



Model: GW12-38W(12V 9Ah)

GW Series

VLRA High Rate Discharge Battery



Legacy Canadian products designed in Canada, assembled in China.

Connecting To Legacy

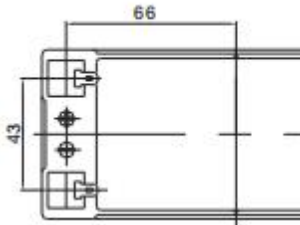
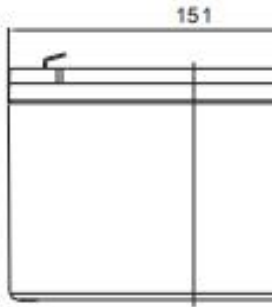
📍 Laval-Quebec-Canada

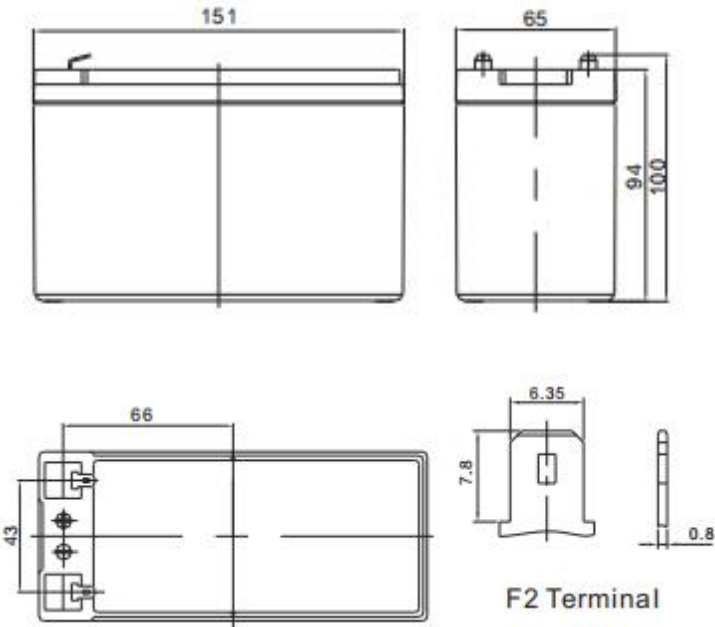
📍 Beirut-Lebanon

📍 Hongkong-China

🔍 www.connectinglegacy.com

Introduction	GW12-38W(12V 9Ah)	
Length	151±1mm (5.94 inches)	
Width	65±1mm (2.56 inches)	
Height	94±1mm (3.70 inches)	
Total Height	100±1mm (3.94 inches)	
Weight	Approx. 2.70Kg (Tolerance±5%)	
Terminal	Default F2	
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.	
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 seperator 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.	





GW12-38W Dimension

Parameters	GW12-38W(12V 9Ah)
Cell Per Unit	6
Voltage Per Unit	12V
Nominal Capacity	38W@15min-rate to 1.67V per cell @25°C
Internal Resistance	≤18.0 mΩ(Full Charge Condition @25°C)
Max. Discharge Current	90A (5 sec)
Max. Charging Current	2.7A
Short Circuit Current	450A
Reference Capacity	C10: 8.5Ah C20: 9.0Ah
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.



GW12-38W Imagine

F.V/TIME	3MIN	5MIN	8MIN	10MIN	15MIN	20MIN	30MIN	60MIN	90MIN
1.60V	61.16	43.82	31.19	26.16	18.63	14.82	9.991	5.616	4.019
1.65V	57.51	41.88	30.46	25.68	17.85	14.66	9.840	5.548	3.936
1.70V	55.32	40.82	30.05	25.35	18.39	14.58	9.764	5.480	3.913
1.75V	50.71	38.23	28.84	24.38	17.90	14.18	9.613	5.382	3.807
1.80V	46.01	34.99	26.89	23.00	17.09	13.69	9.386	5.238	3.716
1.85V	40.26	31.83	24.54	21.14	15.88	12.80	8.856	5.003	3.557



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

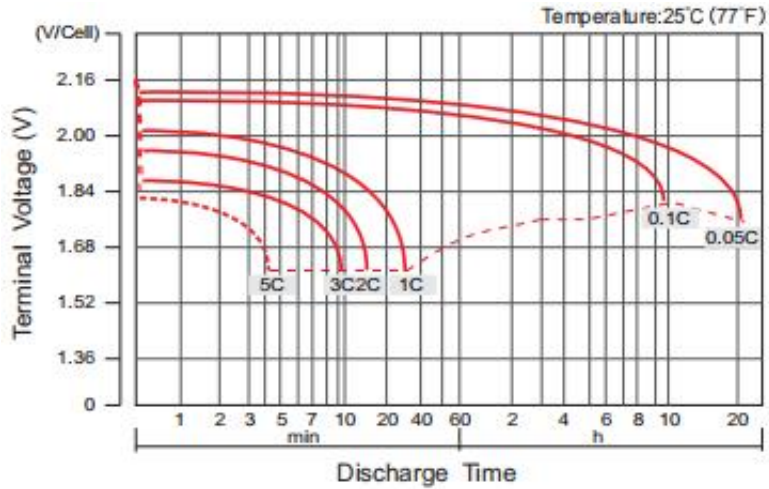
Model: GW12-38W

F.V/TIME	3MIN	5MIN	8MIN	10MIN	15MIN	20MIN	30MIN	60MIN	90MIN
1.60V	104.5	78.30	57.65	48.74	36.02	28.08	18.92	10.62	7.48
1.65V	101.0	76.28	56.70	48.06	38.00	27.81	18.80	10.60	7.43
1.70V	98.55	75.06	55.89	47.66	35.60	27.81	18.80	10.55	7.42
1.75V	92.88	72.63	54.27	46.31	35.05	27.41	18.67	10.48	7.37
1.80V	86.40	68.18	51.71	44.42	33.81	26.60	18.29	10.31	7.27
1.85V	79.11	62.51	47.52	41.18	31.60	25.11	17.41	9.95	7.01

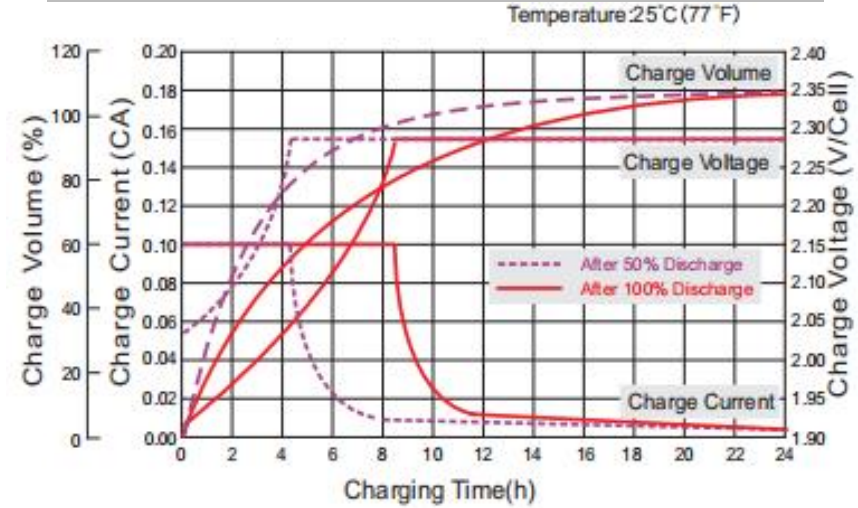


Constant Power Discharge
W/Cell (@ 77°F/25°C)

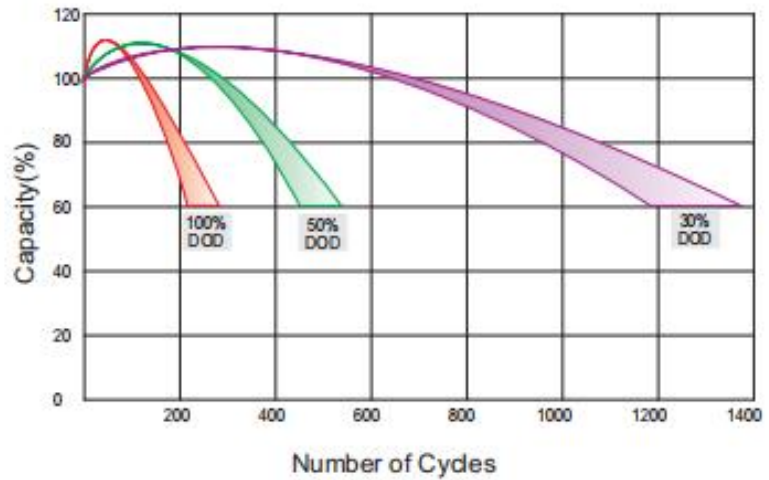
Discharge Characteristics Curve



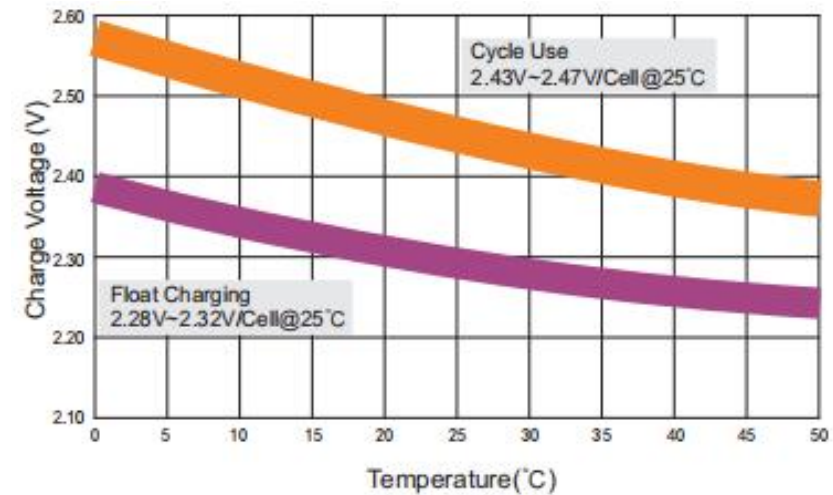
Charge Characteristics Curve For Standby Use(IU)



Cycle Life in Relation to Depth of Discharge

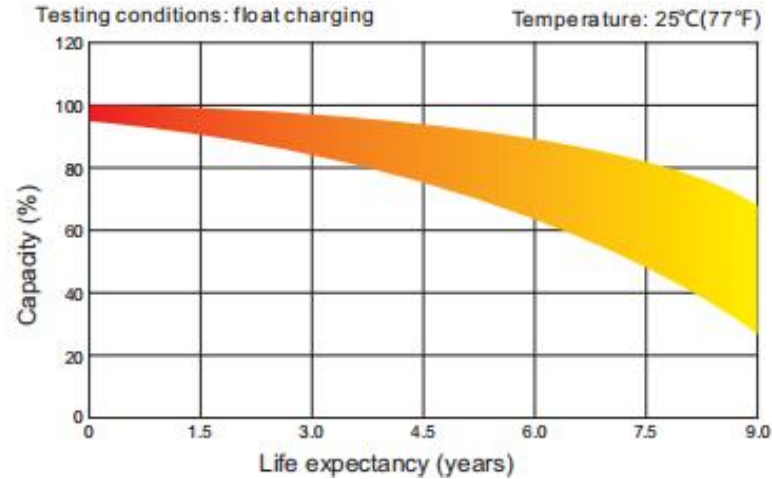


Relationship Between Charging Voltage and Temperature

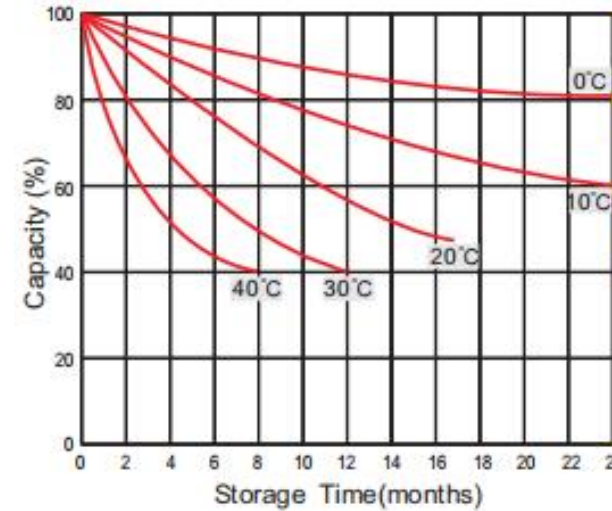


Note: The above data are average values, and can be obtained within 3 charge/discharge cycles. These are not minimum values. Cell and battery designs/specifications are subject to modification without notice. Legacy reserves the right to explain and update the latest information.

Life Characteristics of Standby Use



Storage Characteristics



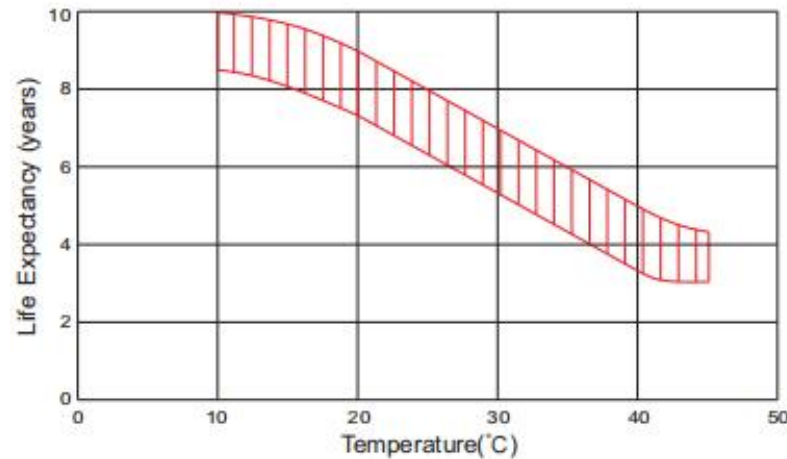
Supplementary charge required (Carry out supplement charge before use if 100% capacity is required)

Supplementary charge required before use. This supplementary charge will help to recover the capacity and should be made as early as possible

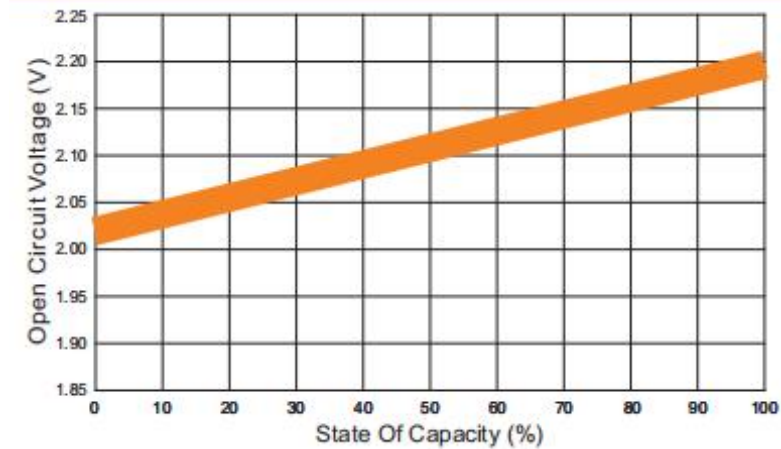
Supplementary charge may often fail to recover the capacity. The battery should never be left standing till this state is reached.

Supplementary charge and storage guidelines

Effect of Temperature on Longterm life



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



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.

LET'S DEVELOP TRUST AND BUSINESS

Connecting To Legacy



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

GW Series

VLRA High Rate Discharge Battery



Legacy Canadian products designed in Canada, assembled in China.

