

Model: GW12-96W(12V 24Ah)

GW Series

VLRA High Rate Discharge Battery



Legacy Canadian products designed in Canada, assembled in China.

Connecting To Legacy

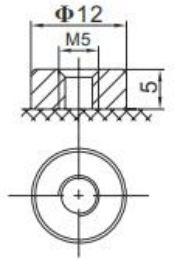
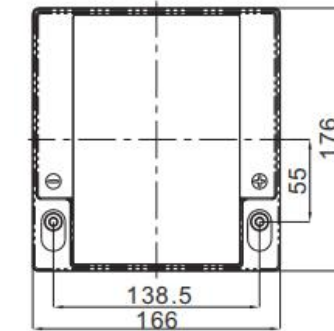
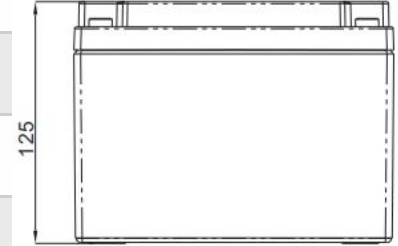
● Laval-Quebec-Canada

● Beirut-Lebanon

● Hongkong-China

● www.connectinglegacy.com

Introduction	GW12-96W(12V 24Ah)
Length	166±1.5mm (6.54 inches)
Width	176±1.5mm (6.93 inches)
Height	125±1.5mm (4.92 inches)
Total Height	125±1.5mm (4.92 inches)
Weight	Approx. 8.10Kg (Tolerance±5%)
Terminal	Default F13-BP(M5), Value: 6~7N*m
Container Material	A.B.S. UL94-HB, <UL94-V0 Optional>
Design Life	8 years
Application	UPS/EPS,Electric Tools,Toys,Medical,Wheelchair and Security System etc.



F13-BP TERMINAL

GW12-96W Dimension

Features	Structure: Compact design of shorter internal connectors among cells for lower I.R.
	Plate: Pasted flat type with patent high rate formula of AM supports stable performance during high current discharge.
	Separator: Improved AGM separator increases deep cycle life.
	Safety Valve:Flame arrester/filter is equipped with safety valve system.
	Design and manufacture with DIN standards by Legacy team, for heavy load discharge applications.

Parameters	GW12-96W(12V 24Ah)
Cell Per Unit	6
Voltage Per Unit	12V
Nominal Capacity	96W@15min-rate to 1.67V per cell @25°C
Internal Resistance	≤10.0 mΩ(Full Charge Condition @25°C)
Max. Discharge Current	240A (5 sec)
Max. Charging Current	7.2A
Short Circuit Current	950A
Reference Capacity	C10: 22.6Ah C20: 24.0Ah
Standby Use Voltage	13.70 V~13.90 V @ 25°C Temperature Compensation: -3mV/°C/Cell
Cycle Use Voltage	14.60 V~14.80 V @ 25°C Temperature Compensation: -4mV/°C/Cell
Normal Operating Temperature Range	25°C±5°C
Operating Temperature Range	Discharge and Storage : -20°C~60°C Charge: 0°C~50°C
Self Discharge	Monthly Self-discharge ratio is less than 3% at 25°C
Note	Legacy GW batteries can be stored for up to 6 months at 25°C and recharging is recommended. Please charged batteries before using.



GW12-96W Imagine

F.V/TIME	3MIN	5MIN	8MIN	10MIN	15MIN	20MIN	30MIN	60MIN	90MIN
1.60V	112.7	99.03	80.89	70.85	55.60	43.70	31.14	17.46	12.38
1.65V	102.2	89.87	73.97	65.31	52.00	41.25	29.50	16.64	11.85
1.70V	97.83	85.99	71.02	62.93	50.40	40.15	28.77	16.28	11.63
1.75V	90.61	79.65	66.17	58.97	47.60	38.15	27.57	15.73	11.27
1.80V	82.99	72.95	61.16	55.01	45.20	36.35	26.37	15.14	10.88
1.85V	70.69	62.38	52.11	46.70	38.76	31.57	23.32	13.69	9.947



Constant Current Discharge
Ah/Cell (@ 77°F/25°C)

