

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

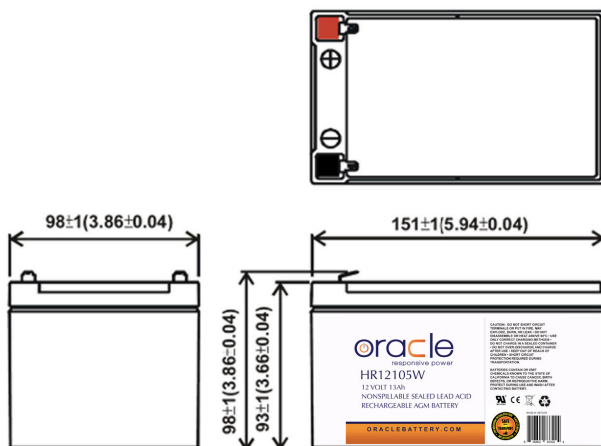


Specification

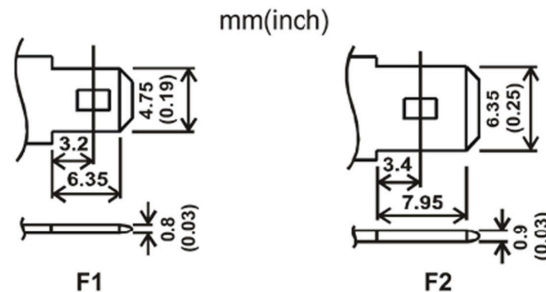
Cell per unit	6	Ambient Temperature
Nominal Voltage (V)	12	Charge 0°C (32°F) to 40°C (104°F)
Nominal Capacity (watts)	105W/cell @ 5mins rate to 1.6vpc	Discharge -15°C (5°F) to 50°C (122°F)
Weight	Approx 4.2kg (9.2lbs.)	Storage -15°C (5°F) to 40°C (104°F)
Internal Resistance (1KHz)	20mΩ	Max Charge Current
Max Discharge Current (5s)	180A	Max charge current 3.9A
Battery Life	Stand by : 10 years	Cycle use: Charge voltage: 14.4 to 15.0V
Terminal Type	F1/F2	Stand by: Charge voltage: 13.5 to 13.8V
Container Material	ABS 94-HB flame retardant case (94V-0 Optional)	



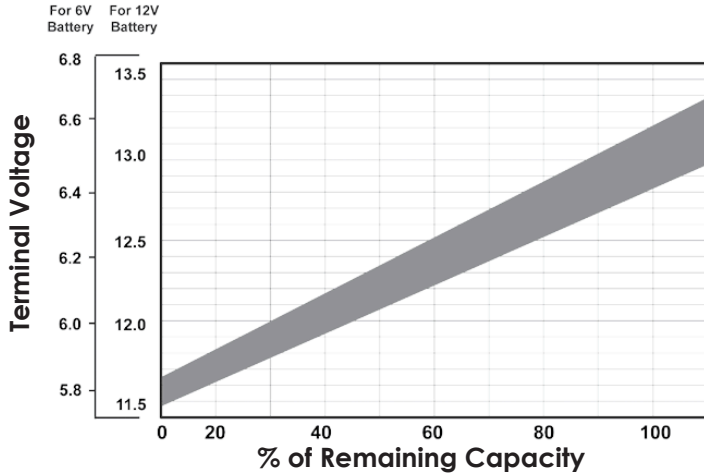
Dimensions



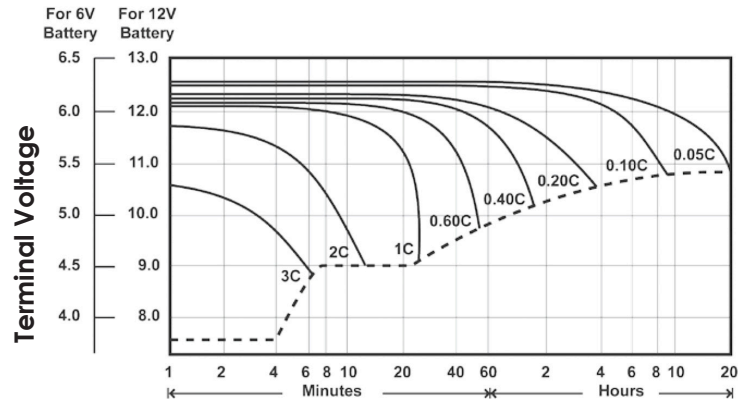
	Length	Width	Height	Total Height
Unit mm	151±1	98±1	93±1	98±1
Unit inch	5.94±0.04	3.86±0.04	3.66±0.04	3.86±0.04



Terminal Voltage



Discharge Times



Time to Ending Voltage

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	54.2	25.0	13.70	8.85	5.05	3.40	2.21	1.38	1.22	0.67
1.67V	50.0	23.3	13.30	8.71	5.03	3.27	2.16	1.38	1.20	0.66
1.70V	49.0	22.7	13.20	8.66	5.00	3.12	2.11	1.37	1.16	0.64
1.75V	46.0	22.0	12.80	8.55	4.93	2.98	2.05	1.36	1.14	0.62
1.80V	42.0	20.0	12.30	8.43	4.90	2.88	2.02	1.36	1.13	0.60

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

F.V/Time	5MIN	15MIN	30MIN	60MIN	2HR	3HR	5HR	8HR	10HR	20HR
1.60V	630.0	305.0	175.0	110.0	60.0	38.5	25.7	16.1	14.2	8.35
1.67V	600.0	300.8	174.4	103.4	57.7	38.3	25.4	15.8	14.1	8.32
1.70V	580.0	296.2	161.2	97.8	57.5	38.0	24.8	15.7	14.0	8.30
1.75V	560.0	285.6	157.2	95.0	56.7	37.6	24.7	15.6	13.9	8.25
1.80V	550.0	266.5	155.0	92.0	55.0	35.2	24.5	15.4	13.8	8.22



HR12105W 12V 13Ah
Sealed Lead Acid AGM Battery