Connecting To Legacy

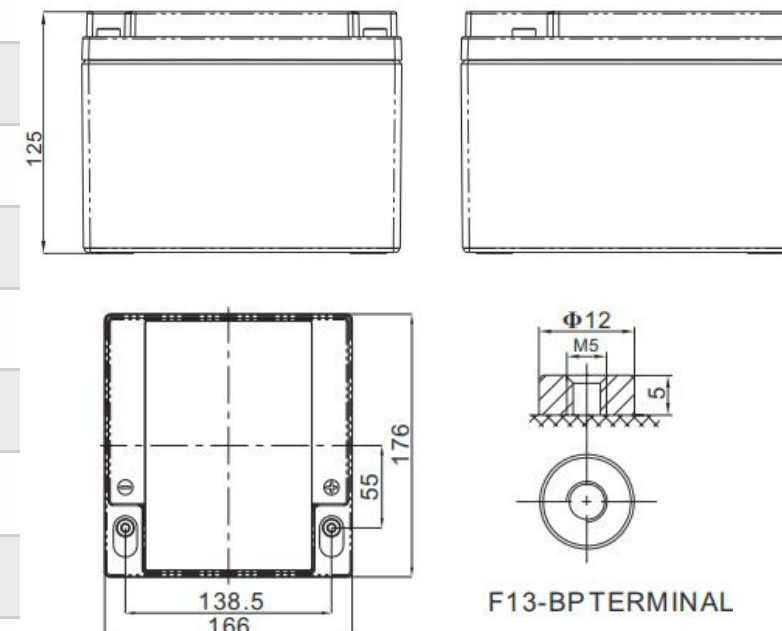
📍 Laval-Quebec-Canada

📍 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)

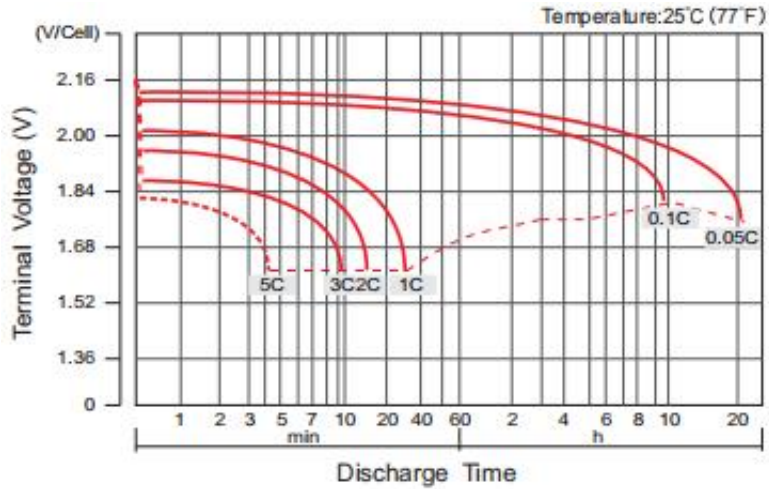
Model: GW12-96W

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

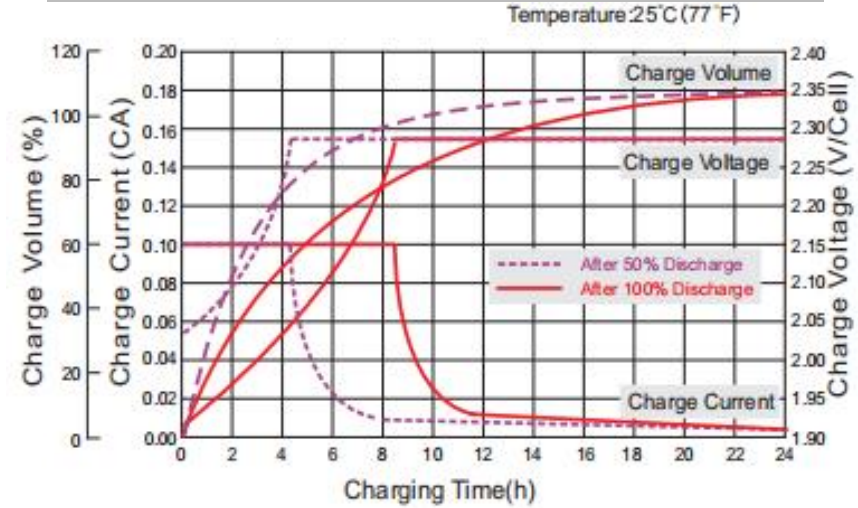


Constant Power Discharge
W/Cell (@ 77°F/25°C)

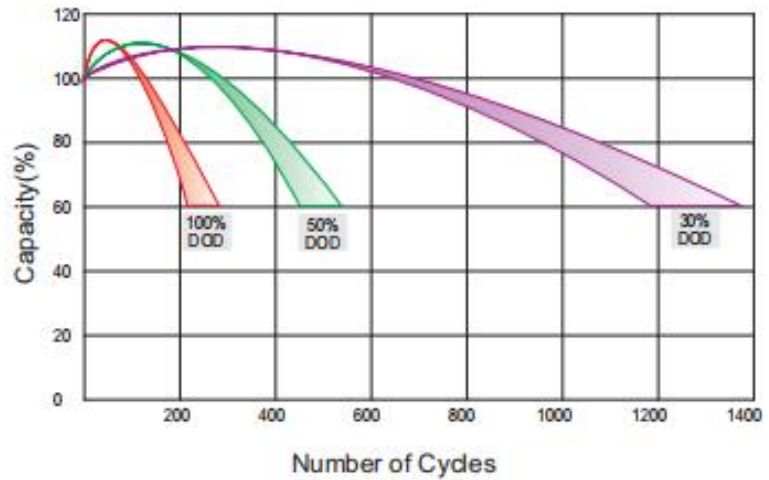
Discharge Characteristics Curve



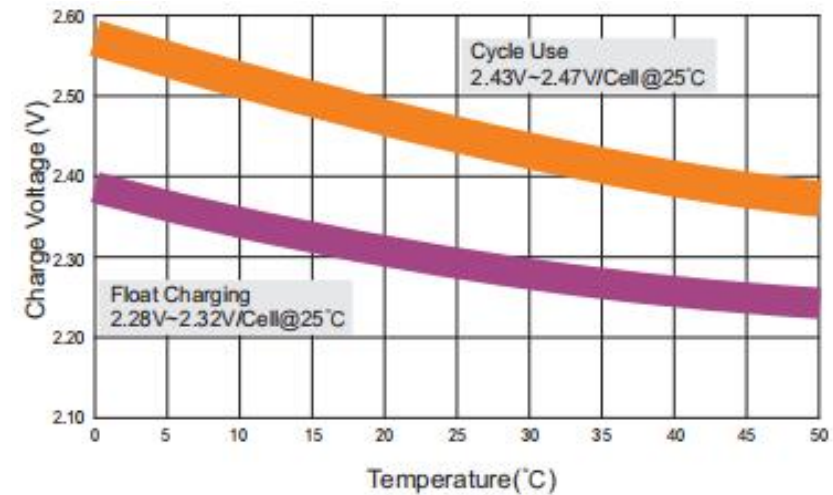
Charge Characteristics Curve For Standby Use(IU)



Cycle Life in Relation to Depth of Discharge

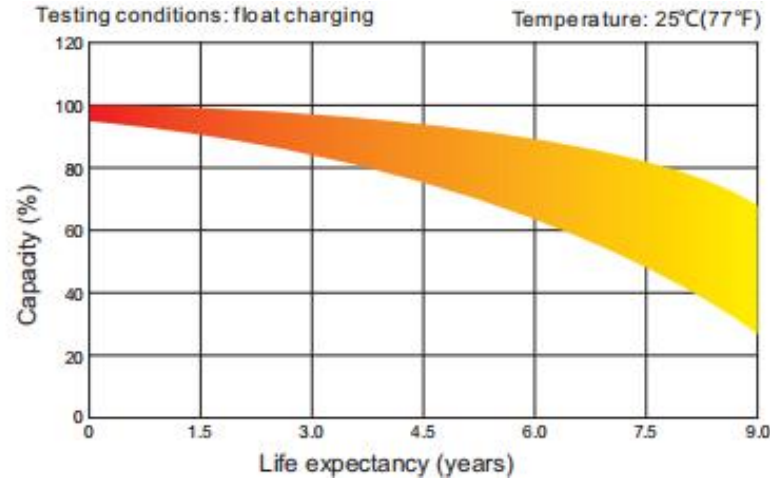


Relationship Between Charging Voltage and Temperature

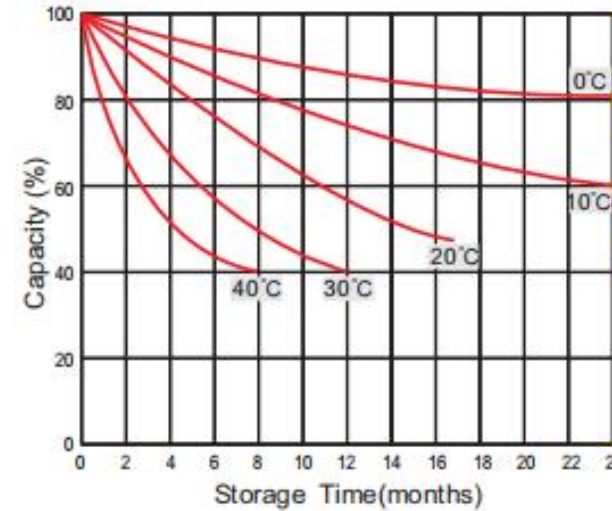


Note: The above data are average values, and can be obtained within 3 charge/discharge cycles. These are not minimum values. Cell and battery designs/specifications are subject to modification without notice. Legacy reserves the right to explain and update the latest information.

Life Characteristics of Standby Use



Storage Characteristics



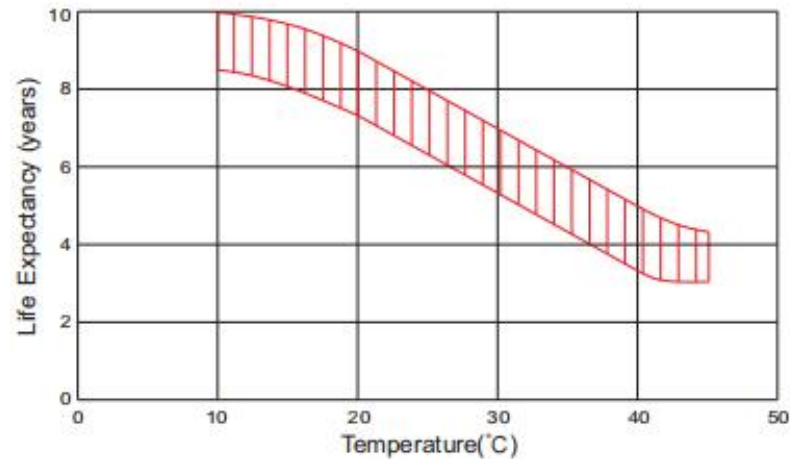
Supplementary charge required (Carry out supplement charge before use if 100% capacity is required)

Supplementary charge required before use. This supplementary charge will help to recover the capacity and should be made as early as possible

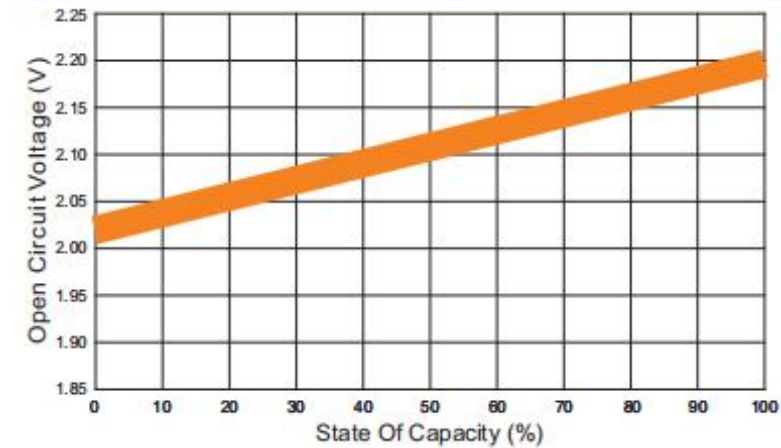
Supplementary charge may often fail to recover the capacity. The battery should never be left standing till this state is reached.

Supplementary charge and storage guidelines

Effect of Temperature on Longterm life



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



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.

LET'S DEVELOP TRUST AND BUSINESS

Connecting To Legacy



Model: GW12-150W(12V 40Ah)

GW Series

VLRA High Rate Discharge Battery



Legacy Canadian products designed in Canada, assembled in China.

Connecting To Legacy

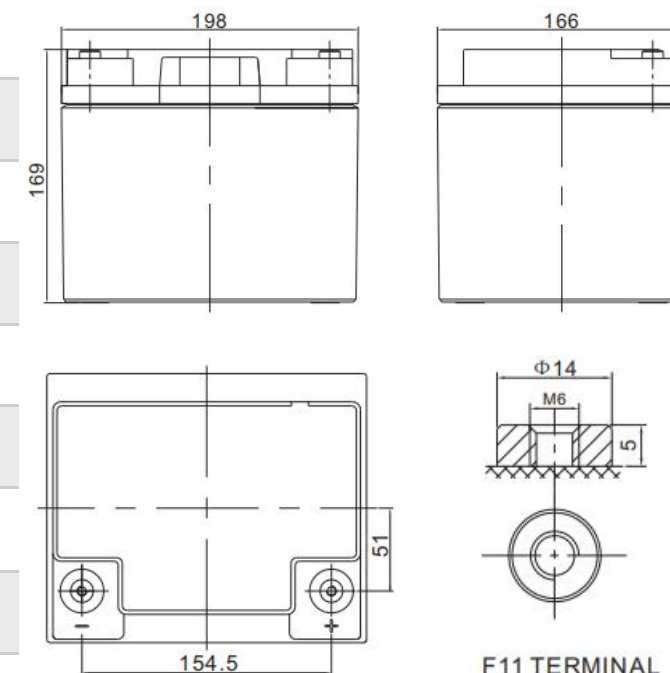
📍 *Laval-Quebec-Canada*

📍 *Beirut-Lebanon*

📍 *Hongkong-China*

🔍 www.connectinglegacy.com

Introduction	GW12-150W(12V 40Ah)
Length	198±2mm (7.80 inches)
Width	166±2mm (6.54 inches)
Height	169±2mm (6.65 inches)
Total Height	169±2mm (6.65 inches)
Weight	Approx. 12.4Kg (Tolerance±5%)
Terminal	Default F11(M6), Value: 8~10N*m
Container Material	A.B.S. UL94-HB, <UL94-V0 Optional>
Design Life	15 years
Application	UPS/EPS,Electric Tools,Toys,Medical,Wheelchair and Security System etc.
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.



GW12-150W Dimension

Parameters	GW12-150W(12V 40Ah)
Cell Per Unit	6
Voltage Per Unit	12V
Nominal Capacity	150W@15min-rate to 1.67V per cell @25°C
Internal Resistance	≤9.5 mΩ(Full Charge Condition @25°C)
Max. Discharge Current	400A (5 sec)
Max. Charging Current	12.0A
Short Circuit Current	1100A
Reference Capacity	C10: 37.8Ah C20: 40.0Ah
Standby Use Voltage	13.50 V~13.62 V @ 25°C Temperature Compensation: -3mV/°C/Cell
Cycle Use Voltage	14.10 V~14.40 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.



