

ESH 100-12

(AGM + Gel + FR)

Pasted High Technology
Electrolyte Suspension
For Longer Service Life

INTRODUCTION

ESH Series (Gel+FR) are designed for general-purpose high rate applications such as UPS, Telecom, and Electrical Utilities. With 10 years Design Life, the batteries comply o the most popular international standards. The series is engineered to provide performance reliability and consistency over the life of the product. The battery uses silica gel to immobilize the electrolyte inside the battery.

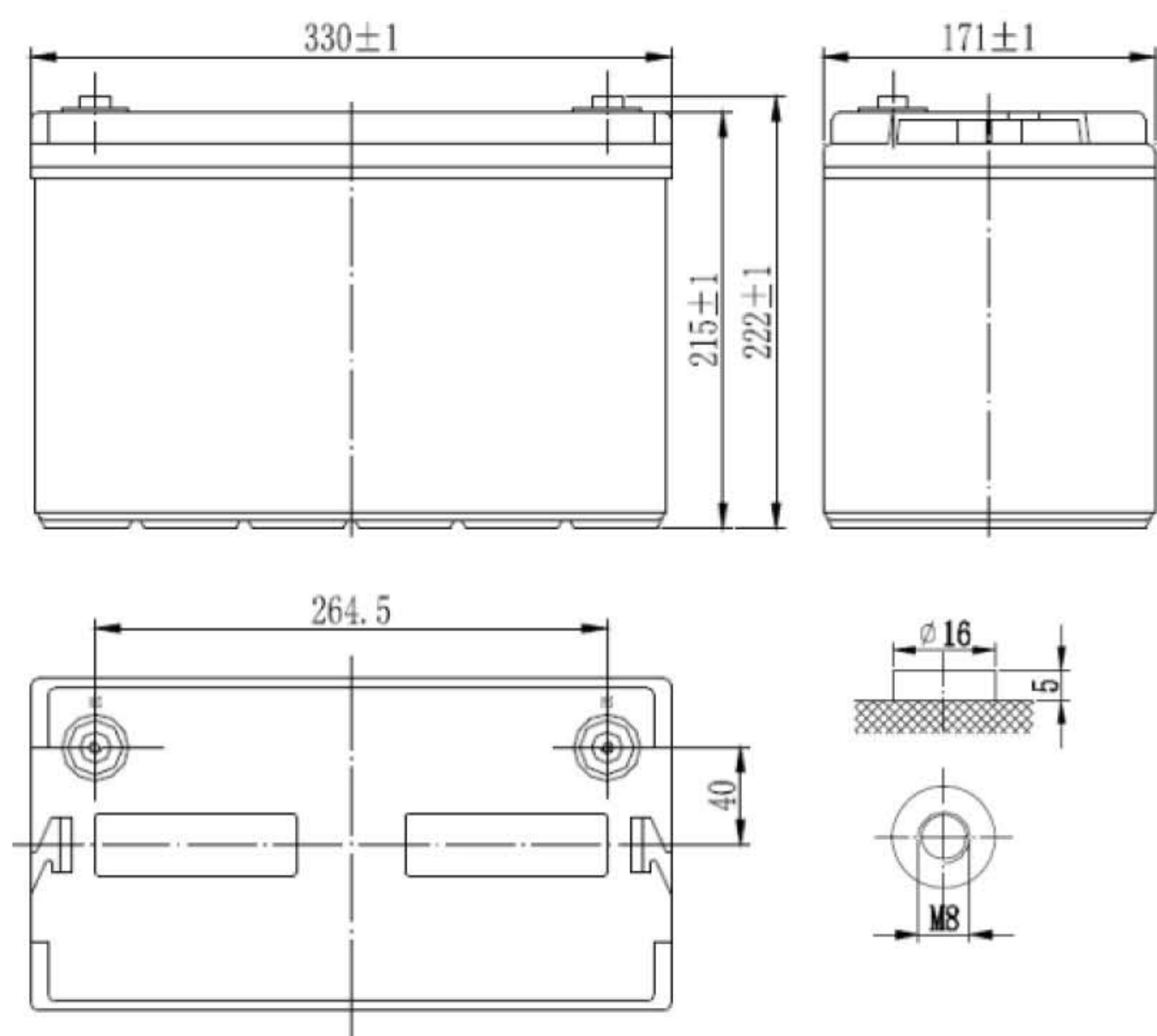
In order to stay in competition with the international battery market, Global has established capital and technical ties with the world's most renowned battery manufacturers, such as Yuasa Corporation of Japan, Hagen Batteries AG. of Germany, and SAFT of France.

