

### Features

#### HR High Rate Discharge Series:

- Excellent high-rate discharge characteristics that ensure reliable performance in UPS and other high-rate discharge applications for up to 10 years service life at 25° C temperatures.
- Interior design performance attributes to ensure cell to cell consistency and high wattage per cell performances.
- Valve Regulated Lead Acid (VRLA), Absorbent Glass Mat (AGM) Technology – Safe operation in any position
- Lead-calcium alloy grids and the use of high purity virgin lead
- Externally sealed Flame retardant ABS case and cover to UL94V-0 for superior performance on sizes over 33Ah is standard (under 33Ah is optional)
- Special high performance terminals designed to increase conductance.
- UL recognized (UR) as a component in UL approved equipment installations under File number MH46202
- Classified as non-spillable status for transportation making it non-hazardous for normal transportation processes. Approved for transport by air. Fulfills US D.O.T., I.A.T.A., F.A.A., C.A.B. handling and shipping requirements
- For more details on special design and construction details see Features and Benefits publication on [www.oraclebattery.com](http://www.oraclebattery.com)

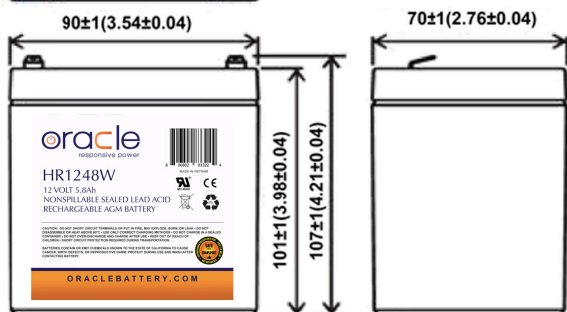
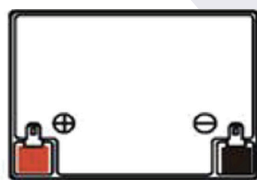


### Specification

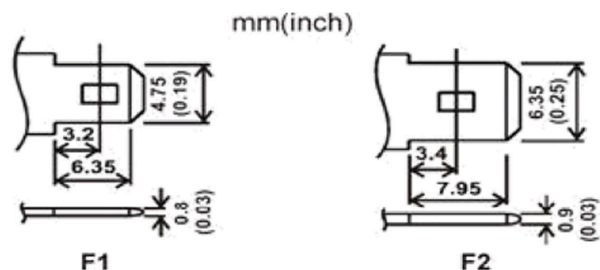
<b>Cell per unit</b>	6	<b>Ambient Temperature</b>
<b>Nominal Voltage (V)</b>	12	Charge 0°C (32°F) to 40°C (104°F)
<b>Nominal Capacity (watts)</b>	48 W/cell @ 5mins rate to 1.6vpc	Discharge -15°C (5°F) to 50°C (122°F)
<b>Weight</b>	Approx 1.90kg (4.19lbs.)	Storage -15°C (5°F) to 40°C (104°F)
<b>Internal Resistance (1KHz)</b>	25mΩ	<b>Max Charge Current</b>
<b>Max Discharge Current (5s)</b>	75A	Max charge current 1.74A
<b>Battery Life</b>	Stand by : 10 years	<b>Cycle use:</b> Charge voltage: 14.4 to 15.0V
<b>Terminal Type</b>	F1/F2	<b>Stand by:</b> Charge voltage: 13.5 to 13.8V
<b>Container Material</b>	ABS 94-HB flame retardant case (94V-0 Optional)	