GW12-150W Imagine

F.V/TIME	5MIN	8MIN	10MIN	15MIN	20MIN	30MIN	60MIN	90MIN
1.60V	149.9	124.1	108.7	82.95	67.54	49.79	28.81	20.68
1.65V	136.0	113.8	100.5	77.36	63.49	47.11	27.49	19.83
1.70V	130.2	109.4	96.87	75.00	61.71	45.98	26.94	19.45
1.75V	120.2	101.9	90.82	70.95	58.63	44.03	26.00	18.84
1.80V	110.2	94.36	84.76	67.14	55.87	42.16	25.06	18.23
1.85V	94.56	80.38	71.81	57.73	48.49	37.30	22.64	16.62



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

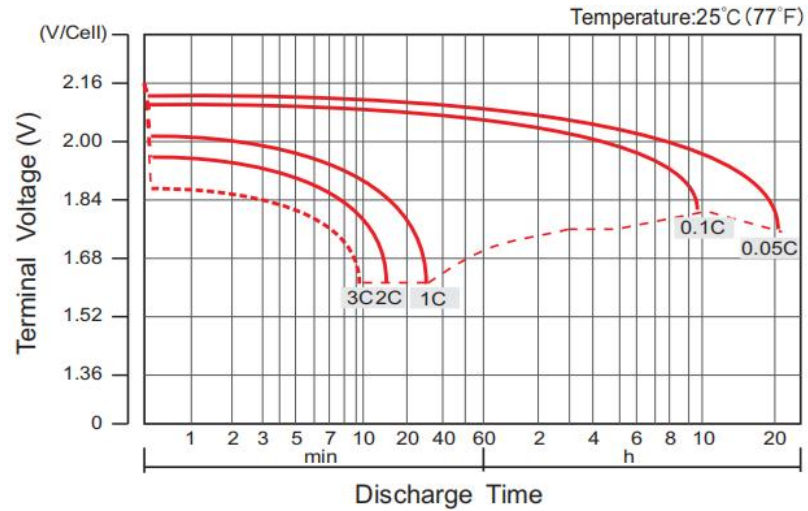
Model: GW12-150W

F.V/TIME	5MIN	8MIN	10MIN	15MIN	20MIN	30MIN	60MIN	90MIN
1.60V	275.4	231.1	204.5	158.1	129.8	96.74	54.11	39.13
1.65V	256.4	216.8	193.0	150.0	123.9	92.76	52.08	37.83
1.70V	247.9	210.3	187.6	146.5	121.2	90.90	51.22	37.30
1.75V	232.7	198.7	178.2	140.2	116.4	87.90	49.82	36.30
1.80V	216.5	186.5	168.3	134.0	112.0	84.82	48.33	35.30
1.85V	188.6	161.1	144.5	116.4	98.11	75.65	43.96	32.47

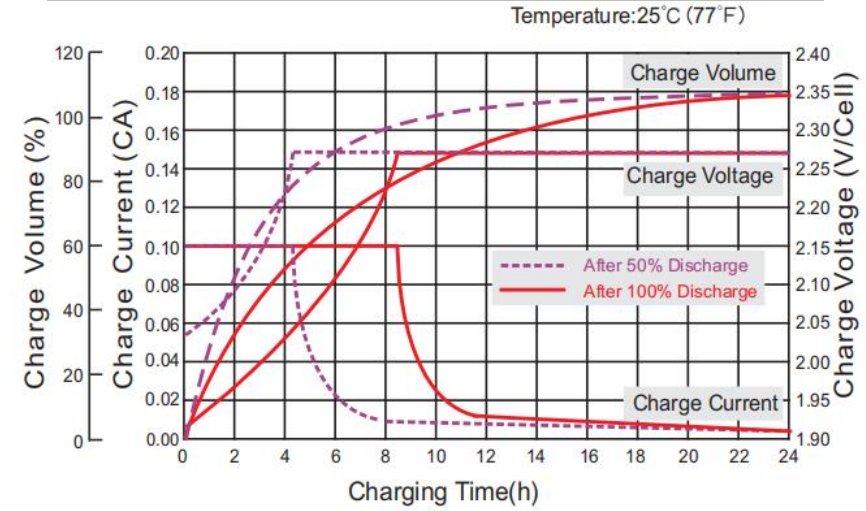


Constant Power Discharge
W/Cell (@ 77°F/25°C)

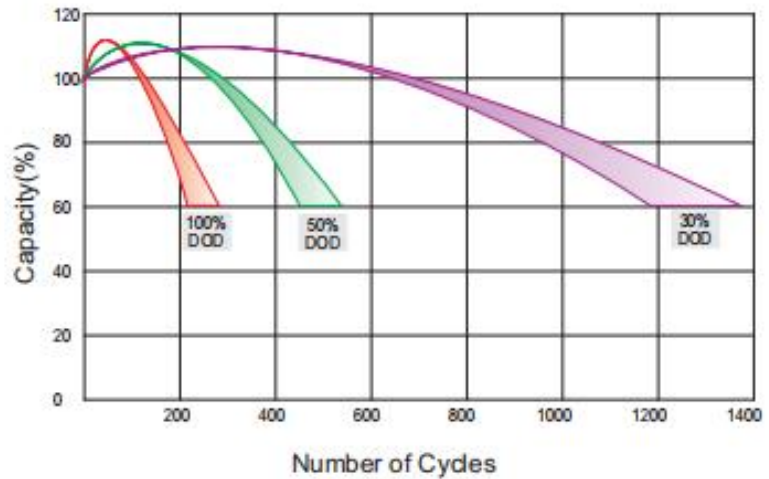
Discharge Characteristics Curve



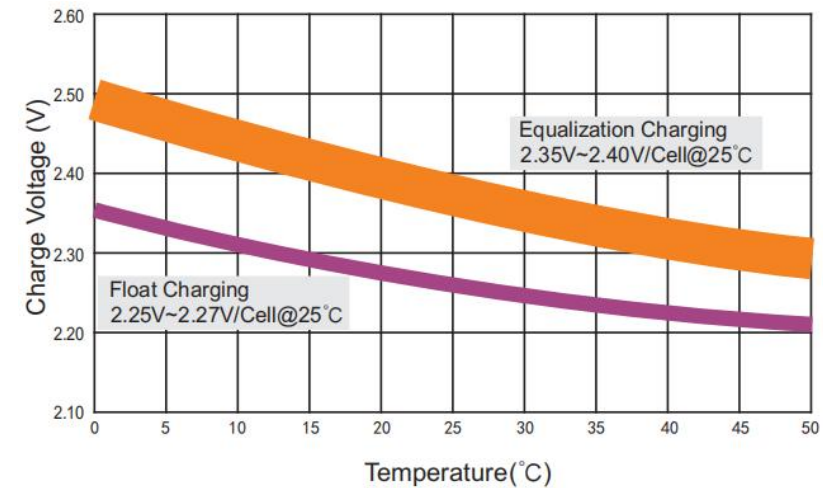
Charge Characteristics Curve For Standby Use(IU)



Cycle Life in Relation to Depth of Discharge

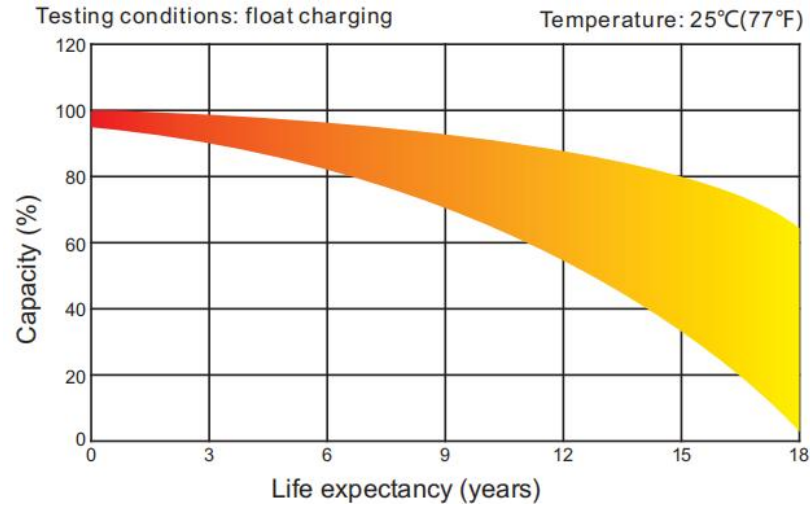


Relationship Between Charging Voltage and Temperature

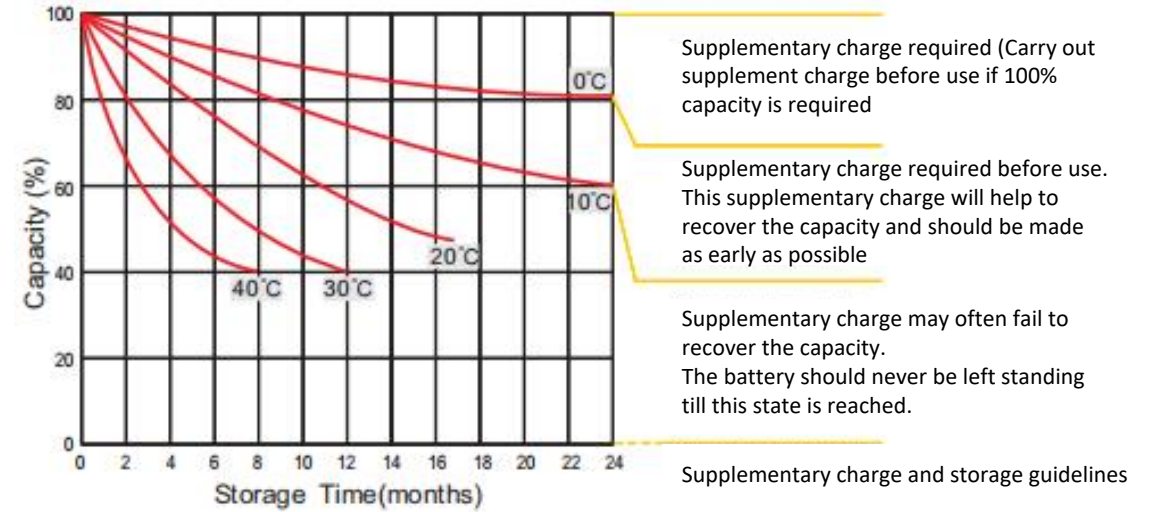


Note: The above data are average values, and can be obtained within 3 charge/discharge cycles. These are not minimum values. Cell and battery designs/specifications are subject to modification without notice. Legacy reserves the right to explain and update the latest information.

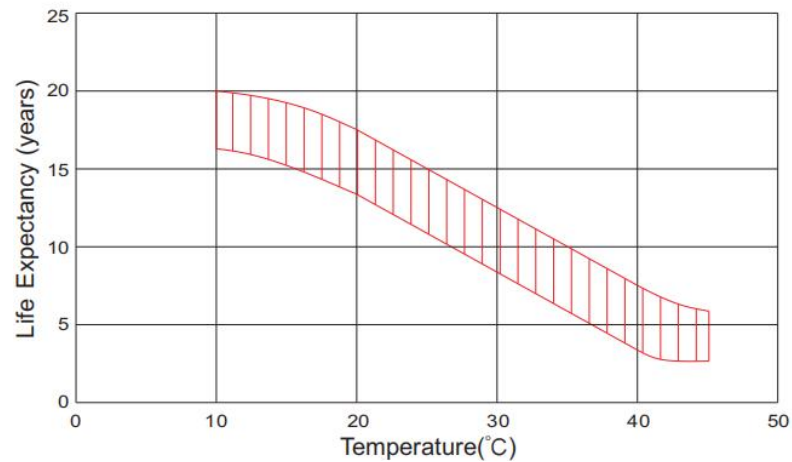
Life Characteristics of Standby Use



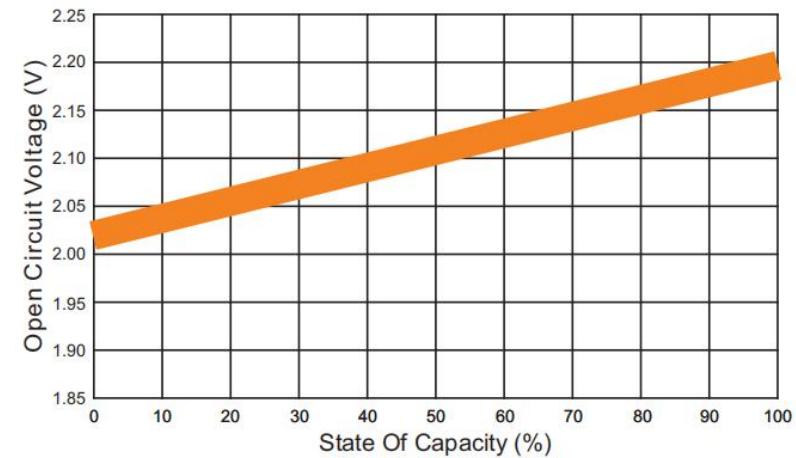
Storage Characteristics



Effect of Temperture on Longterm life



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



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.

LET'S DEVELOP TRUST AND BUSINESS

Connecting To Legacy



Model: GW12-240W(12V 65Ah)

GW Series

VLRA High Rate Discharge Battery



Legacy Canadian products designed in Canada, assembled in China.

Connecting To Legacy

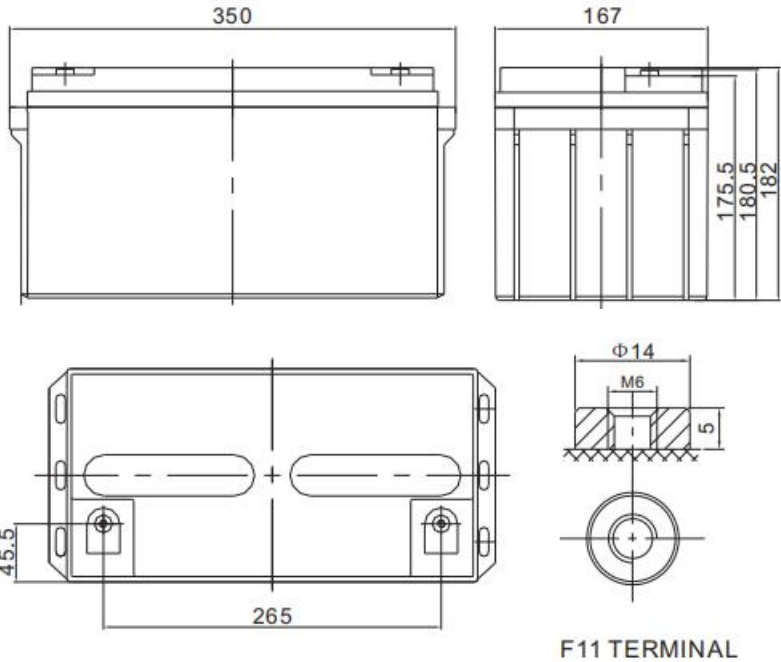
📍 *Laval-Quebec-Canada*

📍 *Beirut-Lebanon*

📍 *Hongkong-China*

🔍 www.connectinglegacy.com

Introduction	GW12-240W(12V 65Ah)
Length	350±2mm (13.8 inches)
Width	167±2mm (6.57 inches)
Height	182±2mm (7.17 inches)
Total Height	182±2mm (7.17 inches)
Weight	Approx. 17.5Kg (Tolerance±5%)
Terminal	Default F11(M6), Value: 8~10N*m
Container Material	A.B.S. UL94-HB, <UL94-V0 Optional>
Design Life	15 years
Application	UPS/EPS,Electric Tools,Toys,Medical,Wheelchair and Security System etc.
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.



GW12-240W Dimension

Parameters	GW12-240W(12V 65Ah)
Cell Per Unit	6
Voltage Per Unit	12V
Nominal Capacity	240W@15min-rate to 1.67V per cell @25°C
Internal Resistance	≤6.5 mΩ(Full Charge Condition @25°C)
Max. Discharge Current	650A (5 sec)
Max. Charging Current	19.5A
Short Circuit Current	1650A
Reference Capacity	C10: 61.3Ah C20: 65.0Ah
Standby Use Voltage	13.50 V~13.62 V @ 25°C Temperature Compensation: -3mV/°C/Cell
Cycle Use Voltage	14.10 V~14.40 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.



