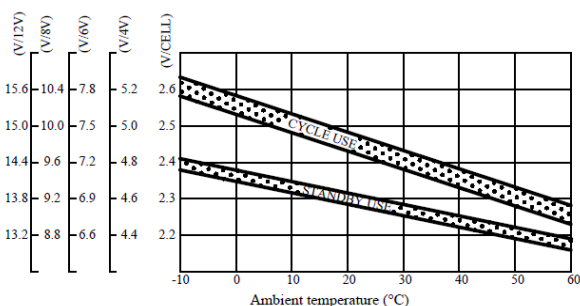
Discharge Characteristic (25°C)



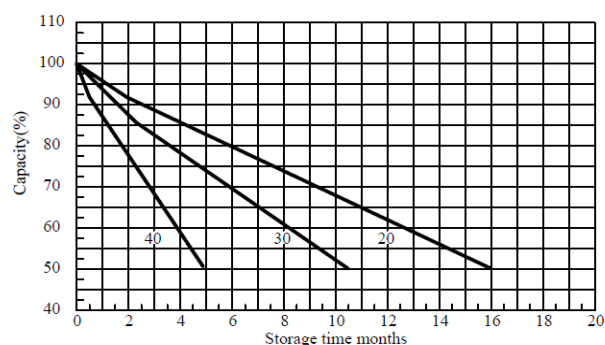
Constant voltage charging characteristic (0.25CA, 25°C)



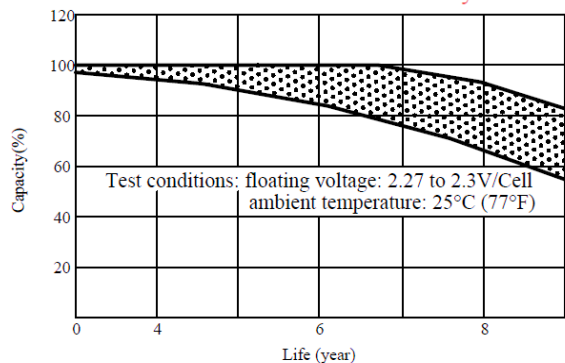
Relationship between charging voltage and temperature



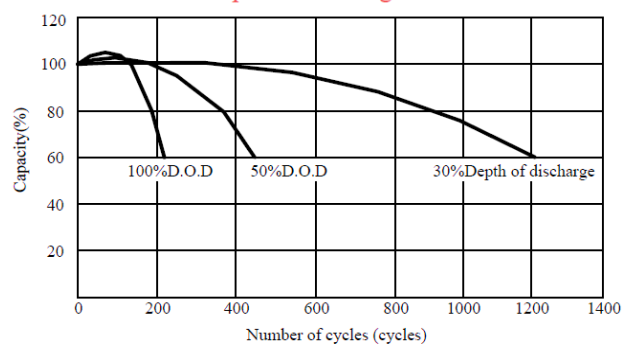
Self-discharge characteristic



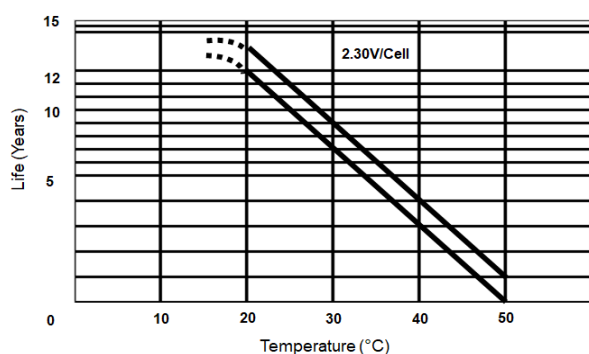
Life characteristics of Standby use



Cycle service life in relation to depth of discharge



Temperature effects on Float Life



Temperature effects on capacity