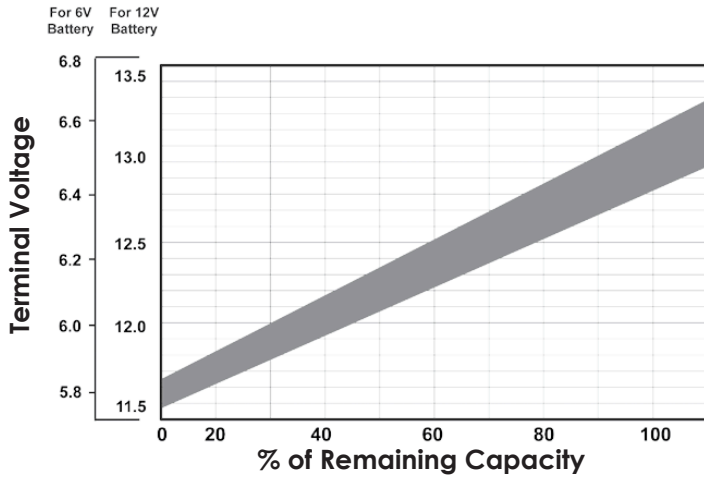
### Dimensions



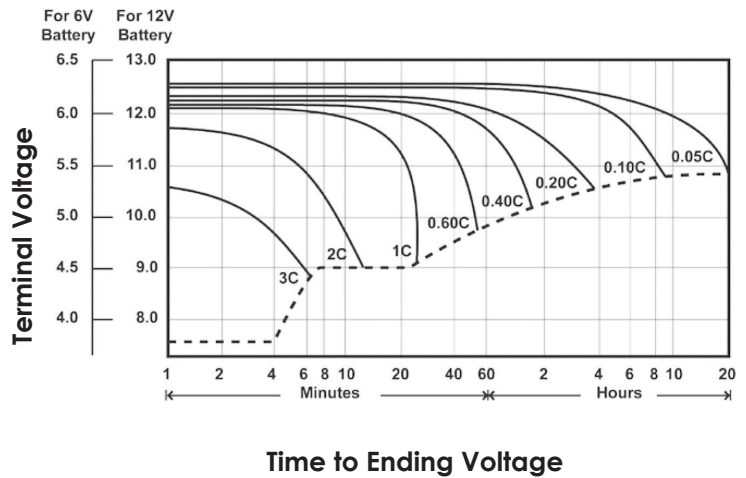
	Length	Width	Height	Total Height
Unit mm	90±1	70±1	101±1	107±1
Unit inch	3.54±0.04	2.76±0.04	3.98±0.04	4.21±0.04



## Terminal Voltage



## Discharge Times



## Charge Voltages

Temperature Compensated Charging	Average Temperature	Cycle Charging Volts Per Cell	Float Charging Volts Per Cell
	-40°C (-40°F)	2.85-2.95	2.38-2.43
	-20°C (-4°F)	2.67-2.77	2.34-2.39
	-10°C (14°F)	2.61-2.71	2.32-2.37
	0°C (32°F)	2.55-2.65	2.30-2.35
	10°C (50°F)	2.49-2.59	2.28-2.33
	20°C (68°F)	2.43-2.53	2.26-2.31
	25°C (77°F)	2.40-2.50	2.25-2.30
	30°C (86°F)	2.37-2.47	2.24-2.29
	40°C (104°F)	2.31-2.41	2.22-2.27
50°C (122°F)	2.25-2.35	2.20-2.25	

## Temperature Storage

Average Storage Temperature	Recharging Interval
68°F	Every 9 months
77°F	Every 6 months
95°F	Every 3 months

## Constant Current Discharge Characteristics (25°C 77°F)

F.V/Time	5MIN	15MIN	30MIN	60MIN	2HR	3HR	5HR	8HR	10HR	20HR
1.60V	27.17	11.72	6.97	3.60	2.21	1.55	1.10	0.734	0.550	0.300
1.67V	26.25	11.01	6.61	3.53	2.12	1.50	1.05	0.727	0.532	0.291
1.70V	25.17	10.30	6.26	3.49	2.09	1.47	0.95	0.716	0.522	0.286
1.75V	23.69	9.69	6.01	3.39	2.04	1.41	0.92	0.706	0.514	0.279
1.80V	20.47	8.96	5.79	3.20	1.97	1.35	0.89	0.694	0.510	0.274

## Watts Per Battery Discharge Characteristics (25°C 77°F)

F.V/Time	5MIN	15MIN	30MIN	60MIN	2HR	3HR	5HR	8HR	10HR	20HR
1.60V	288.0	144.0	82.8	46.80	21.73	18.23	12.38	8.016	6.890	3.625
1.67V	278.3	141.2	81.9	46.34	22.43	18.13	12.35	7.958	6.890	3.625
1.70V	266.8	138.0	80.8	45.79	22.26	18.00	12.31	7.848	6.876	3.618
1.75V	251.1	133.9	79.0	44.97	21.73	17.84	12.24	7.752	6.840	3.600
1.80V	216.9	128.0	76.1	43.67	21.04	17.49	12.06	7.630	6.736	3.528



**HR1248W 12V 5.8Ah**  
Sealed Lead Acid AGM Battery