GW12-240W Imagine

F.V/TIME	5MIN	8MIN	10MIN	15MIN	20MIN	30MIN	60MIN	90MIN
1.60V	232.7	194.6	172.2	132.7	108.1	79.66	46.10	33.09
1.65V	211.1	178.4	159.2	123.8	101.6	75.38	43.98	31.74
1.70V	202.1	171.5	153.5	120.0	98.74	73.57	43.10	31.12
1.75V	186.6	159.8	143.9	113.5	93.81	70.45	41.60	30.14
1.80V	171.0	148.0	134.3	107.4	89.39	67.47	40.11	29.16
1.85V	146.8	126.0	113.8	92.38	77.59	59.68	36.23	26.59



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

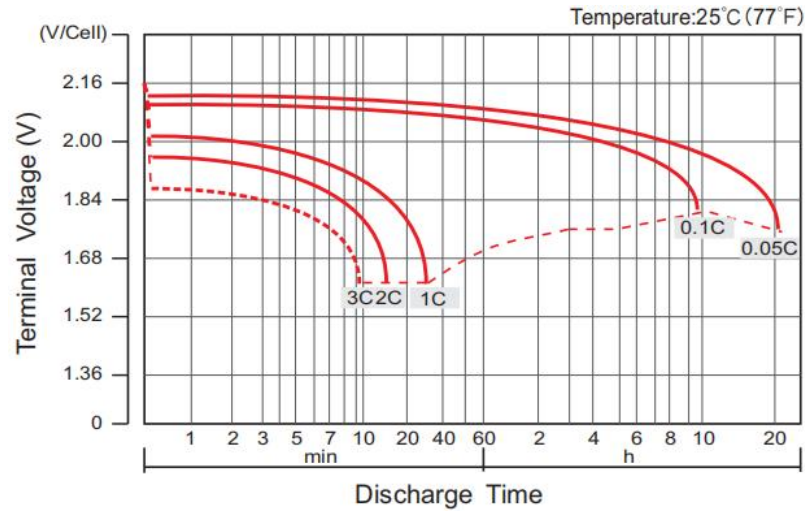
Model: GW12-240W

F.V/TIME	5MIN	8MIN	10MIN	15MIN	20MIN	30MIN	60MIN	90MIN
1.60V	427.5	362.4	324.0	253.0	207.7	154.8	86.58	62.62
1.65V	397.9	340.0	305.7	240.0	198.3	148.4	83.33	60.53
1.70V	384.8	329.8	297.2	234.4	194.0	145.4	81.96	59.68
1.75V	361.1	311.6	282.3	224.3	186.2	140.6	79.71	58.08
1.80V	336.1	292.5	266.5	214.3	179.2	135.7	77.34	56.49
1.85V	292.8	252.7	228.8	186.3	157.0	121.1	70.34	51.96

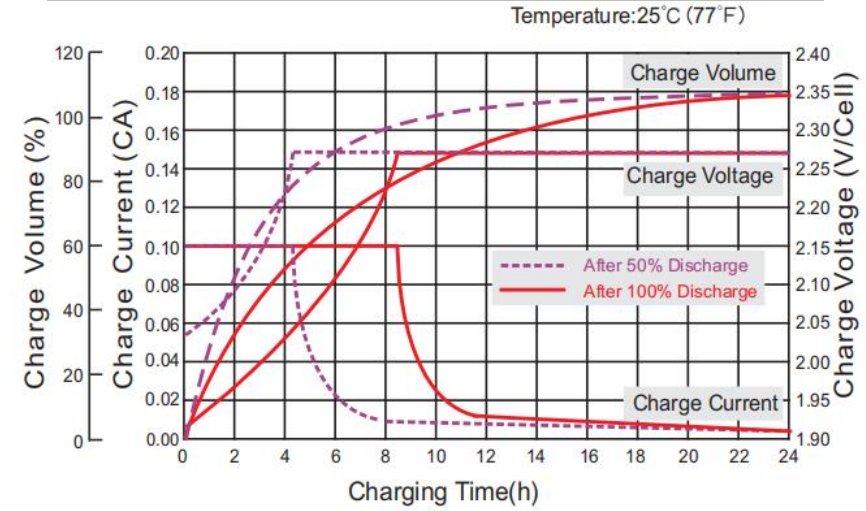


Constant Power Discharge
W/Cell (@ 77°F/25°C)

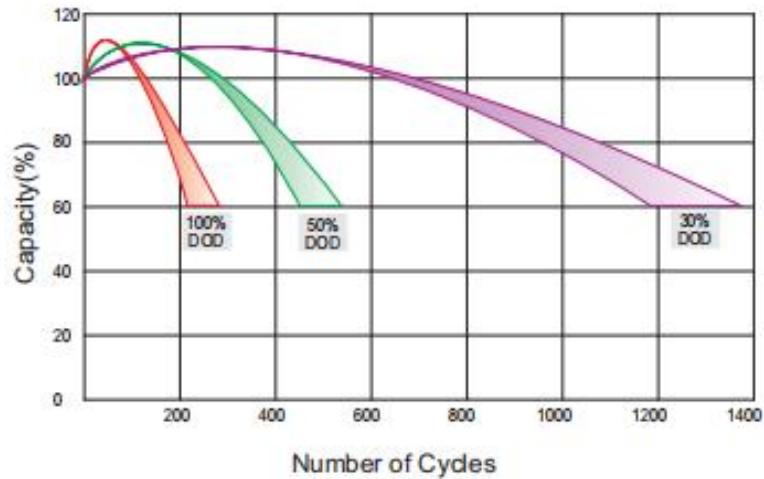
Discharge Characteristics Curve



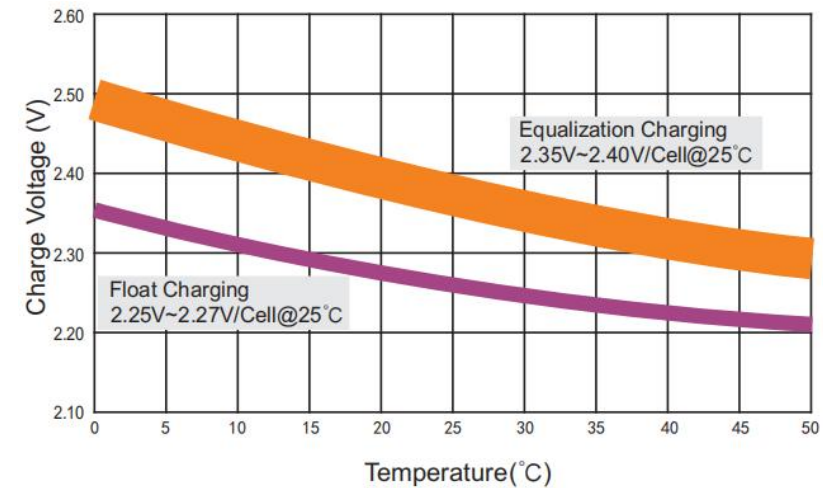
Charge Characteristics Curve For Standby Use(IU)



Cycle Life in Relation to Depth of Discharge

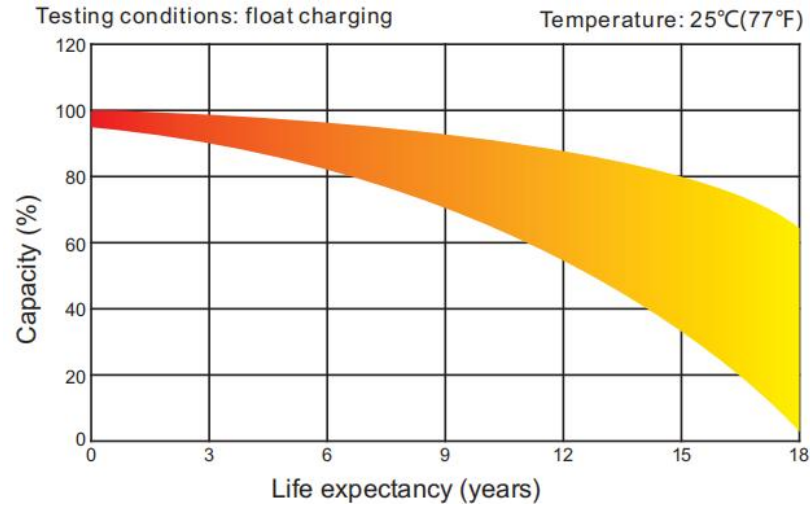


Relationship Between Charging Voltage and Temperature

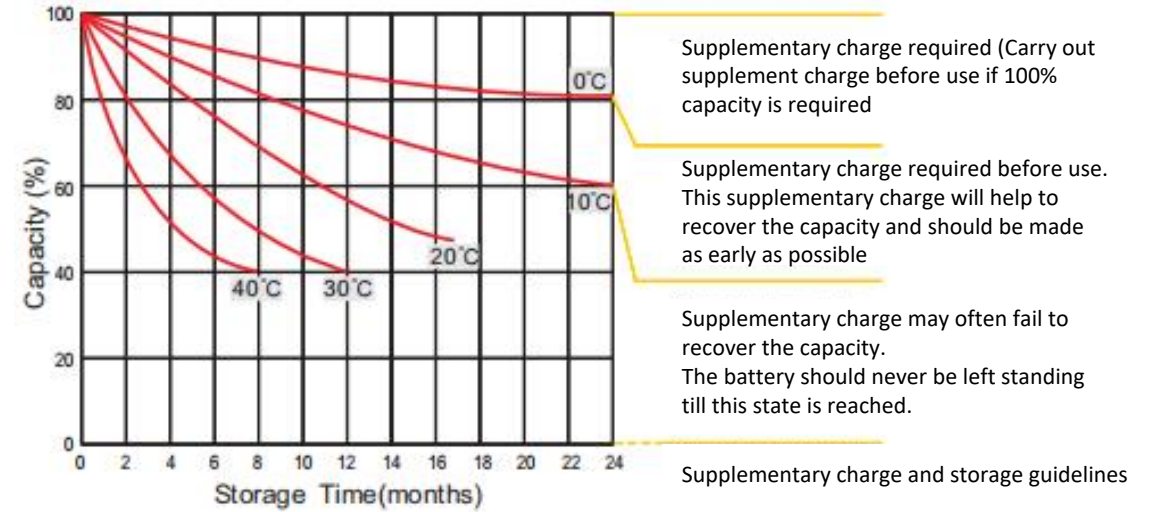


Note: The above data are average values, and can be obtained within 3 charge/discharge cycles. These are not minimum values. Cell and battery designs/specifications are subject to modification without notice. Legacy reserves the right to explain and update the latest information.

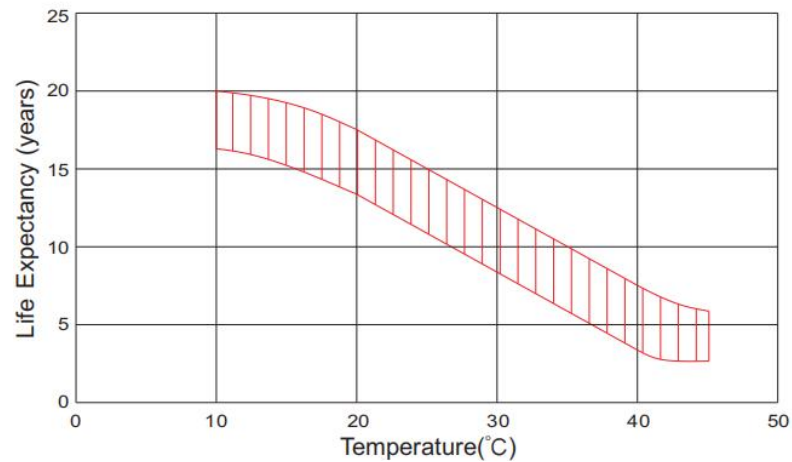
Life Characteristics of Standby Use



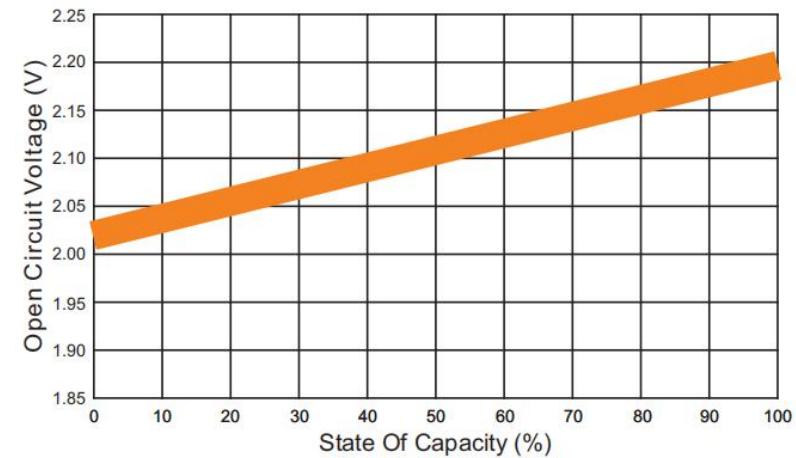
Storage Characteristics



Effect of Temperture on Longterm life



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



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.

LET'S DEVELOP TRUST AND BUSINESS

Connecting To Legacy



Model: GW12-300W(12V 80Ah)

GW Series

VLRA High Rate Discharge Battery



Legacy Canadian products designed in Canada, assembled in China.

Connecting To Legacy

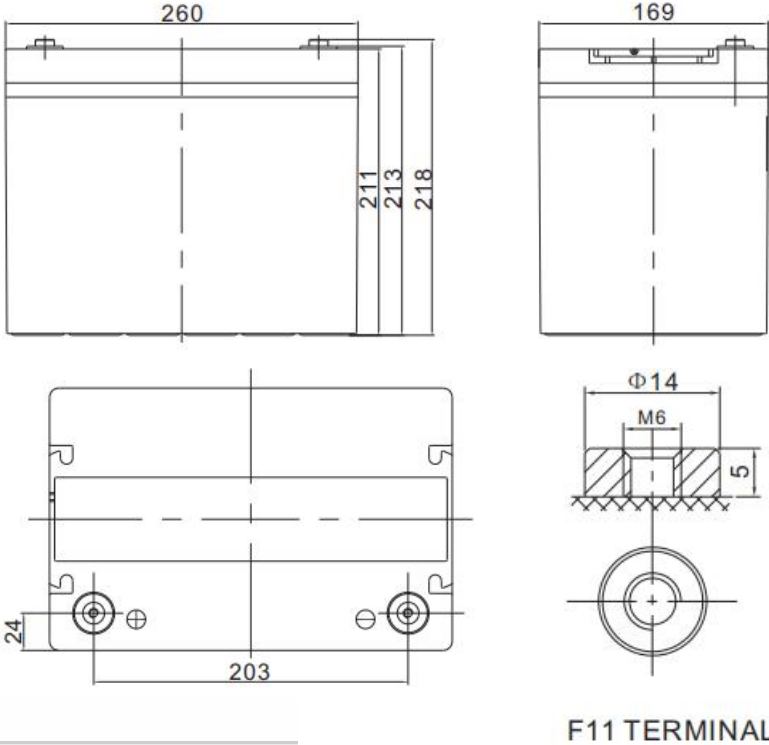
📍 *Laval-Quebec-Canada*

📍 *Beirut-Lebanon*

📍 *Hongkong-China*

🔍 www.connectinglegacy.com

Introduction	GW12-300W(12V 80Ah)	
Length	260±2mm (10.2 inches)	
Width	169±2mm (6.65 inches)	
Height	211±2mm (8.31 inches)	
Total Height	216±2mm (8.50 inches)	
Weight	Approx. 25.5Kg (Tolerance±5%)	
Terminal	Default F11(M6), Value: 8~10N*m	
Container Material	A.B.S. UL94-HB, <UL94-V0 Optional>	
Design Life	15 years	
Application	UPS/EPS,Electric Tools,Toys,Medical,Wheelchair and Security System etc.	
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.	



GW12-300W Dimension

Parameters	GW12-300W(12V 80Ah)
Cell Per Unit	6
Voltage Per Unit	12V
Nominal Capacity	300W@15min-rate to 1.67V per cell @25°C
Internal Resistance	≤5.8 mΩ(Full Charge Condition @25°C)
Max. Discharge Current	800A (5 sec)
Max. Charging Current	24.0A
Short Circuit Current	1900A
Reference Capacity	C10: 75.0Ah C20: 80.0Ah
Standby Use Voltage	13.50 V~13.62 V @ 25°C Temperature Compensation: -3mV/°C/Cell
Cycle Use Voltage	14.10 V~14.40 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.



