

# HR12-300

12 volt 300watts/cell @15 min/75ah @ 20 hour rate

## Specification

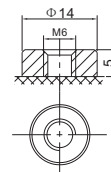
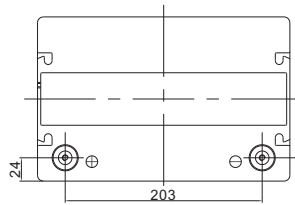
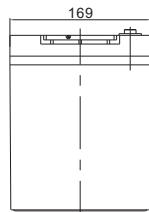
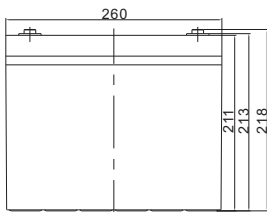
Cells Per Unit	6
Voltage Per Unit	12
Capacity	300 W@15min-rate to 1.67V per cell @25°C
Weight	Approx. 24.8 Kg (Tolerance ±2.0%)
Internal Resistance	Approx. 6.0 mΩ
Terminal	F11(M6)
Max. Discharge Current	750A (5 sec)
Short Circuit Current	1850A
Design Life	Could Reach 15 years
Recommended Maximum Charging Current	22.5 A
Reference Capacity	C10 70.8AH C20 75.0AH
Standby Use Voltage	13.6 V~13.8 V @ 25°C
Cycle Use Voltage	14.6 V~14.8 V @ 25°C
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.
Constainer Material	A.B.S. UL94-HB, UL94-V0 Optional.



The 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 and specially designed active material the HR series is with lower I.R, lower self discharge rate, high power, and longer service life performance. Generally the HR series offers 30% more power output than the standard range. Suitable for high power standby and cycling situation, such as UPS, datacenter, electric tools et al.



## Dimensions



F11 TERMINAL

Length	260±1mm (10.2 inches)
Width	169±1mm (6.65 inches)
Height	211±1mm (8.31 inches)
Total Height	218±1mm (8.58 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/Time	5MIN	8MIN	10MIN	15MIN	20MIN	30MIN	60MIN	90MIN
1.60V	265.1	227.0	204.2	162.2	130.3	95.5	54.9	40.7
1.67V	245.3	213.0	191.6	153.8	121.6	91.1	52.3	38.7
1.70V	235.1	205.5	184.7	149.0	116.9	88.5	50.8	37.6
1.75V	222.1	195.2	173.4	142.0	113.7	86.0	50.0	36.7
1.80V	208.9	184.9	162.1	134.9	110.3	83.3	49.0	35.8
1.85V	194.9	173.9	150.3	127.2	106.5	80.3	47.8	34.8

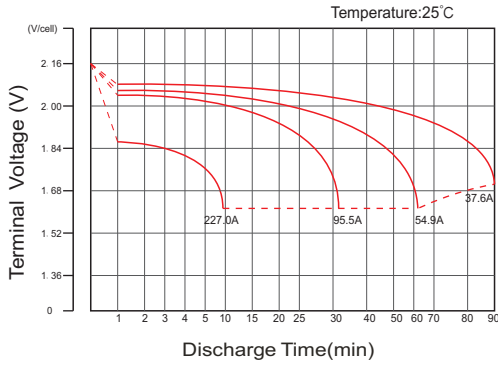
### Constant Power Discharge Characteristics : WPC (25°C)

F.V/Time	5MIN	8MIN	10MIN	15MIN	20MIN	30MIN	60MIN	90MIN
1.60V	473	411	372	304	240	176	101.6	75.5
1.67V	442	389	352	300	226	169	97.7	72.6
1.70V	428	380	343	298	220	167	96.0	71.2
1.75V	410	366	327	279	216	164	95.7	70.5
1.80V	391	351	310	268	213	161	95.1	69.8
1.85V	372	337	293	255	210	158	94.7	69.1

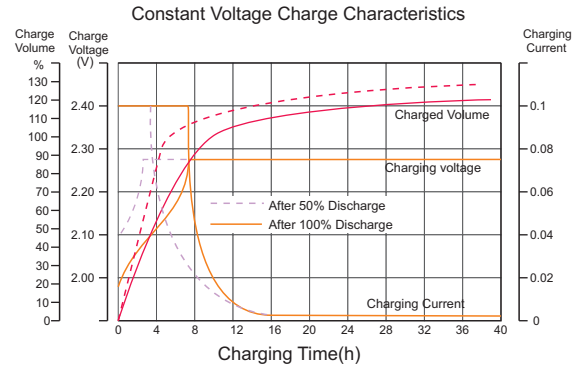
(Note) The above characteristics data are average values obtained within three charge/discharge cycle not the minimum values.

