



## HGL18-12

12-Volt, 18AH @ 20HR

Valve Regulated  
Lead-Acid Battery

Design for Standby  
Power Applications

### Life Expectancy:

Expected trickle life: 3-5 years at 25°C.

### Application

UPS, Fishing Lights, Emergency Lights, Lawn Mowers, Video Camcorders(VCR).

### Specifications

Nominal Voltage	12V(6 cells per unit)
Rated Capacity	18AH @20HR-Rate to 1.75V per cell@25°C
	16.7AH @10HR-Rate to 1.75V per cell@25°C
	15.3AH @5HR-Rate to 1.70V per cell@25°C
	10.8AH @1HR-Rate to 1.60V per cell@25°C
Weight	Approx. 5.5kg (12.10lbs.)
Max. Short-Duration Discharge Current	180 A (5S)
Internal Resistance of charged battery	Approx. 14 mΩ
Short Circuit Current	900 A

### Operating Temperature Range

Nominal Operating Temperature	25°C (77°F)	
Discharge	-15°C ~ +50°C	5°F ~ 122°F
Charge	-15°C ~ +40°C	5°F ~ 104°F
Storage	-15°C ~ +40°C	5°F ~ 104°F
Capacity affected by Temperature (20 hour rate)	40°C (104°F)	102%
	25°C (77°F)	100%
	0°C (32°F)	85%
	-15°C (5°F)	65%
Capacity loss per month at 20°C	<3%	

### Mechanical Specifications

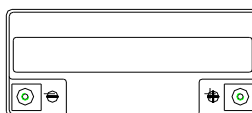
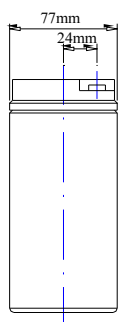
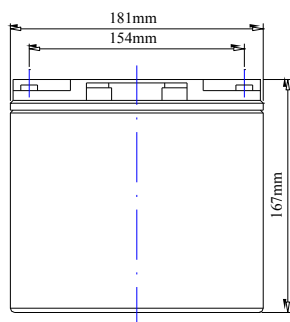
Overall Height (H)	167±2mm	6.57"
Container Height (h)	167±2mm	6.57"
Length (L)	181±2.0mm	7.13"
Width (W)	77±1.0mm	3.03"
Terminal	M5 Female threaded terminal	
Terminal Torque	2.0 ~ 3.0 N.M	
Container Material	Standard	ABS (UL 94-HB)
	Optional	ABS Flame Retardant (UL94-VO)
Sealed Construction	Can be operated in any position without leakage.	

### Charge Characteristics

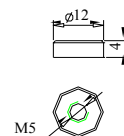
Trickle use	Initial current	No limit
	Control Voltage	13.5 to 13.8 VDC/unit(25°C)
Cycle use	Initial current	4.5 A or smaller
	Control Voltage	14.40~14.9VDC/unit (25°C)
Charging Temperature Compensation	Cycle use	-4mV/cell/°C
	Float use	-3mV/cell/°C

CAUTION : Do not charge in a sealed container.

### DIMENSIONS (All units shown in mm)



Terminal: M5  
unit: mm



### Constant Current Discharge Rating Amperes @ 77°F (25°C)

Cut off voltage V/cell	15M	30M	45M	1H	2H	3H	5H	8H	10H	12H	20H
1.75V	32	18	13.3	10.7	5.8	4.7	3.2	2.07	1.69	1.44	0.90

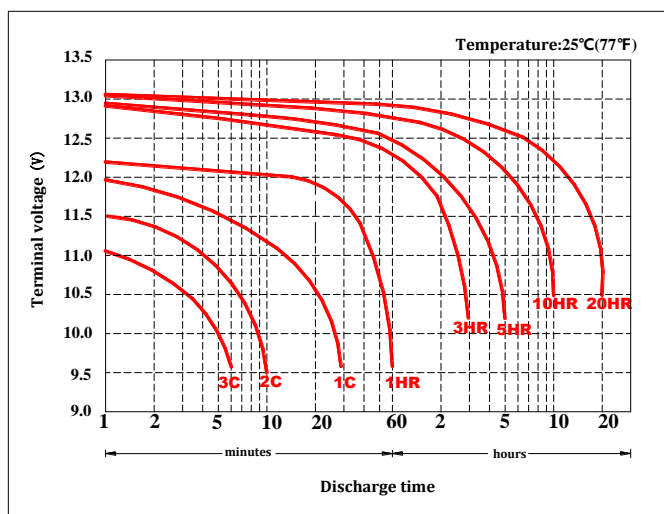
Note The above data are average values, and can be obtained with 3 charge/discharge cycles. These are not minimum values.