GW12-300W Imagine

F.V/TIME	5MIN	8MIN	10MIN	15MIN	20MIN	30MIN	60MIN	90MIN
1.60V	269.8	228.3	208.7	165.9	135.1	99.55	57.61	41.34
1.65V	244.8	209.3	192.9	154.7	127.0	94.20	54.96	39.66
1.70V	234.4	201.2	185.9	150.0	123.4	91.93	53.86	38.89
1.75V	216.4	187.4	174.3	141.9	117.2	88.04	51.99	37.67
1.80V	198.3	173.6	162.7	134.2	111.7	84.31	50.12	36.44
1.85V	170.2	147.9	137.8	115.4	96.96	74.58	45.28	33.23



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

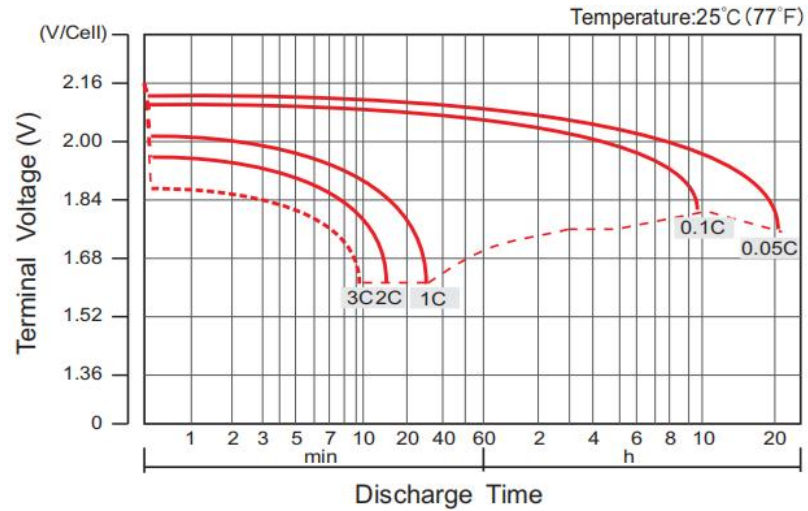
Model: GW12-300W

F.V/TIME	5MIN	8MIN	10MIN	15MIN	20MIN	30MIN	60MIN	90MIN
1.60V	495.7	425.1	392.6	316.2	259.6	193.4	108.2	78.25
1.65V	461.3	398.8	370.4	300.0	247.7	185.5	104.1	75.64
1.70V	446.2	386.9	360.1	293.0	242.4	181.8	102.4	74.57
1.75V	418.7	365.6	342.0	280.3	232.7	175.8	99.61	72.58
1.80V	389.7	343.2	323.0	267.8	223.9	169.6	96.64	70.59
1.85V	339.5	296.4	277.3	232.8	196.2	151.3	87.90	64.93

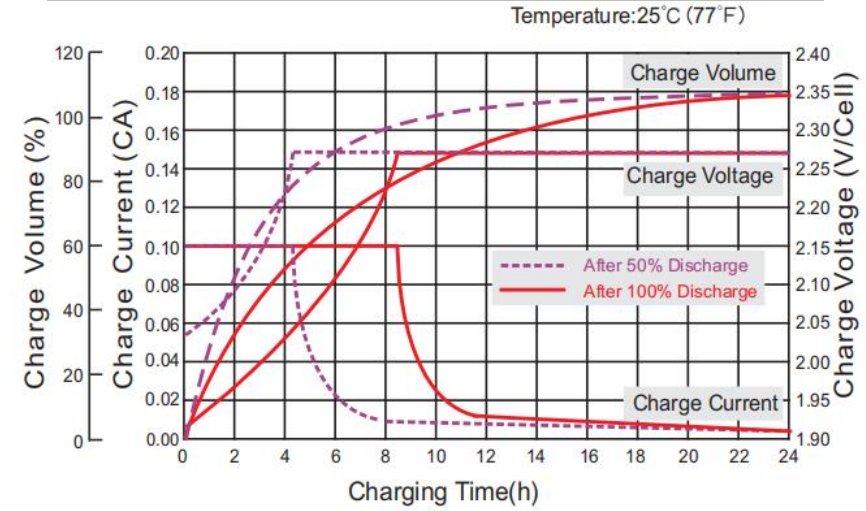


Constant Power Discharge
W/Cell (@ 77°F/25°C)

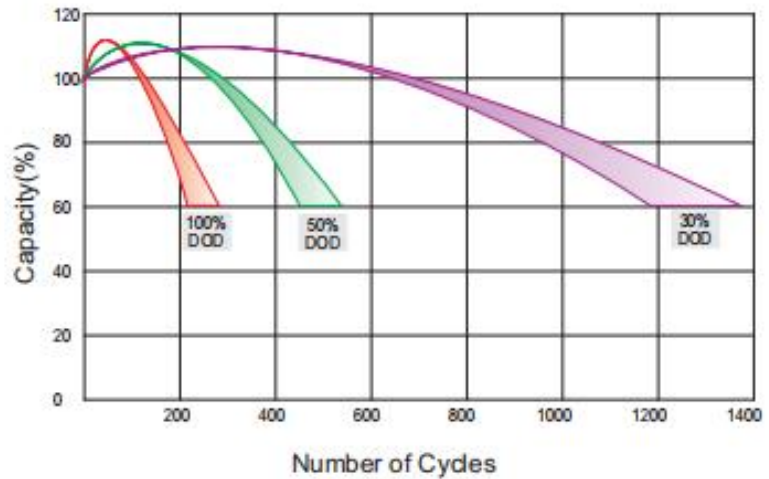
Discharge Characteristics Curve



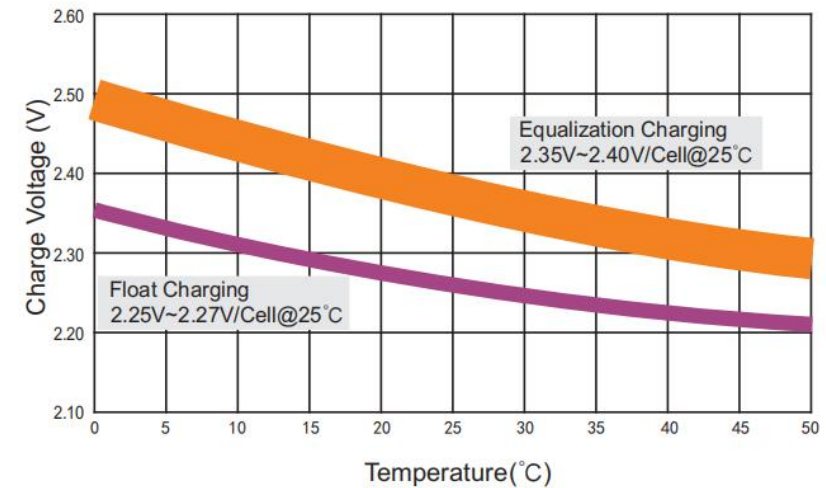
Charge Characteristics Curve For Standby Use(IU)



Cycle Life in Relation to Depth of Discharge

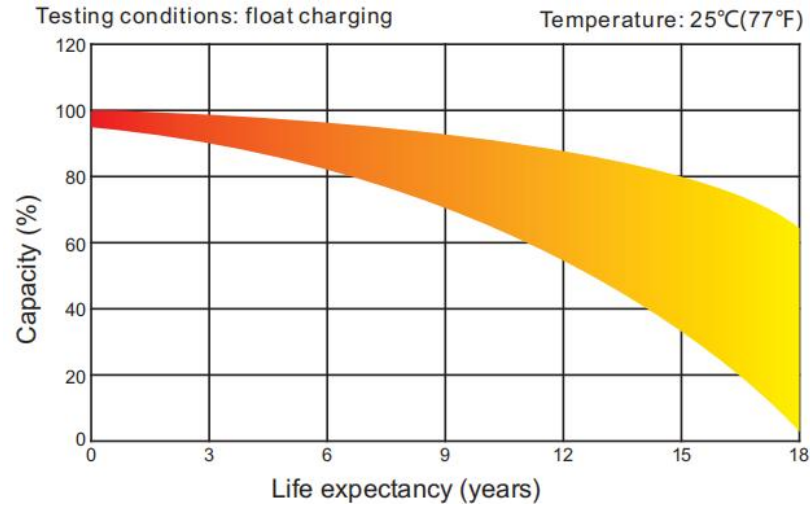


Relationship Between Charging Voltage and Temperature

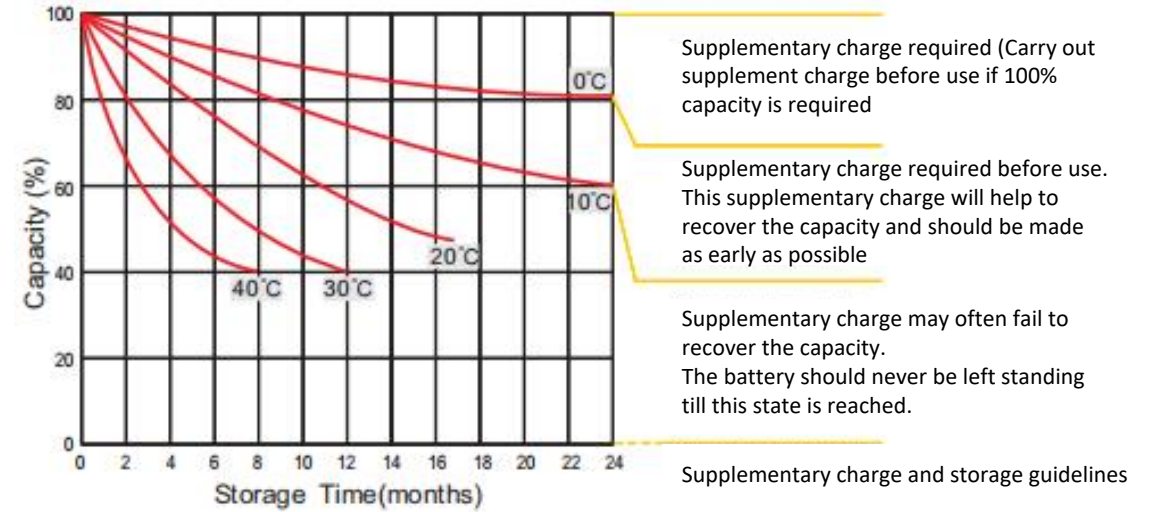


Note: The above data are average values, and can be obtained within 3 charge/discharge cycles. These are not minimum values. Cell and battery designs/specifications are subject to modification without notice. Legacy reserves the right to explain and update the latest information.

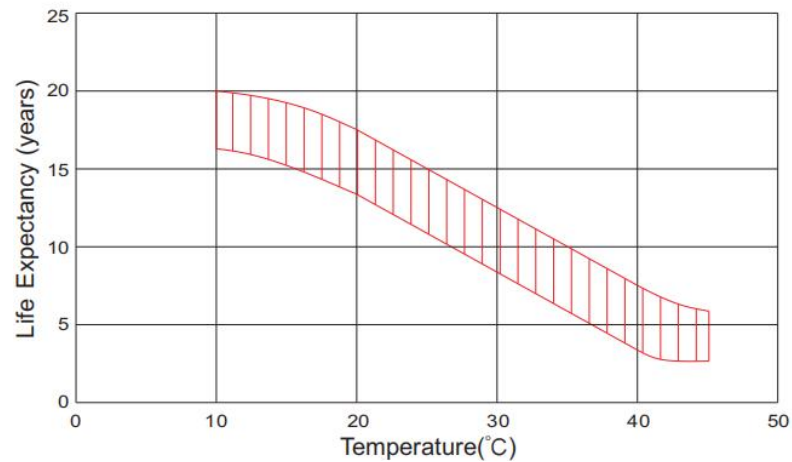
Life Characteristics of Standby Use



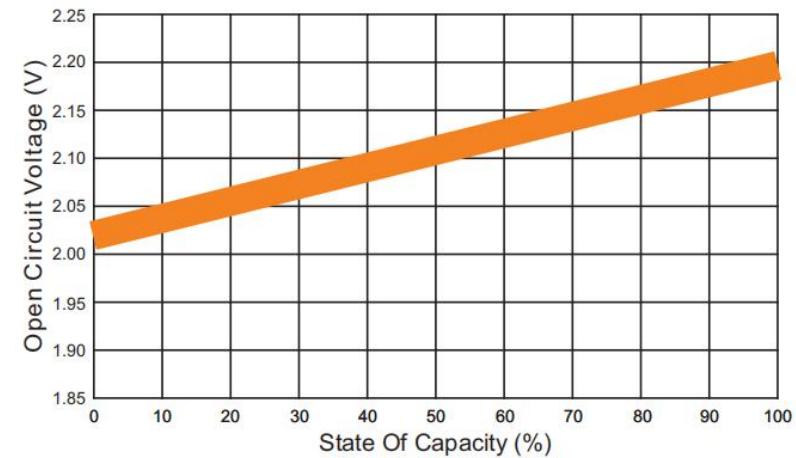
Storage Characteristics



Effect of Temperture on Longterm life



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



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.

LET'S DEVELOP TRUST AND BUSINESS

Connecting To Legacy



Model: GW12-380SW(12V 100Ah)

GW Series

VLRA High Rate Discharge Battery



Legacy Canadian products designed in Canada, assembled in China.

Connecting To Legacy

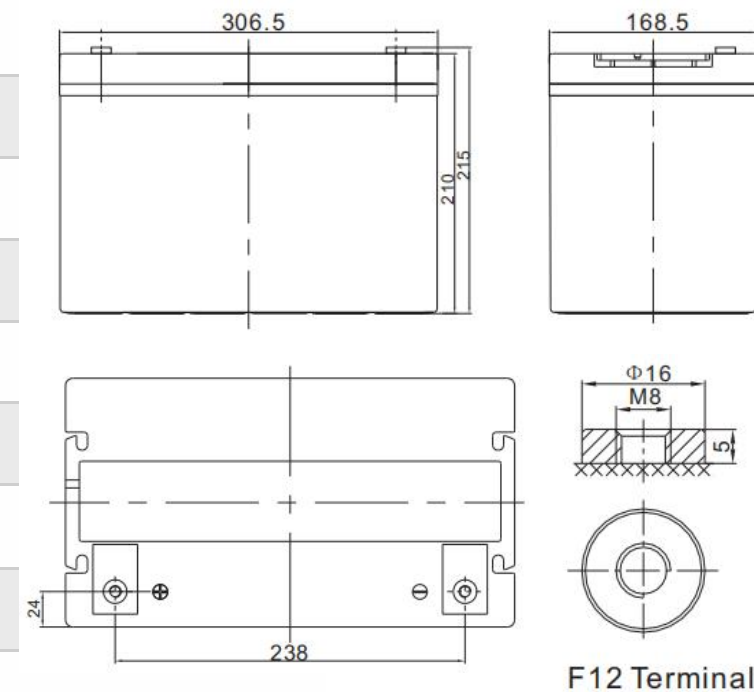
📍 Laval-Quebec-Canada

📍 Beirut-Lebanon

📍 Hongkong-China

🔍 www.connectinglegacy.com

Introduction	GW12-380SW(12V 100Ah)
Length	306.5±2mm (12.1 inches)
Width	168.5±2mm (6.63 inches)
Height	210±2mm (8.27 inches)
Total Height	215±2mm (8.46 inches)
Weight	Approx. 30.0Kg (Tolerance±5%)
Terminal	Default F12(M8), Value: 10~12N*m
Container Material	A.B.S. UL94-HB, <UL94-V0 Optional>
Design Life	15 years
Application	UPS/EPS,Electric Tools,Toys,Medical,Wheelchair and Security System etc.
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.



GW12-380SW Dimension

Parameters	GW12-380SW(12V 100Ah)
Cell Per Unit	6
Voltage Per Unit	12V
Nominal Capacity	380W@15min-rate to 1.67V per cell @25°C
Internal Resistance	≤5.0 mΩ(Full Charge Condition @25°C)
Max. Discharge Current	1000A (5 sec)
Max. Charging Current	30.0A
Short Circuit Current	2550A
Reference Capacity	C10: 94.3Ah C20: 100.0Ah
Standby Use Voltage	13.50 V~13.62 V @ 25°C Temperature Compensation: -3mV/°C/Cell
Cycle Use Voltage	14.10 V~14.40 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.



