

ES 18-12

12V - 18Ah

INTRODUCTION

The most advanced technology of ROCKET, Valve Regulated Lead Acid batteries make them highly useful in a broad range of applications. The use of high-purity calcium alloy maximizes the longevity of ROCKET batteries to ensure excellent performance in any circumstances.

ES Series are specially designed to provide better cyclic life and are ideally suited for areas prone to frequent power failures.

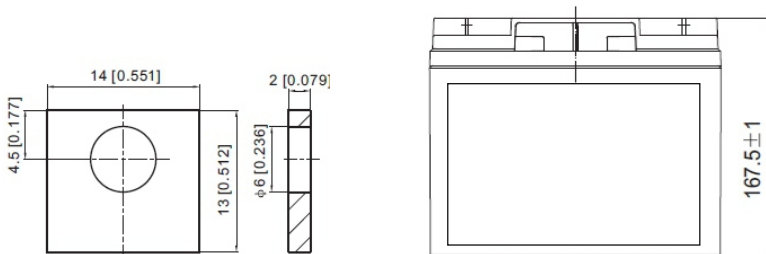
The unique construction coupled with the use of special sealing epoxies and long sealing paths of ROCKET series ensures that no electrolyte leakage can occur from terminals or cases of any ROCKET Batteries. This feature ensures safe & efficient operation of ROCKET batteries in any position.

TECHNICAL FEATURES

- Non-Spillable Sealed Construction
- Absorptive Glass Mat System (AGM System)
- ABS (Acrylonitrile Butadiene Styrene) container and cover
- Micro millimeter SiO₂ and H₂SO₄ gelled electrolyte technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance or water adding.
- Maintenance-Free Operation
- Low Pressure Venting System
- Can be mounted in any orientation.
- Computer designed lead, calcium tin alloy grid for high power density.
- Low Self-Discharge - Long Shelf Life
- Wide Operating Temperature Range

APPLICATIONS

- UPS
- Telecom Communication Equipments
- Medical Instruments
- Computer Backup
- Solar Powered Systems.



SPECIFICATION

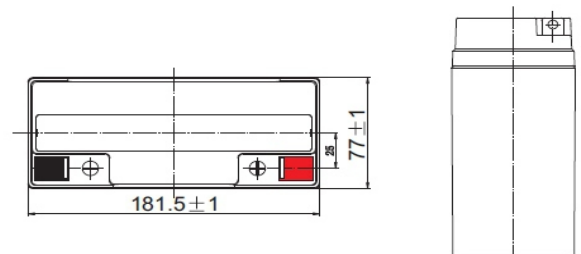
Nominal Voltage		12V
Capacity (20HR, 25°C)		18Ah
Dimension	Length	181.5mm (7.14inch)
	Width	77mm (3.03inch)
	Height	167.5mm (6.59inch)
	Total Height	167.5mm (6.59inch)
Approx Weight		5.6kg (12.35lbs)
Design Life		7 Years

CHARACTERISTICS

Capacity 25°C (77°F)	20 hour rate	18Ah
	10 hour rate	16.7Ah
	5 hour rate	15.3Ah
	1 hour rate	11.3Ah
Internal resistance (Fully charge, 25°C)		16mΩ
Self-discharge (25°C)	1 month	Remaining Capacity:97%
Operating temperature range	Discharge	-20°C~60°C
	Charge	-10°C~60°C
	Storage	-20°C~60°C
Maximum discharge current		77°F(25°C)270A(5 Sec.)
Charge Methods (Constant Voltage Charge 77°F(25°C)) - Cyclic Use		Cycle Use 14.4 to 15.0V Temp.compensation-30mV/°C
Charge Methods (Constant Voltage Charge 77°F(25°C)) - Standby Use		Standby Use 13.5-13.8V Temp. compensation-20mV/°C

COMPLAINTS STANDARD

- JIS
- IEC 60896 PART 1 & 2
- BS6290-4,
- Eurobat Guide - HIGH Performance



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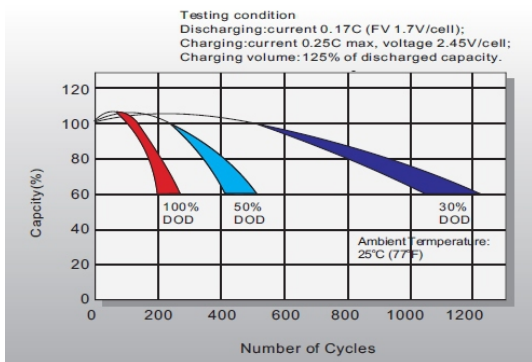
CONSTANT CURRENT DISCHARGE (Amperes) at 25°C

End Point Volts/Cell	5min	10min	15min	30min	1h	2h	3h	4h	5h	10h	20h
1.60V	83.40	56.64	41.88	24.84	13.56	7.88	6.08	4.88	4.00	2.17	1.14
1.65V	75.60	52.20	39.24	23.52	13.44	7.56	5.90	4.74	3.86	2.15	1.13
1.70V	68.52	48.36	36.84	22.32	13.08	7.45	5.66	4.58	3.77	2.10	1.12
1.75V	62.28	44.40	34.56	21.48	12.72	7.27	5.51	4.46	3.67	2.06	1.09
1.80V	55.20	40.32	31.56	20.64	12.12	7.01	5.41	4.37	3.58	2.00	1.08

CONSTANT POWER DISCHARGE (Watts per cell) at 25°C

End Point Volts/Cell	5min	10min	15min	30min	1h	2h	3h	4h	5h	10h	20h
1.60V	138.24	96.24	73.32	45.24	25.56	15.00	11.62	9.38	7.70	4.27	2.23
1.65V	128.28	90.72	69.72	43.20	25.44	14.40	11.33	9.13	7.49	4.22	2.22
1.70V	117.96	84.84	66.12	41.28	24.96	14.28	10.91	8.86	7.31	4.15	2.20
1.75V	110.16	79.68	62.76	39.84	24.36	13.92	10.63	8.64	7.14	4.07	2.16
1.80V	99.84	73.68	58.20	38.76	23.40	13.56	10.49	8.48	6.98	3.97	2.14

ES-CYCLE LIFE EXPECTANCY



Discharge Characteristics