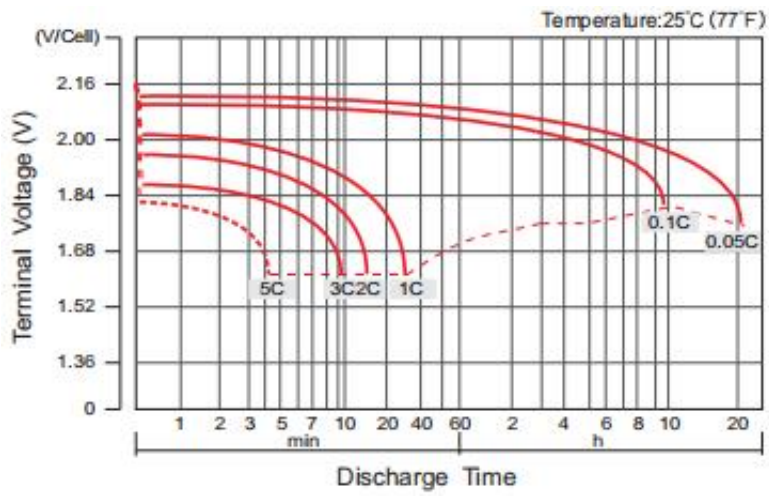
Model: GW12-96W

F.V/TIME	3MIN	5MIN	8MIN	10MIN	15MIN	20MIN	30MIN	60MIN	90MIN
1.60V	202.5	178.0	145.9	128.2	101.6	80.46	57.55	32.74	23.43
1.65V	186.0	163.5	135.2	119.9	96.00	76.78	55.40	31.51	22.64
1.70V	179.6	157.9	130.9	116.4	94.00	75.15	54.11	31.01	22.28
1.75V	168.0	147.7	123.3	110.4	89.60	72.29	52.40	30.15	21.71
1.80V	156.0	137.1	115.3	104.1	85.60	69.43	50.68	29.29	21.13
1.85V	135.5	119.1	99.65	89.45	74.40	60.85	45.09	26.65	19.41

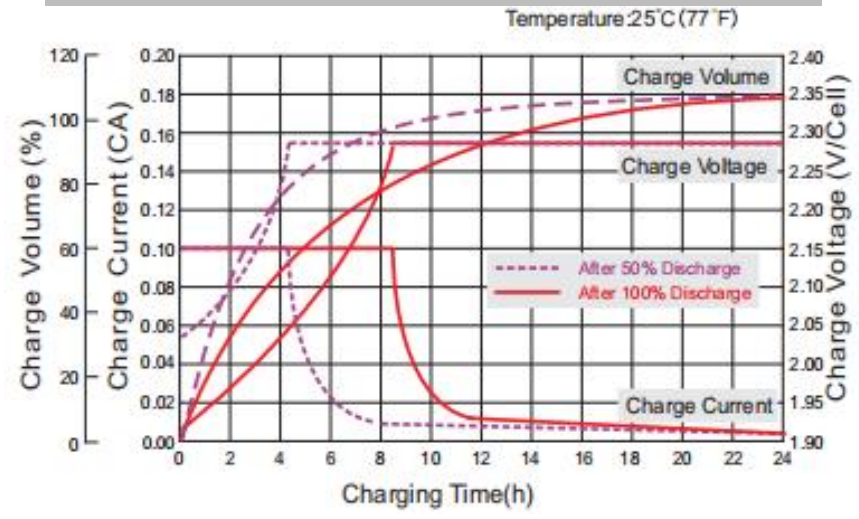


Constant Power Discharge
W/Cell (@ 77°F/25°C)