GW12-380SW Imagine

F.V/TIME	5MIN	8MIN	10MIN	15MIN	20MIN	30MIN	60MIN	90MIN
1.60V	324.6	289.6	267.2	210.1	171.1	126.1	72.98	52.37
1.65V	294.6	265.6	246.9	195.9	160.8	119.3	69.62	50.24
1.70V	282.1	255.3	238.1	190.0	156.3	116.5	68.24	49.27
1.75V	260.4	237.8	223.2	179.7	148.5	111.5	65.86	47.72
1.80V	238.6	220.2	208.3	170.1	141.5	106.8	63.49	46.17
1.85V	204.8	187.6	176.5	146.2	122.8	94.48	57.36	42.09



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

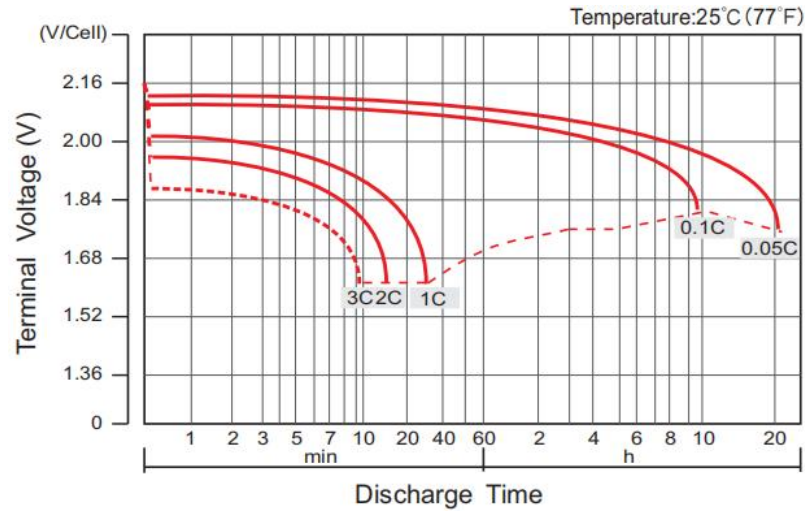
Model: GW12-380SW

F.V/TIME	5MIN	8MIN	10MIN	15MIN	20MIN	30MIN	60MIN	90MIN
1.60V	596.5	539.4	502.6	400.5	328.8	245.0	137.1	99.12
1.65V	555.2	506.0	474.3	380.0	313.8	235.0	131.9	95.83
1.70V	536.9	490.9	461.0	371.1	307.1	230.2	129.7	94.47
1.75V	503.9	463.9	437.6	355.1	294.7	222.6	126.2	91.95
1.80V	469.0	435.4	413.5	339.3	283.6	214.8	122.4	89.42
1.85V	408.5	376.1	355.0	294.9	248.5	191.6	111.4	82.25

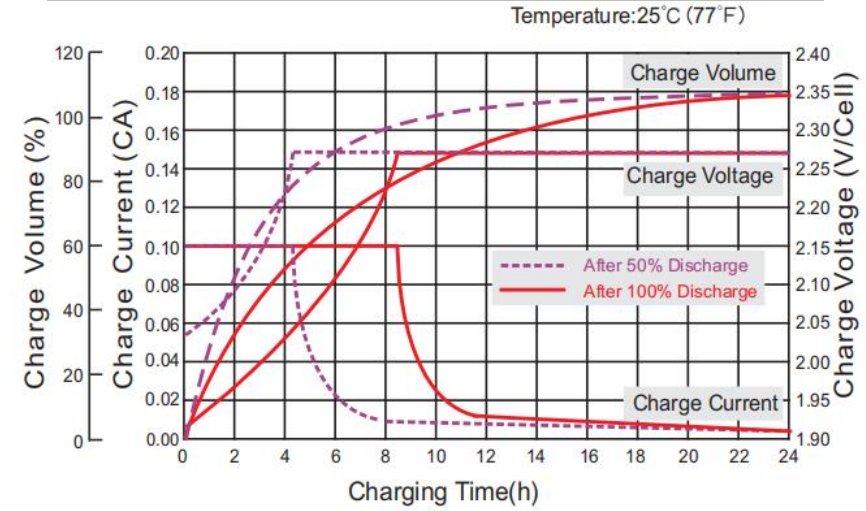


Constant Power Discharge
W/Cell (@ 77°F/25°C)

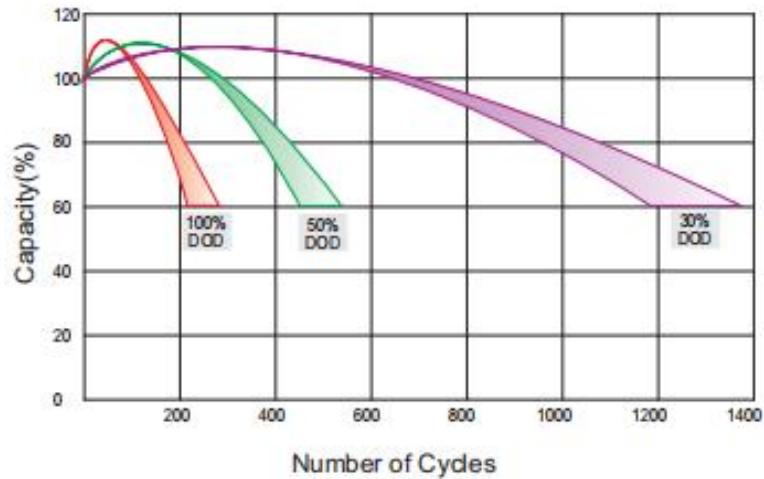
Discharge Characteristics Curve



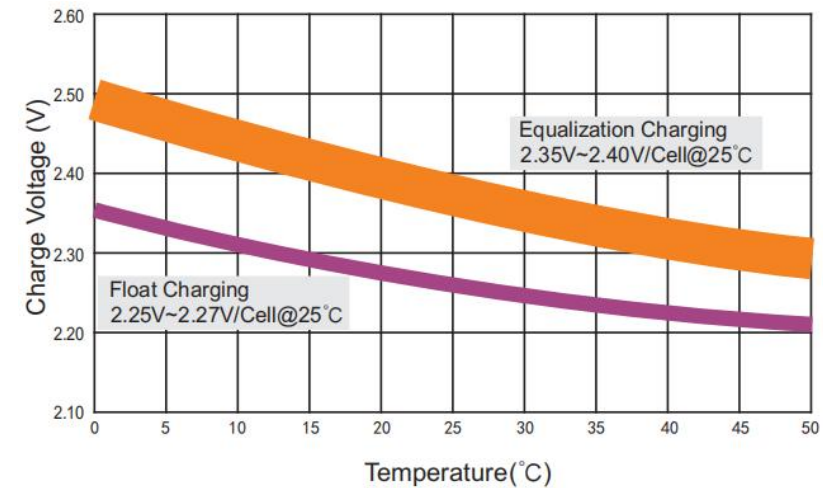
Charge Characteristics Curve For Standby Use(IU)



Cycle Life in Relation to Depth of Discharge

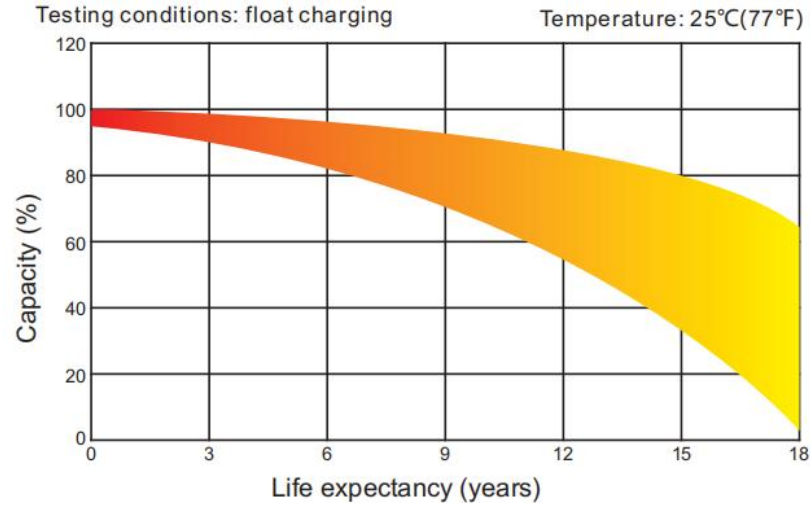


Relationship Between Charging Voltage and Temperature

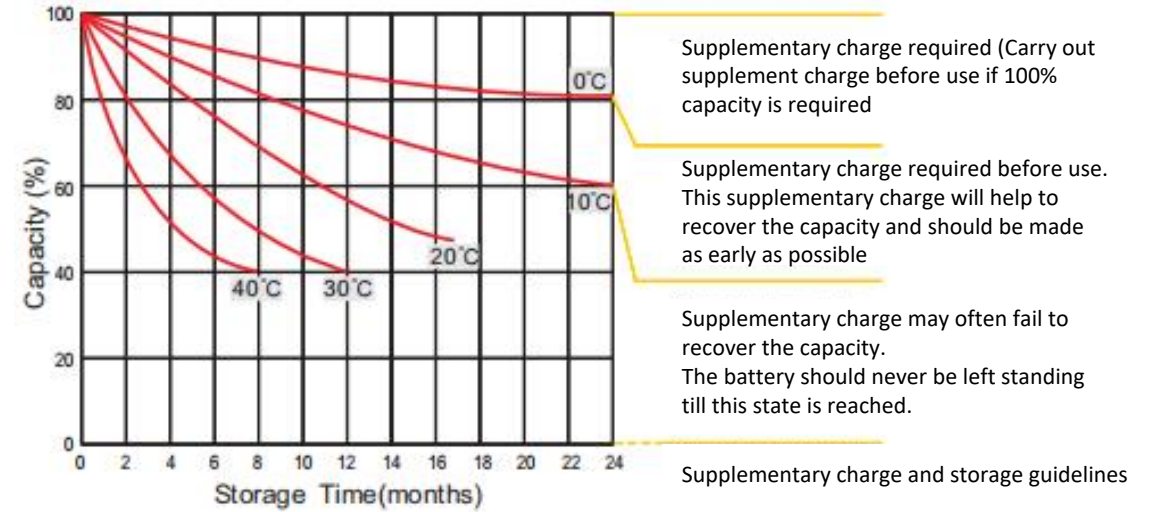


Note: The above data are average values, and can be obtained within 3 charge/discharge cycles. These are not minimum values. Cell and battery designs/specifications are subject to modification without notice. Legacy reserves the right to explain and update the latest information.

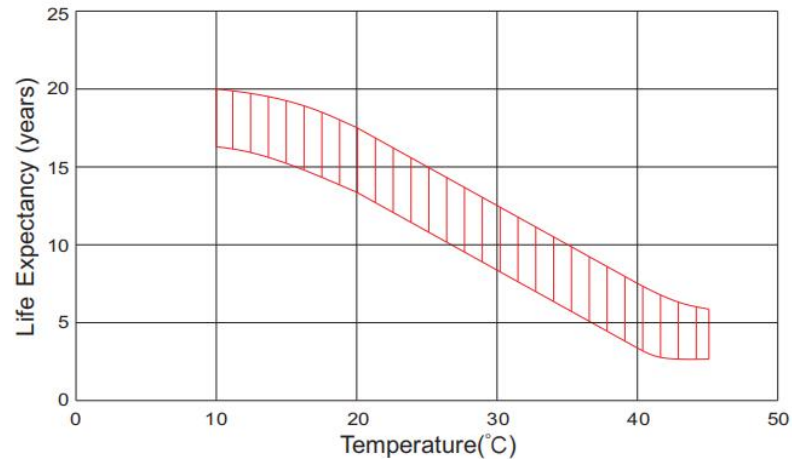
Life Characteristics of Standby Use



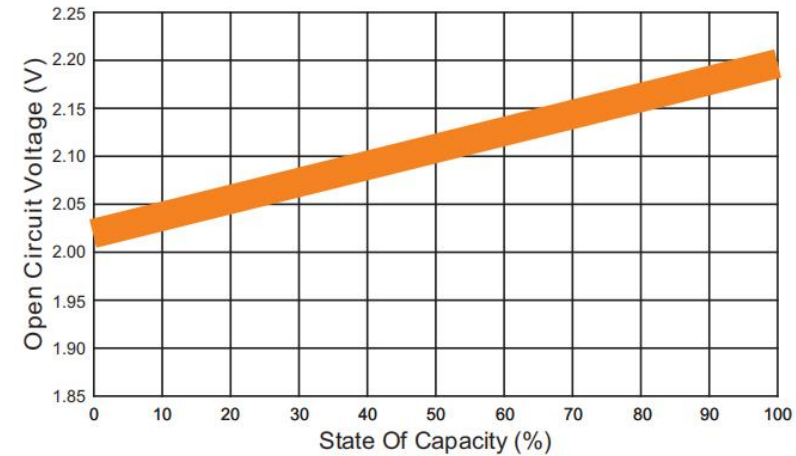
Storage Characteristics



Effect of Temperture on Longterm life



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



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.

LET'S DEVELOP TRUST AND BUSINESS

Connecting To Legacy



Model: GW12-420W(12V 110Ah)

GW Series

VLRA High Rate Discharge Battery



Legacy Canadian products designed in Canada, assembled in China.

Connecting To Legacy

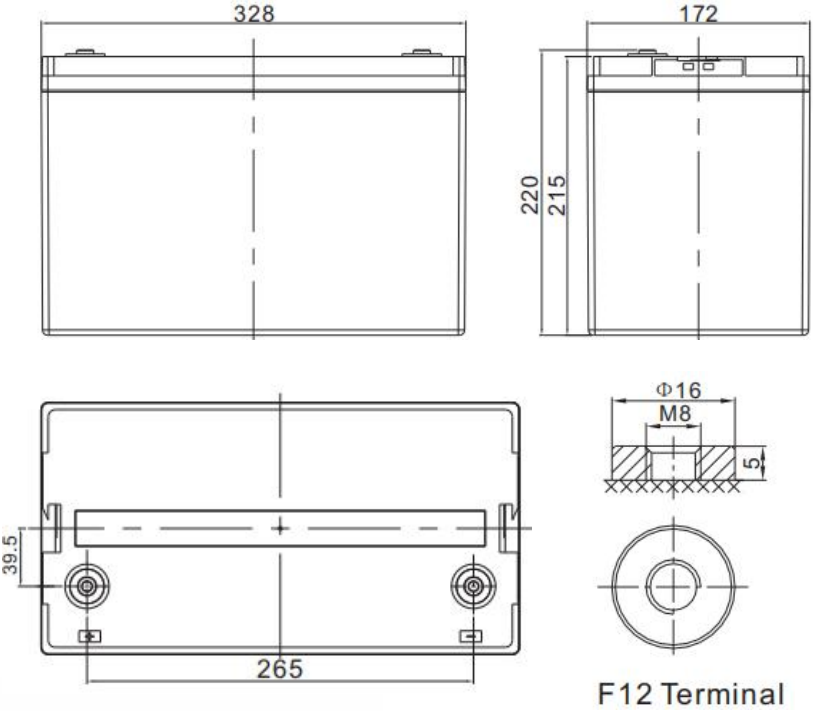
📍 *Laval-Quebec-Canada*

📍 *Beirut-Lebanon*

📍 *Hongkong-China*

🔍 www.connectinglegacy.com

Introduction	GW12-420W(12V 110Ah)	
Length	328±2mm (12.9 inches)	
Width	172±2mm (6.77 inches)	
Height	215±2mm (8.46 inches)	
Total Height	220±2mm (8.66 inches)	
Weight	Approx. 33.5Kg (Tolerance±5%)	
Terminal	Default F12(M8), <i>Value: 10~12N*m</i>	
Container Material	A.B.S. UL94-HB, <UL94-V0 Optional>	
Design Life	15 years	
Application	UPS/EPS,Electric Tools,Toys,Medical,Wheelchair and Security System etc.	
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.	



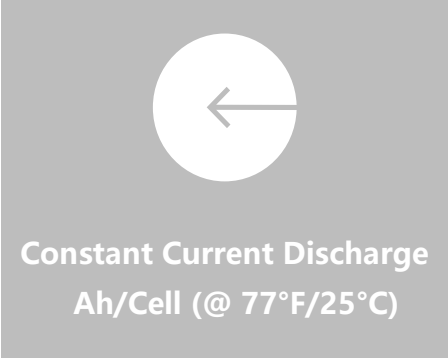
GW12-420W Dimension

Parameters	GW12-420W (12V 110Ah)
Cell Per Unit	6
Voltage Per Unit	12V
Nominal Capacity	420W@15min-rate to 1.67V per cell @25°C
Internal Resistance	≤4.8 mΩ(Full Charge Condition @25°C)
Max. Discharge Current	1100A (5 sec)
Max. Charging Current	33.0A
Short Circuit Current	2700A
Reference Capacity	C10: 104.0Ah C20: 110.0Ah
Standby Use Voltage	13.50 V~13.62 V @ 25°C Temperature Compensation: -3mV/°C/Cell
Cycle Use Voltage	14.10 V~14.40 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.



