



# HR12-620W(12V620W)

## Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	620W@15min-rate to 1.67V per cell @25°C
Weight	Approx. 56.0Kg (Tolerance ±3.0%)
Internal Resistance	Approx. 3.8 mΩ
Terminal	F12(M8)
Max. Discharge Current	1800A (5 sec)
Short Circuit Current	3200A
Design Life	15 years
Max. Charging Current	54.0 A
Reference Capacity	C10 170.0AH C20 180.0AH
Standby Use Voltage	13.6 V~13.8 V @ 25°C Temperature Compensation: -3mV/°C/Cell
Equalization Voltage	14.6 V~14.8 V @ 25°C Temperature Compensation: -4mV/°C/Cell
Operating Temperature Range	Discharge: -20°C~60°C Charge: 0°C~50°C Storage: -20°C~60°C
Normal Operating Temperature Range	25°C ±5°C
Self Discharge	RITAR Valve Regulated Lead Acid (VRLA) batteries can be stored for up to 6 months at 25°C and then recharging is recommended. Monthly Self-discharge ratio is less than 3% at 25°C. Please charge batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.



HR ( High Rate ) series Valve Regulated Lead Acid (VRLA) battery is designed for heavy load discharge applications with 15 years design life in float service. By using strong grids, thick plate and specially designed active material. It is with lower I.R, lower self discharge rate, high power, and longer service life. The HR series battery offers 30% more power output than the standard series. It is suitable for high power standby used, such as datacenter, UPS, EPS etc.



ISO 9001

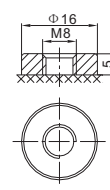
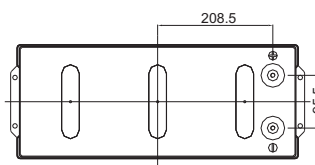
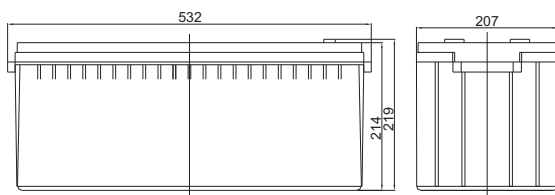


ISO 14001



OHSAS 18001

## Dimensions



F16 Terminal

Length	532±2mm (20.9 inches)
Width	207±2mm (8.15 inches)
Height	214±2mm (8.43 inches)
Total Height	219±2mm (8.62 inches)
Terminal	Value
M5	6~7 N*m
M6	8~10 N*m
M8	10~12 N*m

Unit: mm

### Constant Current Discharge Characteristics : A (25°C)

F.V/T ime	5MIN	8MIN	10MIN	15MIN	20MIN	30MIN	60MIN	90MIN
1.60V	508.0	451.3	417.9	342.8	279.2	205.8	119.1	85.5
1.67V	461.0	413.9	386.2	319.7	262.4	194.7	113.6	82.0
1.70V	441.4	397.8	372.3	310.0	255.0	190.0	111.3	80.4
1.75V	407.5	370.6	349.1	293.2	242.3	182.0	107.5	77.9
1.80V	373.4	343.2	325.8	277.5	230.9	174.3	103.6	75.3
1.85V	320.5	292.3	276.0	238.6	200.4	154.2	93.6	68.7

### Constant Power Discharge Characteristics : WPC (25°C)

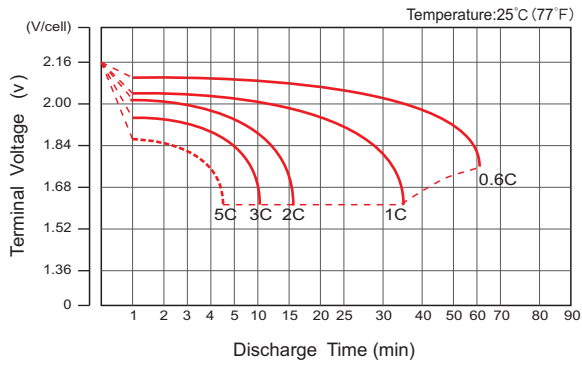
F.V/T ime	5MIN	8MIN	10MIN	15MIN	20MIN	30MIN	60MIN	90MIN
1.60V	933.5	840.5	786.1	653.5	536.5	399.8	223.6	161.7
1.67V	868.8	788.5	741.8	620.0	512.1	383.4	215.3	156.4
1.70V	840.2	764.9	721.1	605.6	501.0	375.7	211.7	154.1
1.75V	788.5	722.8	684.9	579.4	480.9	363.3	205.9	150.0
1.80V	733.9	678.5	646.8	553.6	462.8	350.5	199.8	145.9
1.85V	639.3	586.0	555.3	481.2	405.5	312.7	181.7	134.2

(Note) The above characteristics data are average values obtained within three charge/discharge cycle not the minimum values.