TECHNICAL FEATURES

1. 10 years Design Life @ 25 C
2. V0 Class Flame Retardant ABS Container
3. Lead-tin-Calcium alloy grid for long service life, in Float and Cyclic
4. Lower Internal Resistance
5. High Power Density
6. High Realibility
7. Low Pressure Venting System
8. Heavy-Duty Grids
9. High Recovery Capacity
10. Absorptive Glass Mat System (AGM System)
11. Proven Silica Gel Technology improves Battery Cyclic Life

APPLICATIONS

1. UPS Application
2. Telecom Application
3. Medical Instruments
4. Camera & Photographic
5. Personal Computers
6. Lighting Equipment
7. Security Alarm System



SPECIFICATION

Nominal Voltage		12V
Capacity (10HR, 25°C)		100Ah
Dimension	Length	330mm (12.99inch)
	Width	171mm (6.73inch)
	Height	215mm (8.46inch)
	Total Height	222mm (8.74inch)
Approx Weight		32.0kg (70.5bs)
Design Life		10 Years

CHARACTERISTICS

Capacity 25°C(77°F)	10 Hour Rate	100 Ah
	5 Hour Rate	88 Ah
	1 Hour Rate	64.8 Ah
Internal resistance		4.5mΩ
Self-discharge (20°C)	1 month	3% of capacity declined
Self-discharge	Discharge	-20°C~60°C
	Charge	-10°C~60°C
	Storage	-20°C~60°C
Maximum discharge current		900A(5s)
Short Circuit Current		2200A
Maximum charging current		30A
Charge Methods (Constant Voltage Charge 77°F(25°C)) - Cyclic Use		Cycle Use 2.30VPC to 2.35V
		Temp. compensation - 30mV/°C
Charge Methods (Constant Voltage Charge 77°F(25°C)) - Standby Use		Standby Use 2.25VPC to 2.27VPC
		Temp. compensation - 20mV/°C

CONSTANT CURRENT DISCHARGE (Amperes) at 25°C

End Point Volts/Cell	10min	15min	30min	1h	3h	5h	10h	20h
1.60V	233.00	192.00	107.00	64.80	26.50	18.60	10.40	5.46
1.65V	218.00	182.00	104.00	63.70	25.90	18.30	10.30	5.43
1.70V	202.00	173.00	100.00	62.70	25.40	18.00	10.20	5.40
1.75V	188.00	161.00	96.50	61.60	24.80	17.60	10.10	5.35
1.80V	173.00	150.00	94.50	60.70	24.10	17.20	10.00	5.30

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

End Point Volts/Cell	10min	15min	30min	45min	1h	2h	3h	5h
1.60V	406.00	332.00	202.00	147.00	129.00	72.50	51.10	35.70
1.65V	386.00	327.00	196.00	143.00	127.00	71.20	50.60	35.50
1.70V	365.00	316.00	190.00	140.00	126.00	69.90	50.00	35.30
1.75V	346.00	305.00	184.00	137.00	122.00	68.60	49.40	35.10
1.80V	324.00	294.00	178.00	134.00	118.00	68.00	48.50	34.70

Note:

1)Continuous prolonged use at elevated temperature will reduce the battery life by approximately one half for every 8°C above 25°C.