



HR2-650W(2V650W)

Specification



HR (High Rate) series Valve Regulated Lead Acid (VRLA) battery is designed for heavy load discharge applications with 20 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

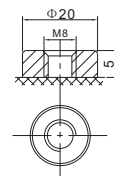
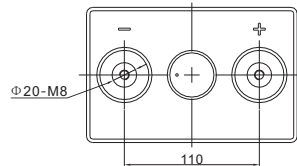
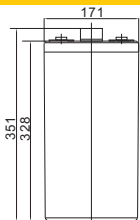
OHSAS 18001



MH 28539

Cells Per Unit	1
Voltage Per Unit	2
Capacity	650W@15min-rate to 1.67V @25°C
Weight	Approx. 14.0Kg (Tolerance ±3.0%)
Internal Resistance	Approx. 0.78 mΩ
Terminal	F10(M8)
Max. Discharge Current	1500A (5 sec)
Short Circuit Current	2800A
Design Life	20 years
Max. Charging Current	50.0 A
Reference Capacity	C10 250.0AH C20 262.5AH
Floating Voltage	2.25 V~2.27 V @ 25°C Temperature Compensation: -3mV/°C/Cell
Equalizing Voltage	2.35 V~2.40 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. The cover is not configured by default.

Dimensions



F10 TERMINAL

Length	171±2mm (6.73 inches)
Width	111±2mm (4.37 inches)
Height	328±2mm (12.9 inches)
Total Height	351±2mm (13.8 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	10MIN	15MIN	20MIN	25MIN	30MIN	45MIN	60MIN	90MIN	120MIN
1.60V	486.4	412.2	342.6	292.9	259.2	197.0	160.4	121.6	98.8
1.65V	448.0	386.2	328.9	281.1	248.8	189.7	154.9	117.6	95.7
1.67V	426.3	373.9	321.7	274.9	243.3	186.1	152.4	115.7	94.1
1.70V	405.1	361.7	314.4	268.7	237.8	182.4	149.9	113.7	92.5
1.75V	370.2	336.6	300.5	256.8	227.3	175.1	144.4	109.7	89.3
1.80V	326.3	310.8	287.2	245.5	217.2	167.9	138.9	105.6	86.1

Constant Power Discharge Characteristics : WPC (25°C)

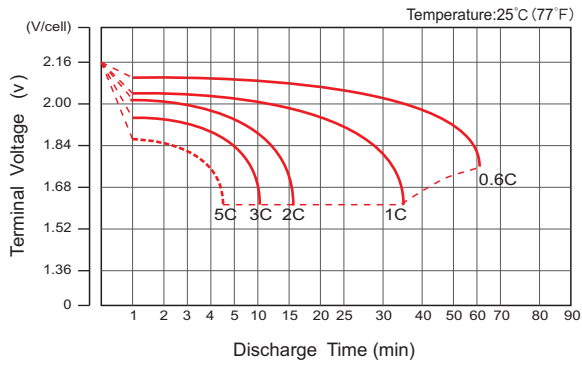
F.V/Time	10MIN	15MIN	20MIN	25MIN	30MIN	45MIN	60MIN	90MIN	120MIN
1.60V	825.0	700.9	591.5	513.5	457.9	354.2	293.3	223.3	182.2
1.65V	771.1	666.5	573.8	498.1	444.2	343.8	284.9	217.0	177.2
1.67V	739.1	650.0	563.9	489.5	436.5	338.6	281.1	214.1	174.8
1.70V	707.8	633.5	554.0	480.9	428.9	333.4	277.3	211.2	172.3
1.75V	656.3	598.1	535.0	464.4	414.1	322.6	268.8	204.7	167.1
1.80V	586.6	560.1	516.5	448.3	399.8	311.7	260.0	198.2	161.9

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

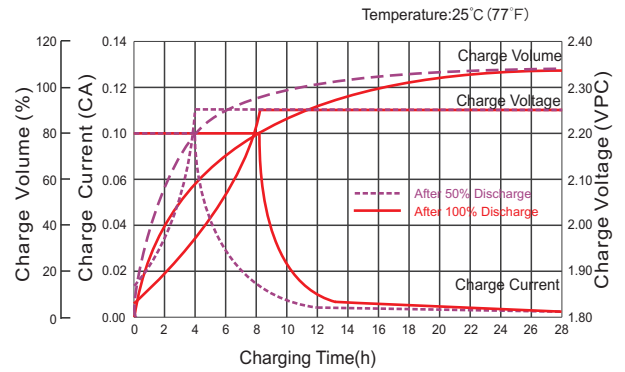
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Discharge Characteristics Curve