# HR12-300

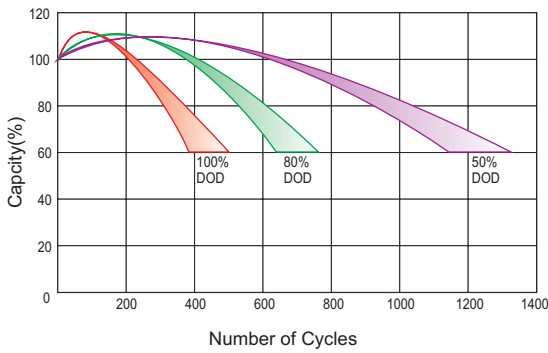
## Discharge Characteristics Curve



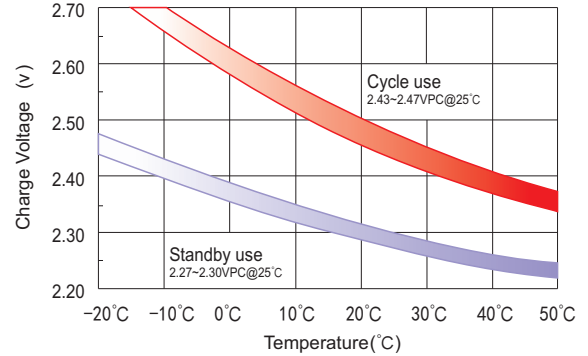
## Charge Characteristic Curve For Standby Use



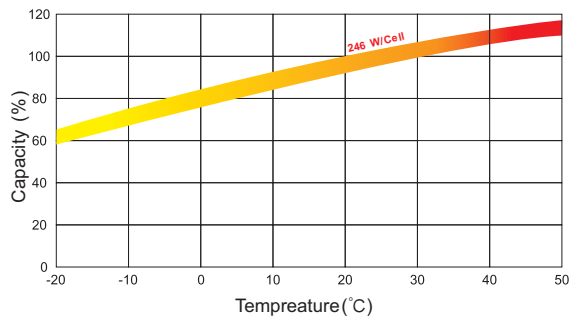
## Cycle Life In Relation To Depth Of Discharge



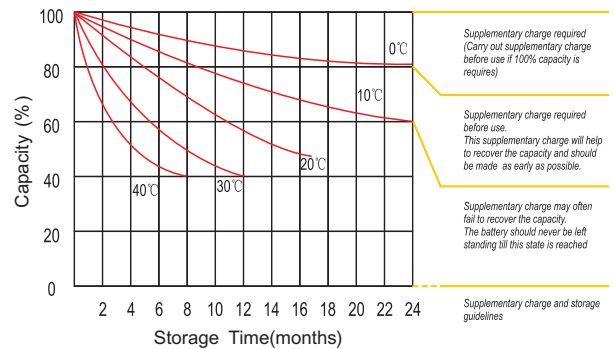
## Relationship Between Charging Voltage And Temperature



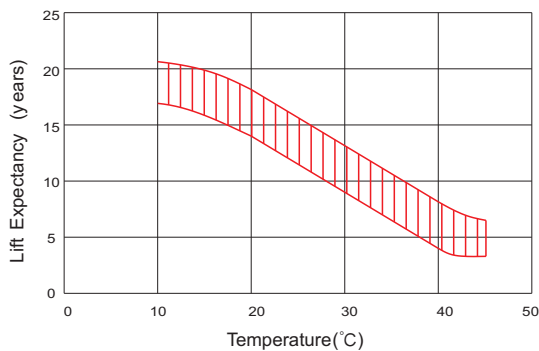
## Temperature Effects On Capacity



## Storage Characteristics



## Effect Of Temperature On Long Term Life



## Life Characteristics Of Standby Use