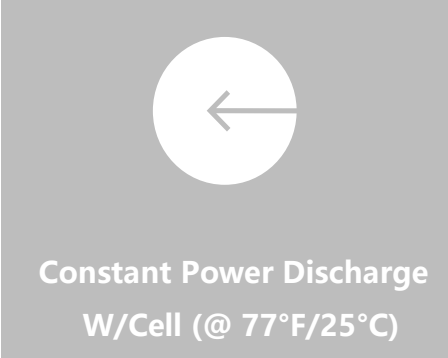
GW12-420W Imagine

F.V/TIME	5MIN	8MIN	10MIN	15MIN	20MIN	30MIN	60MIN	90MIN
1.60V	377.7	330.0	298.3	232.2	189.1	139.4	80.66	57.89
1.65V	342.7	302.6	275.7	216.6	177.7	131.9	76.95	55.53
1.70V	328.2	290.9	265.8	210.0	172.8	128.7	75.42	54.46
1.75V	303.0	271.0	249.2	198.6	164.1	123.3	72.79	52.74
1.80V	277.6	251.0	232.6	188.0	156.4	118.0	70.17	51.03
1.85V	238.3	213.8	197.0	161.6	135.8	104.4	63.39	46.52

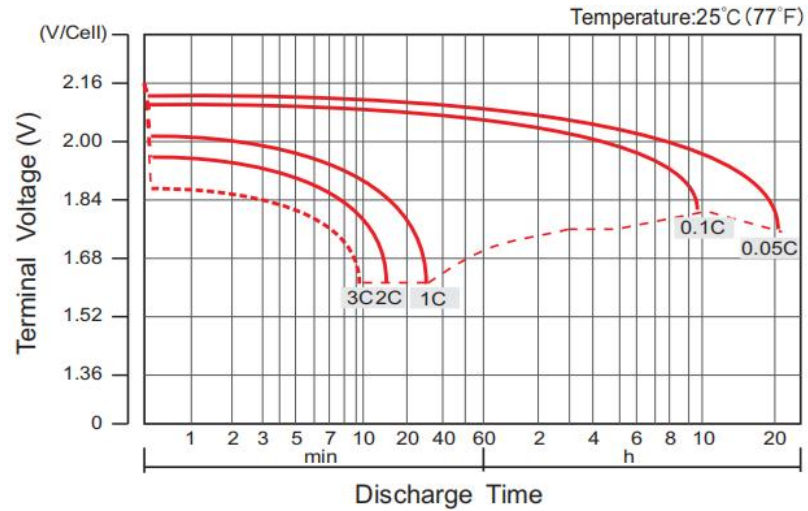


Model: GW12-420W

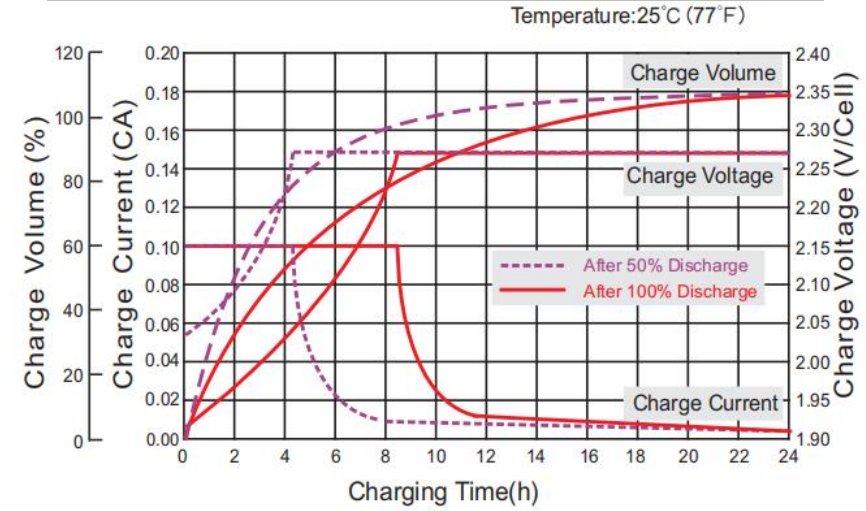
F.V/TIME	5MIN	8MIN	10MIN	15MIN	20MIN	30MIN	60MIN	90MIN
1.60V	694.0	614.6	561.1	442.7	363.4	270.8	151.5	109.6
1.65V	645.9	576.6	529.5	420.0	346.9	259.7	145.8	105.9
1.70V	624.7	559.3	514.7	410.2	339.4	254.5	143.4	104.4
1.75V	586.2	528.5	488.9	392.5	325.8	246.1	139.5	101.6
1.80V	545.6	496.1	461.7	375.0	313.5	237.5	135.3	98.84
1.85V	475.3	428.5	396.4	326.0	274.7	211.8	123.1	90.91



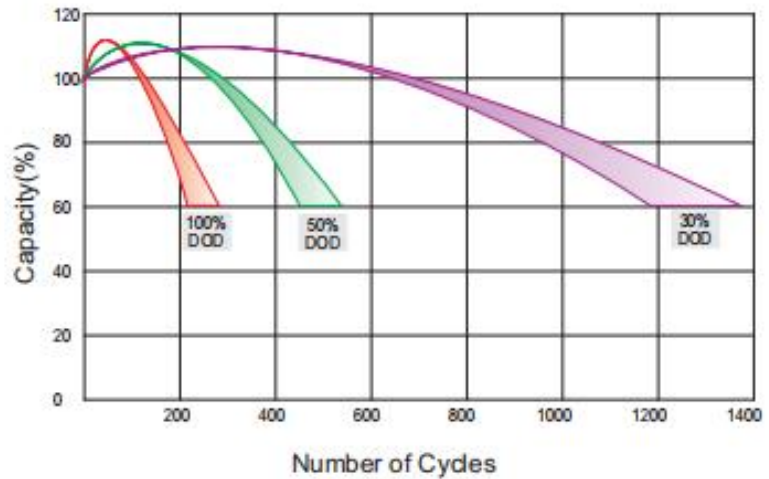
Discharge Characteristics Curve



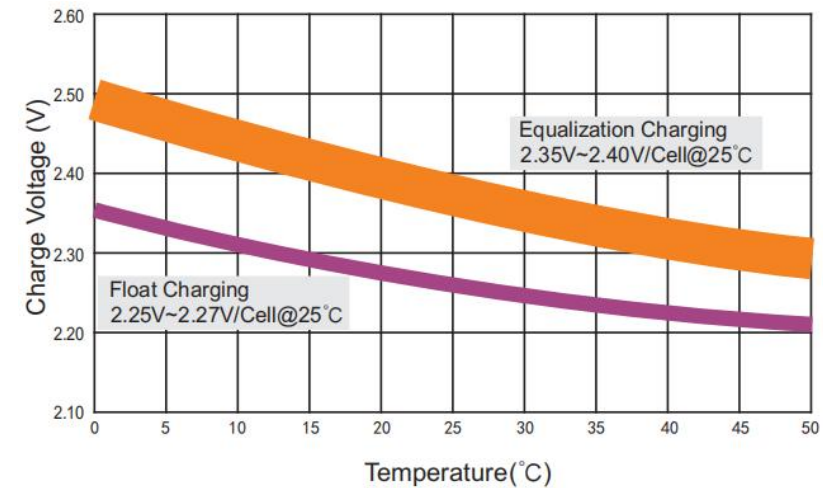
Charge Characteristics Curve For Standby Use(IU)



Cycle Life in Relation to Depth of Discharge

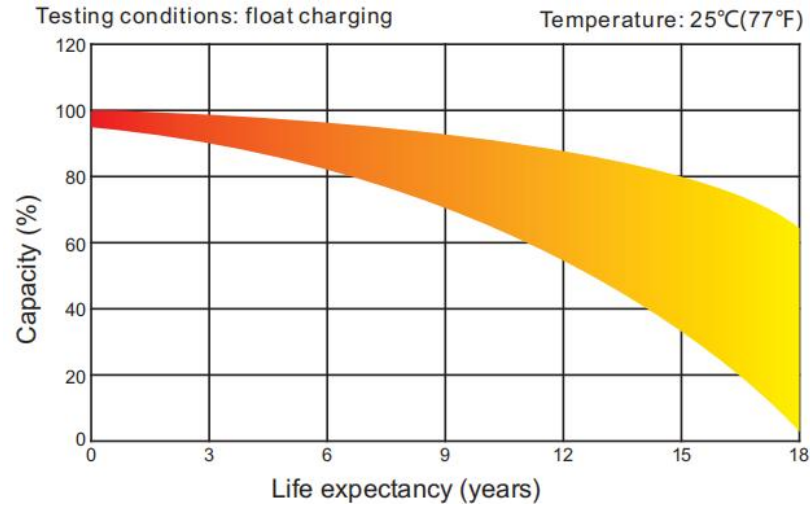


Relationship Between Charging Voltage and Temperature

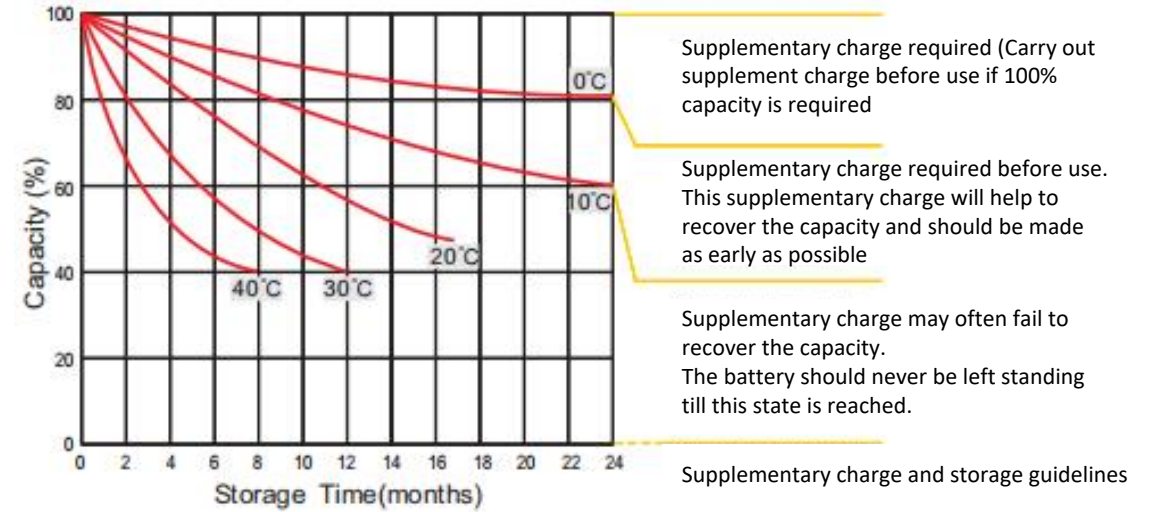


Note: The above data are average values, and can be obtained within 3 charge/discharge cycles. These are not minimum values. Cell and battery designs/specifications are subject to modification without notice. Legacy reserves the right to explain and update the latest information.

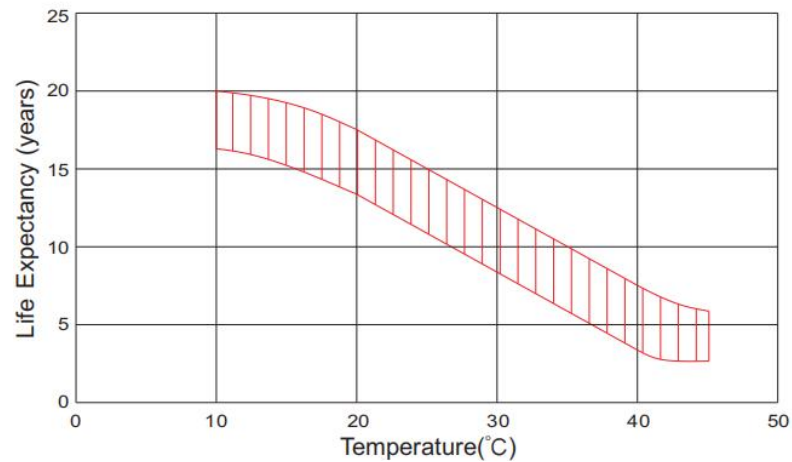
Life Characteristics of Standby Use



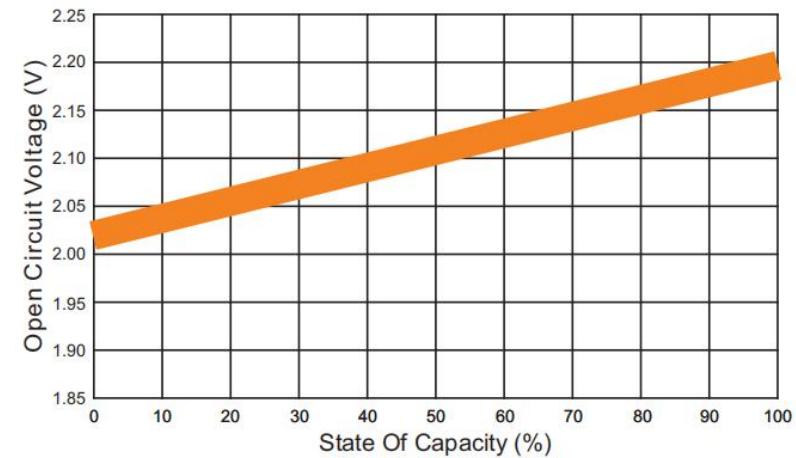
Storage Characteristics



Effect of Temperture on Longterm life



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



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.

LET'S DEVELOP TRUST AND BUSINESS

Connecting To Legacy



Model: GW12-450W(12V 120Ah)

GW Series

VLRA High Rate Discharge Battery



Legacy Canadian products designed in Canada, assembled in China.

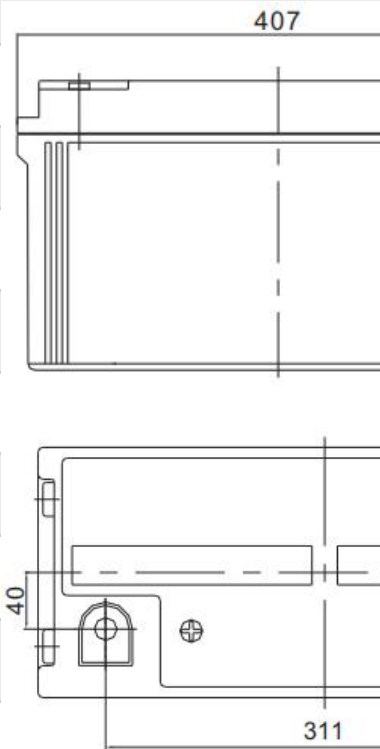
Connecting To Legacy

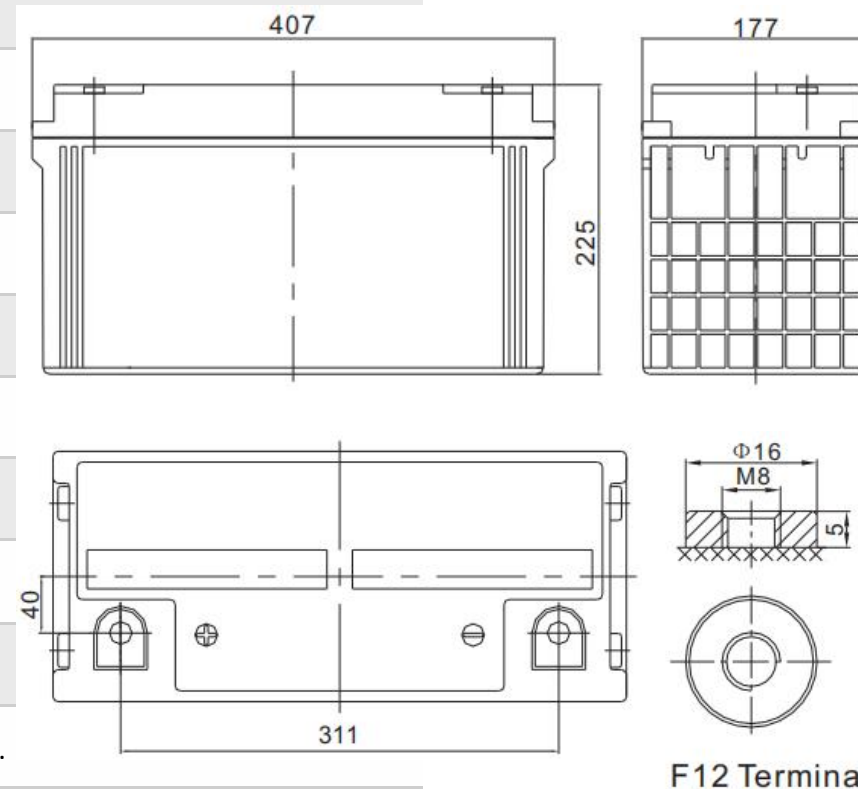
📍 *Laval-Quebec-Canada*

📍 *Beirut-Lebanon*

📍 *Hongkong-China*

🔍 www.connectinglegacy.com

Introduction	GW12-450W(12V 120Ah)	
Length	407±2mm (16.0 inches)	
Width	177±2mm (6.97 inches)	
Height	225±2mm (8.86 inches)	
Total Height	225±2mm (8.86 inches)	
Weight	Approx. 34.5Kg (Tolerance±5%)	
Terminal	Default F12(M8), Value: 10~12N*m	
Container Material	A.B.S. UL94-HB, <UL94-V0 Optional>	
Design Life	15 years	
Application	UPS/EPS,Electric Tools,Toys,Medical,Wheelchair and Security System etc.	
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.	



