

# ESC 200-12

12V - 200Ah

## INTRODUCTION

The most popular series of ROCKET Batteries; The ESC series has been performing with a proven track record for years. It has successfully exemplified its quality and reliability in some of the most demanding power conditions by providing un-relentless backup power supply.

With the same characteristics as that of the ES series, the ESC series provides power reliability to applications which require longer backup time.

This series is widely used in UPS as well as Telecommunication Applications in many parts of the world. The ESC series is world renowned and recognized as a Highly reliable Battery System in the industry.

## TECHNICAL FEATURES

- Non-Spillable Sealed Construction
- Absorbent Glass Mat System (AGM System)
- ABS (Acrylonitrile Butadiene Styrene) container and cover
- Gas Recombination
- Maintenance-Free Operation
- Low Pressure Venting System
- Heavy - Duty Grids
- Low Self-Discharge - Long Shelf Life
- Wide Operating Temperature Range

## APPLICATIONS

- UPS
- Telecom Communication Equipments
- Fire Alarm & Security Systems
- Medical Instruments
- Emergency Lighting
- Computer Backup

## COMPLAINTS STANDARD

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

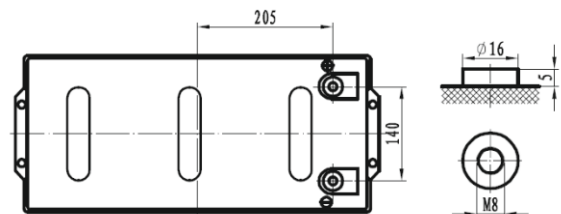
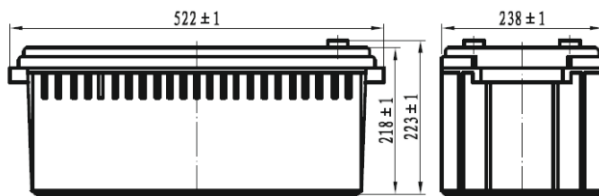
## SPECIFICATION

Nominal Voltage		12V
Capacity (20HR, 25°C)		200Ah
Dimension	Length	522mm (20.55inch)
	Width	238mm (9.37inch)
	Height	218mm (8.58inch)
	Total Height	223mm (8.78inch)
Approx Weight		60kg (132.28 lbs)
Design Life		10 Years

## CHARACTERISTICS

Capacity 25°C (77°F)	20 hour rate	200Ah	
	10 hour rate	196Ah	
	5 hour rate	183.5Ah	
	1 hour rate	138Ah	
Internal resistance (Fully charge, 25°C)		3m Ω	
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) 1000A(5 Sec.)	
Short circuit current		3500A	
Charge Methods (Constant Voltage Charge 77°F(25°C)) - Cyclic Use	Cycle Use 14.4 to 14.7V		
	Max. charging Current 60A		
	Temp. compensation - 30mV/°C		
Charge Methods (Constant Voltage Charge 77°F(25°C)) - Standby Use	Standby Use 13.6-13.8V		
	Temp. compensation - 20mV/°C		

**THE BATTERY CONTAINER AND COVER ARE AVAILABLE BOTH IN ABS plastic and Flame Retardant (FR).**



# ESC 200-12

12V - 200Ah

## CONSTANT CURRENT DISCHARGE (Amperes) at 25°C

End Point Volts/Cell	5min	10min	15min	20min	25min	30min	35min	40min	45min	50min	55min	1h	1.25h
1.60V	504	401	327	260	218	196	174	159	149	142	135	129	108
1.65V	453	377	308	251	210	188	167	153	143	136	131	126	105
1.70V	422	356	288	241	202	181	162	148	139	132	127	123	101
1.75V	401	332	269	230	194	175	157	144	135	129	123	120	98.0
1.80V	368	305	250	198	173	168	147	137	130	125	119	117	94.6

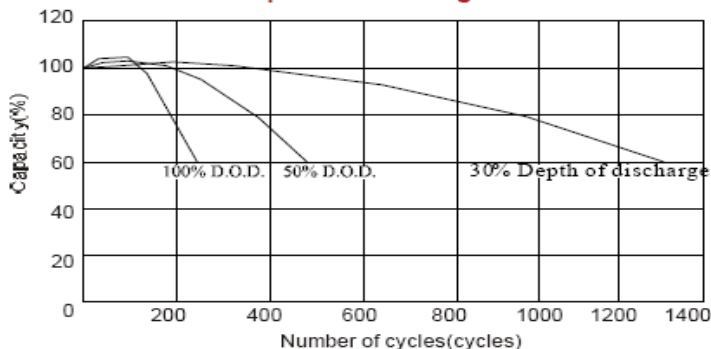
End Point Volts/Cell	1.5h	1.75h	2h	2.25h	2.5h	2.75h	3h	4h	5h	6h	7h	8h	9h	10h	12h	24h
1.60V	90.8	81.3	73.2	68.8	63.6	60.0	50.3	41.5	36.9	31.3	27.0	22.9	20.4	21.1	17.5	9.34
1.65V	87.8	78.8	70.7	66.7	61.4	58.3	49.1	40.1	36.2	30.6	26.5	22.5	20.3	20.9	17.3	9.29
1.70V	85.5	76.3	69.3	64.7	60.5	56.5	48.2	39.5	35.4	30.1	26.2	22.3	20.1	20.7	17.2	9.25
1.75V	83.2	73.7	67.3	62.6	58.8	54.8	47.1	38.5	34.7	29.7	25.9	22.1	19.9	20.4	17.1	9.2
1.80V	80.5	71.2	64.8	60.5	56.3	53.0	45.7	37.3	33.9	29.3	25.6	21.9	19.7	20	17	9.16

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

End Point Volts/Cell	5min	10min	15min	20min	25min	30min	35min	40min	45min	50min	55min
1.60V	840	700	566	464	407	374	336	311	288	248	227
1.65V	819	666	547	447	393	360	325	302	262	242	222
1.70V	777	631	530	434	383	347	318	295	257	236	217
1.75V	733	594	512	425	373	332	310	289	252	232	213
1.80V	694	564	482	409	362	319	304	284	247	228	210

End Point Volts/Cell	1h	1.25h	1.5h	1.75h	2h	2.25h	2.5h	2.75h	3h	4h	5h	6h	7h	8h	9h	10h	12h	24h
1.60V	218	185	160	148	137	125	117	110	97.4	80.5	70.3	60.1	52.3	47.4	42.8	39.2	34.2	18.4
1.65V	213	181	156	145	134	122	115	107	96.1	79.1	69.7	59.1	51.3	46.4	41.8	38.2	33.3	17.9
1.70V	208	177	153	142	131	119	112	104	94.8	77.9	69.1	58.3	50.5	45.6	41	37.4	32.6	17.6
1.75V	203	173	149	138	128	116	109	101	93.4	75.8	68.6	57.3	49.6	44.8	40.2	36.6	31.9	17.2
1.80V	198	169	147	135	124	113	106	98	92.4	74.1	68.1	56.4	48.7	43.9	39.3	35.7	31.2	16.8

Cycle service life in relation to depth of discharge



Discharge characteristic (25°C)