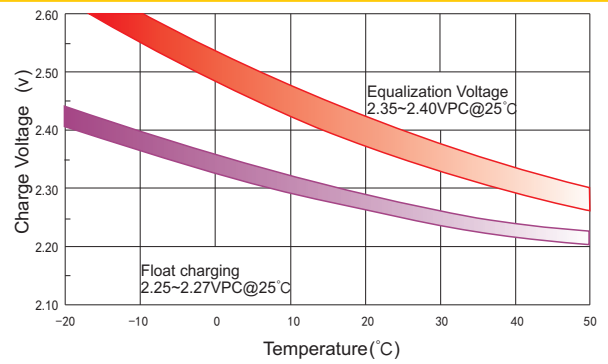
Charge Characteristic Curve For Floating Use



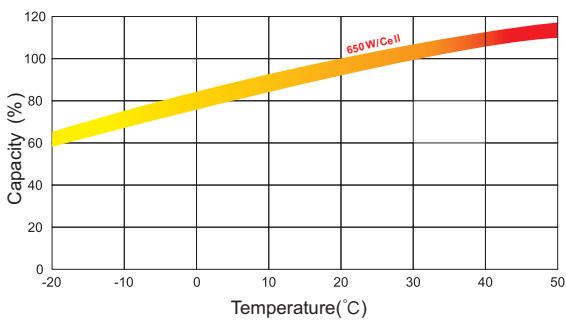
Storage Characteristics



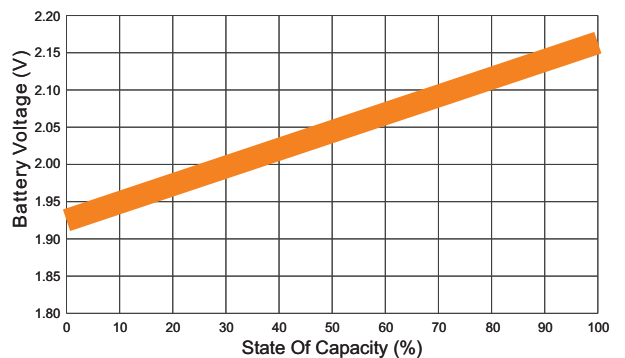
Relationship Between Charging Voltage And Temperature



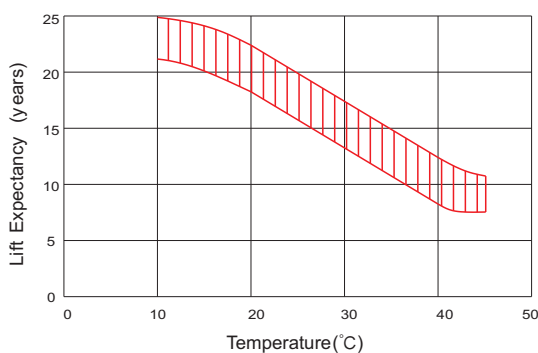
Temperature Effects On Capacity



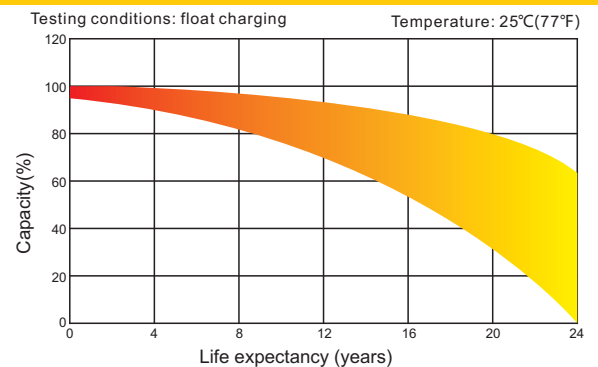
Relationship of OCV And State of Charge(20°C)



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.