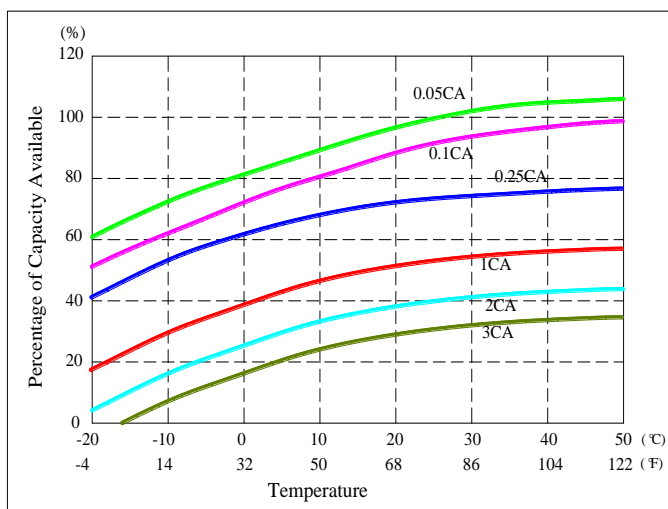
## PRODUCT DATA SHEET

This information is generally descriptive only and is not intended to make or imply any representation, guarantee or warranty with respect to any cells and batteries. Cell and battery designs specification are subject to modification without notice. Contact Fullriver for the latest information.

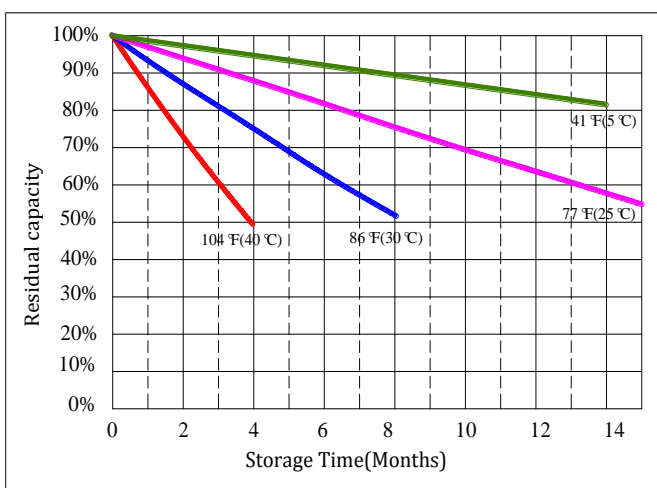
### Discharge Characteristic Curves at 25°C (77°F)



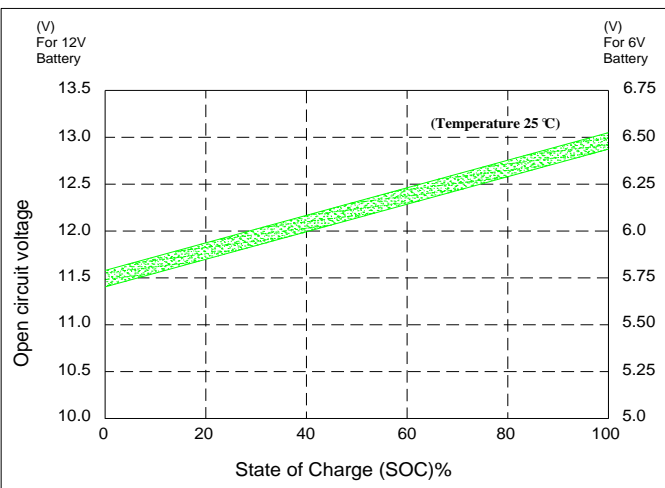
### Temperature Effects In Relation to Battery Capacity



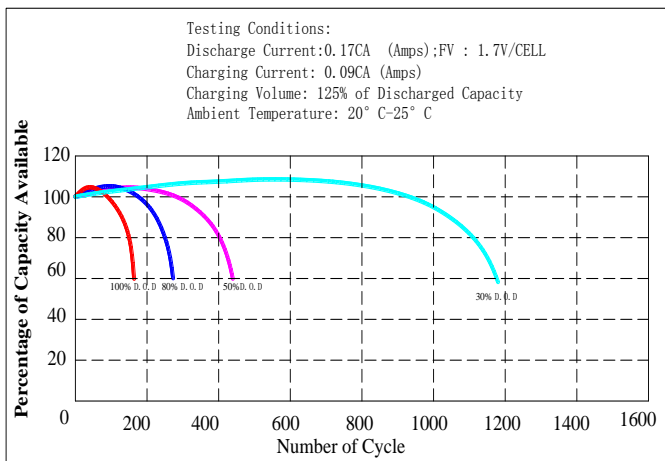
### Capacity Retention Characteristic



### State of Charge (SOC) vs Open Circuit Voltage (OCV)



### Cycle Life vs. Depth of Discharge (DOD)



### Float Service Life