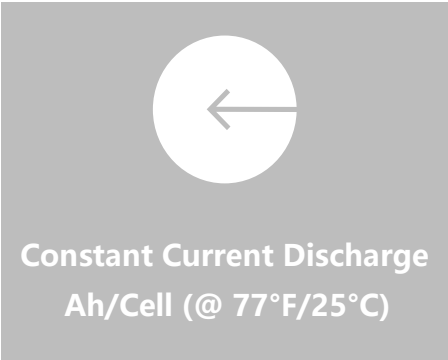
GW12-450W Dimension

Parameters	GW12-450W (12V 120Ah)	
Cell Per Unit	6	
Voltage Per Unit	12V	
Nominal Capacity	450W@15min-rate to 1.67V per cell @25°C	
Internal Resistance	≤4.5 mΩ(Full Charge Condition @25°C)	
Max. Discharge Current	1200A (5 sec)	
Max. Charging Current	36.0A	
Short Circuit Current	3000A	
Reference Capacity	C10: 113.2Ah C20: 120.0Ah	
Standby Use Voltage	13.50 V~13.62 V @ 25°C Temperature Compensation: -3mV/°C/Cell	
Cycle Use Voltage	14.10 V~14.40 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.	



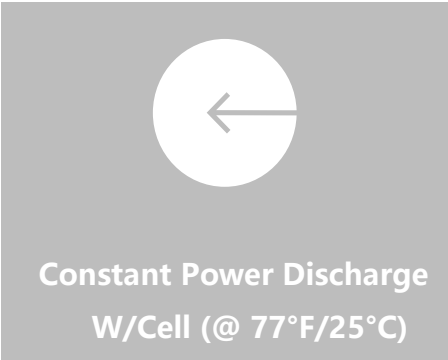
GW12-450W Imagine

F.V/TIME	5MIN	8MIN	10MIN	15MIN	20MIN	30MIN	60MIN	90MIN
1.60V	392.6	335.6	316.5	248.9	202.6	149.4	86.44	62.03
1.65V	356.2	307.8	292.5	232.1	190.5	141.3	82.46	59.50
1.70V	341.1	295.8	282.0	225.0	185.1	137.9	80.82	58.36
1.75V	314.9	275.6	264.3	212.9	175.9	132.1	78.01	56.52
1.80V	288.5	255.2	246.7	201.4	167.6	126.5	75.19	54.68
1.85V	247.7	217.4	209.0	173.2	145.5	111.9	67.93	49.85

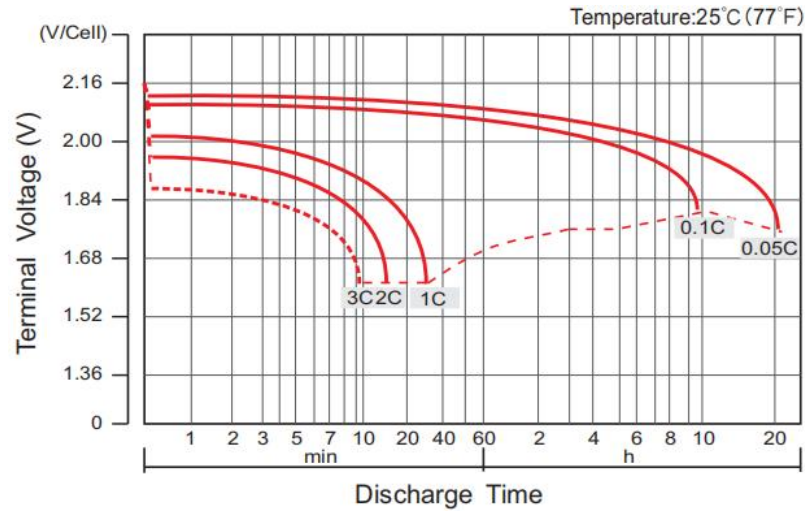


Model: GW12-450W

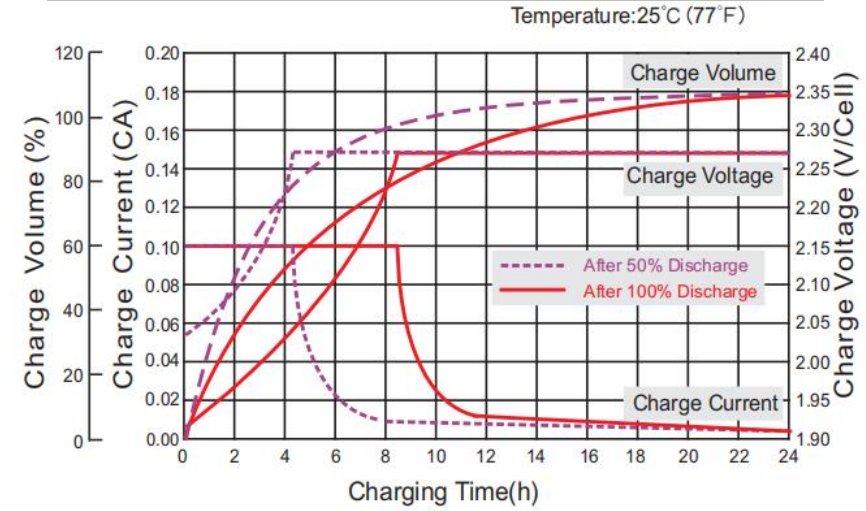
F.V/TIME	5MIN	8MIN	10MIN	15MIN	20MIN	30MIN	60MIN	90MIN
1.60V	721.4	625.0	595.2	474.4	389.5	290.2	162.3	117.4
1.65V	671.4	586.4	561.7	450.0	371.7	278.3	156.2	113.5
1.70V	649.3	568.8	546.0	439.6	363.7	272.7	153.7	111.9
1.75V	609.3	537.5	518.6	420.6	349.1	263.7	149.5	108.9
1.80V	567.1	504.6	489.7	401.9	335.9	254.4	145.0	105.9
1.85V	494.0	435.8	420.5	349.3	294.3	227.0	131.9	97.41



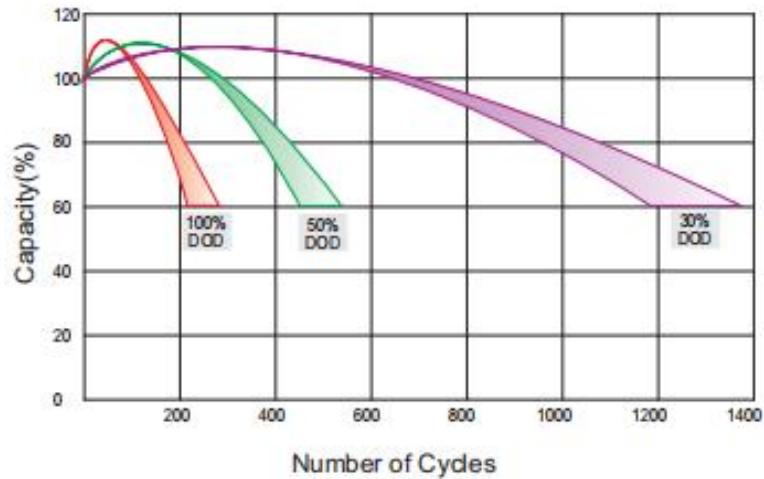
Discharge Characteristics Curve



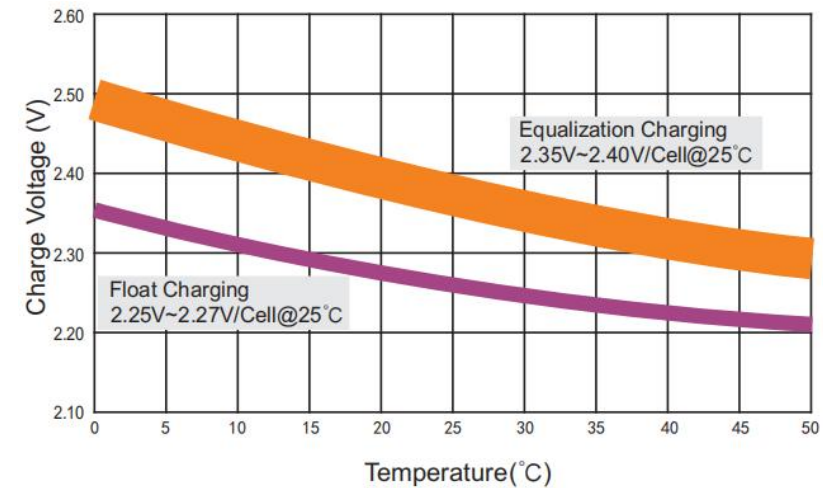
Charge Characteristics Curve For Standby Use(IU)



Cycle Life in Relation to Depth of Discharge

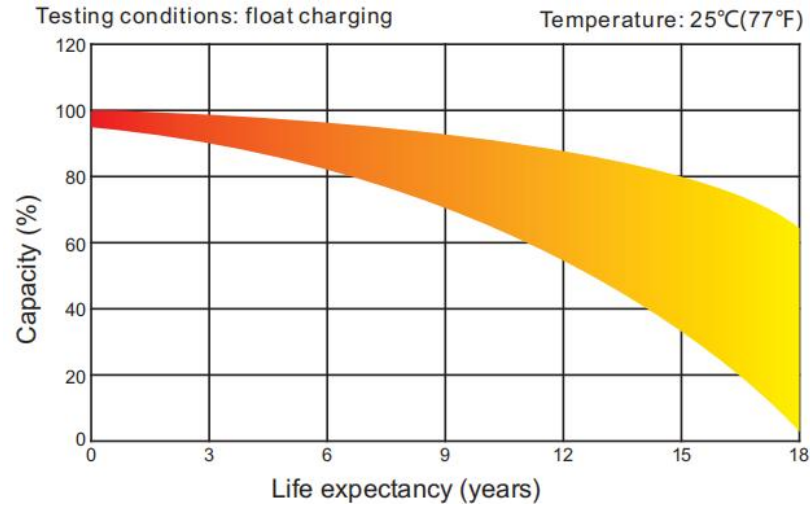


Relationship Between Charging Voltage and Temperature

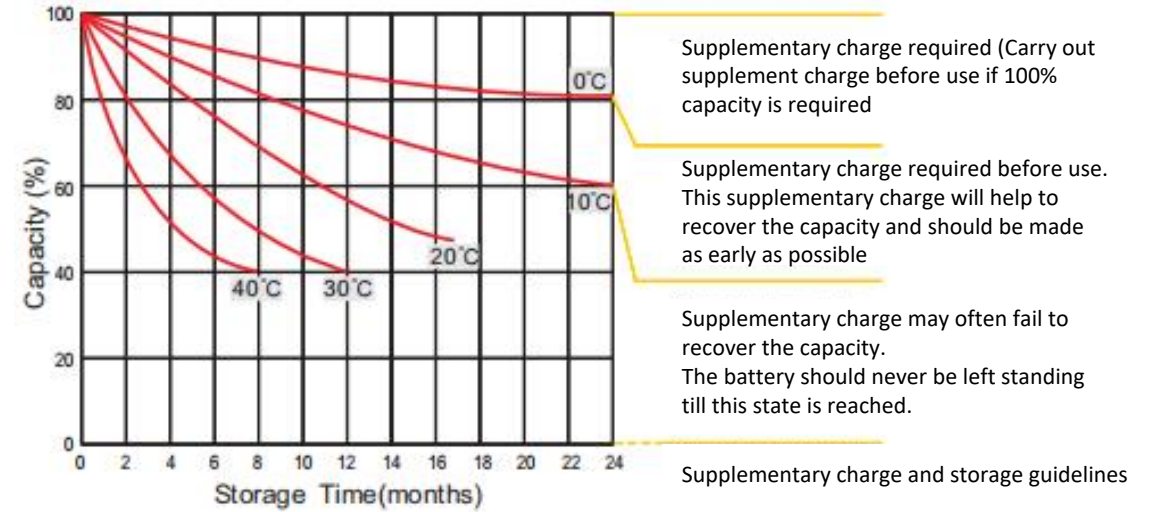


Note: The above data are average values, and can be obtained within 3 charge/discharge cycles. These are not minimum values. Cell and battery designs/specifications are subject to modification without notice. Legacy reserves the right to explain and update the latest information.

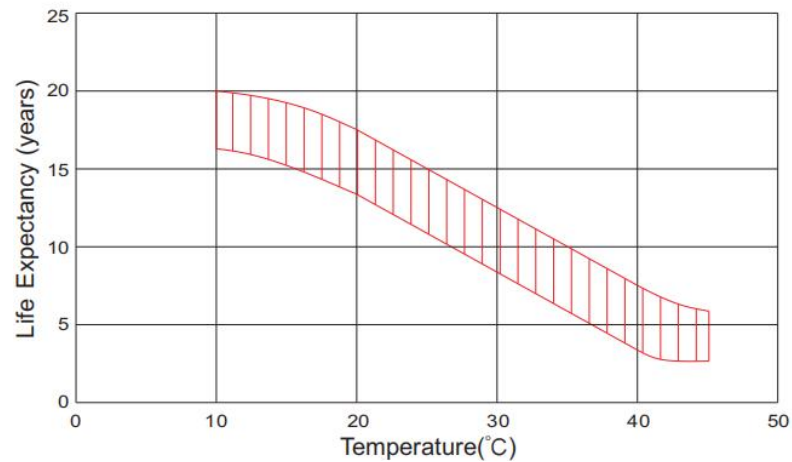
Life Characteristics of Standby Use



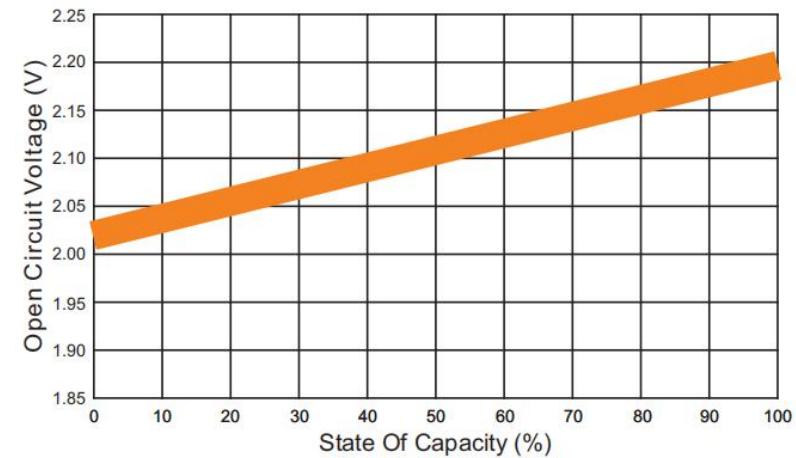
Storage Characteristics



Effect of Temperture on Longterm life



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



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