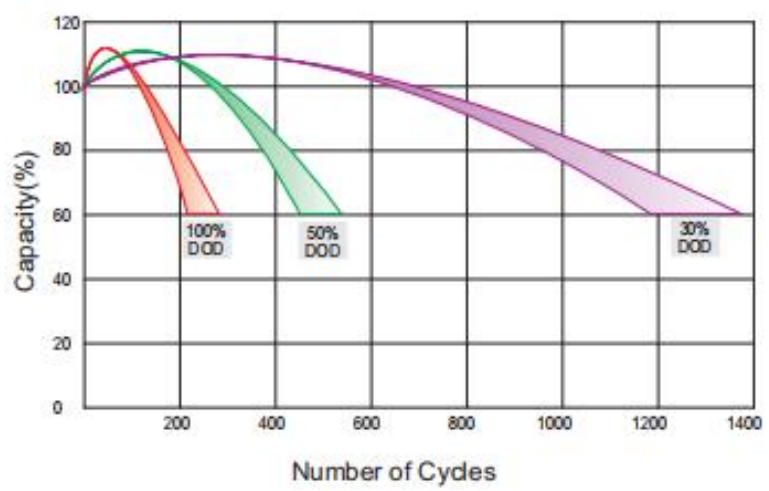
Discharge Characteristics Curve



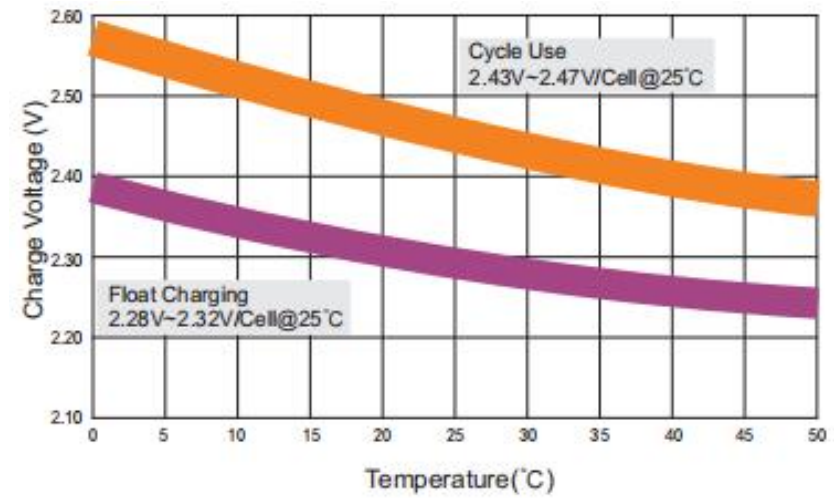
Charge Characteristics Curve For Standby Use(IU)