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## Discharge Characteristics Curve



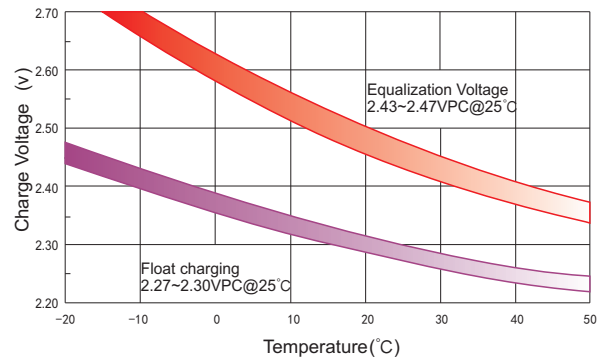
## Charge Characteristic Curve For Standby Use



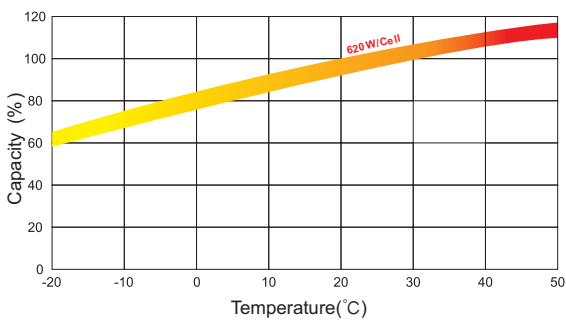
## Storage Characteristics



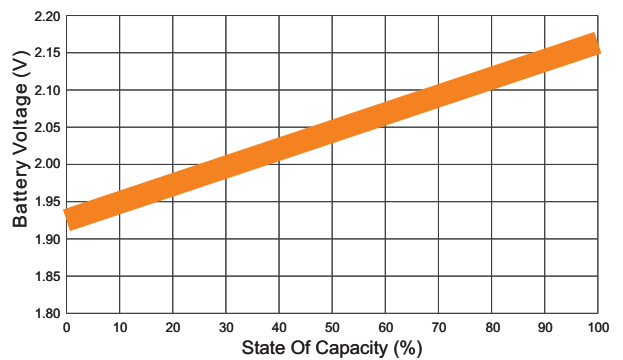
## Relationship Between Charging Voltage And Temperature



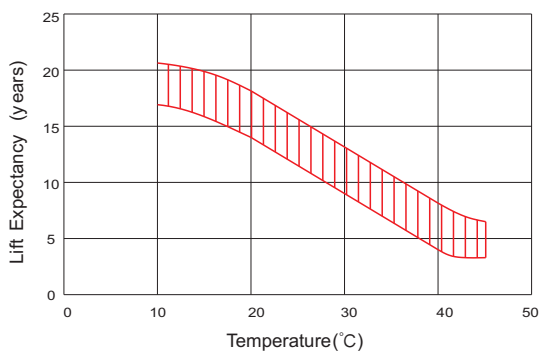
## Temperature Effects On Capacity



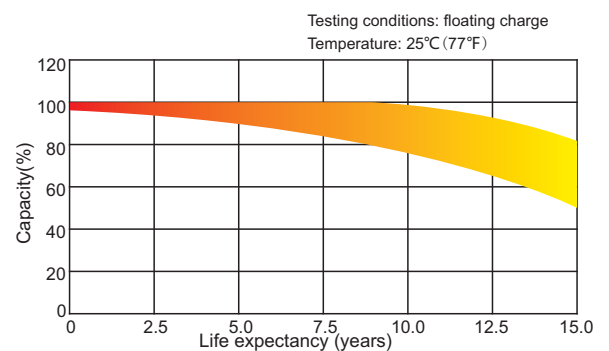
## Relationship of OCV And State of Charge(20°C)



## Effect Of Temperature On Long Term Life



## Life Characteristics Of Standby Use



(Note) All above information shall be changed without prior notice, Ritar reserves the right to explain and update the latest information.