Cycle Life in Relation to Depth of Discharge

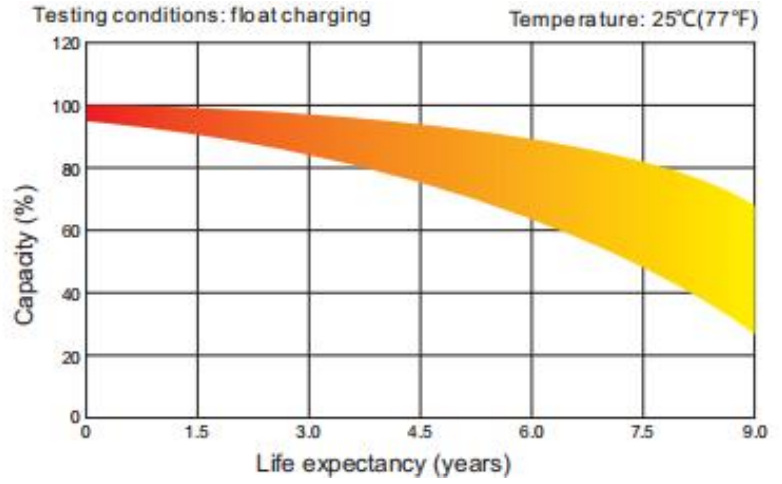


Relationship Between Charging Voltage and Temperature

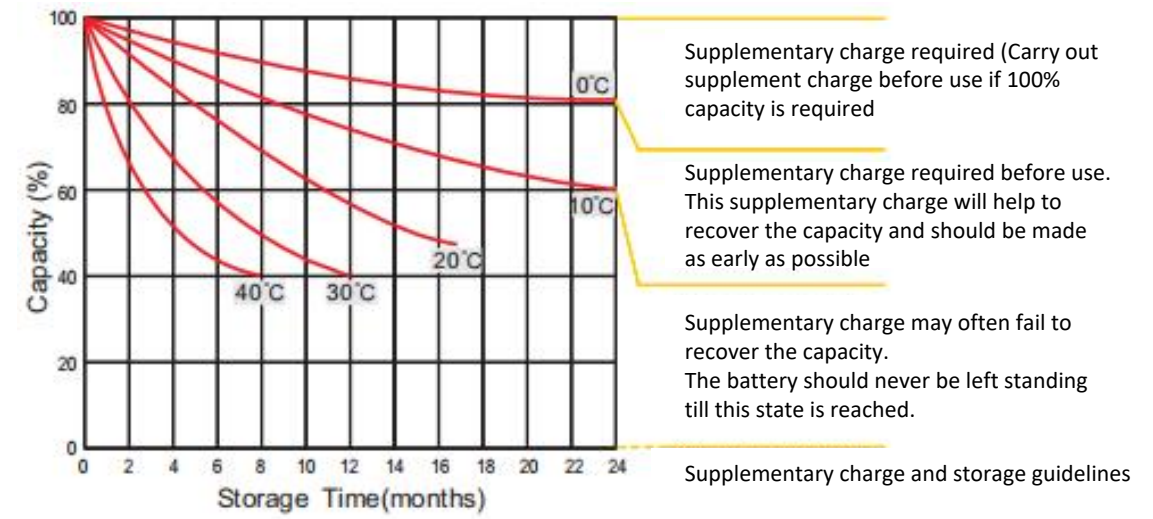


Note: The above data are average values, and can be obtained within 3 charge/discharge cycles. These are not minimum values. Cell and battery designs/specifications are subject to modification without notice. Legacy reserves the right to explain and update the latest information.

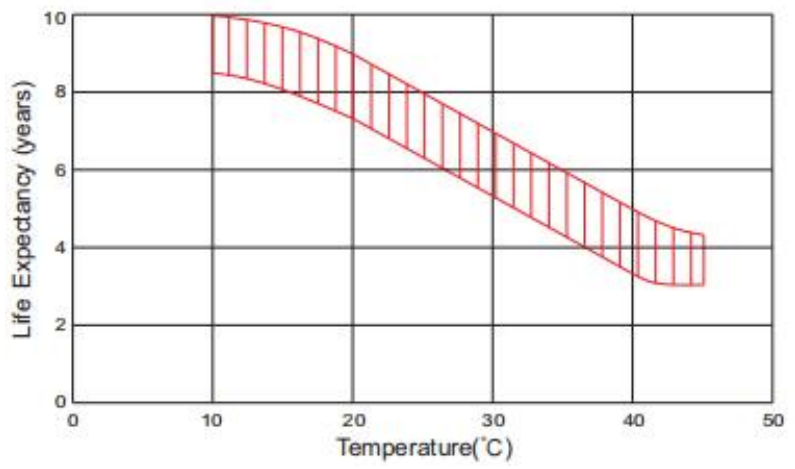
Life Characteristics of Standby Use



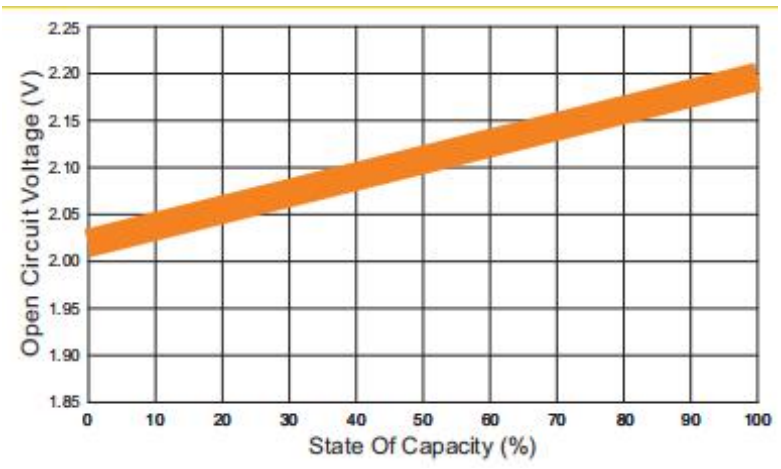
Storage Characteristics



Effect of Temperature on Longterm life



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



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