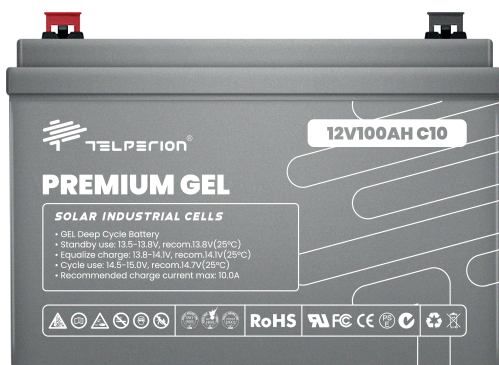


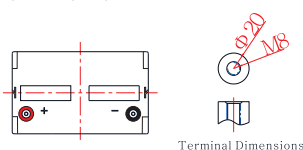
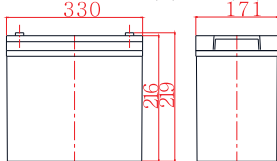


General Features

- Nanosilica colloidal electrolyte and high tin positive plate alloy design to enhance battery performance
- Relatively rich electrolyte, high temperature and low temperature performance is superior
- Long cycle life, excellent deep cycle discharge ability
- Excellent charge acceptance ability
- Precision sealing technology
- Long life



Dimension: 330(L)×171(W)×216(H)×219(TH) Unit: mm



Terminal Dimensions

Applications

- Solar / wind energy and other new energy storage
- UPS/EPS
- Power systems
- Telecommunications system
- Emergency lighting, Auto control system
- Other general purpose

Specification

Nominal Voltage	12V
Nominal Capacity	100Ah
Design life	12 years
Terminal	M8
Approx. Weight	Approx 29kg (66.0lbs)
Container Material	ABS
Rated Capacity	100Ah 10Hour Rate (10.0A to 10.8V)
	78.9Ah 3Hour Rate (26.3A to 10.8V)
	64.2Ah 1Hour Rate (64.2A to 10.5V)
Internal resistance	Full charged at 25°C: 5.2 mΩ
Max. Discharge Current	1200A(5S)
Operating Temperature	Discharge: -40 ~60°C (-40 ~ 140°F)
	Charge: -20 ~50°C (-4 ~ 122°F)
	Storage: -20 ~50°C (-4 ~ 122°F)
Charge current:	Max. 25.0A ; Recom. 10.0A
Charge Method (25 °C)	Float Charge: 13.5-13.8V, recom. 13.5V (-18mV/ °C)
	Equalize charge: 13.8-14.1V, recom. 14.1V (-24mV/ °C)
	Cycle charge: 14.4-15.0V, recom. 14.4V (-30mV/ °C)
Self discharge	3% of capacity declined per month at 25°C

Constant Current Discharge Characteristics Unit: A (25°C, 77°F)

FV/Time	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.60V	184	112	66.0	37.8	27.5	18.4	12.1	10.3	5.43
1.65V	178	110	65.6	37.6	27.2	18.2	12.0	10.2	5.40
1.70V	174	108	65.1	37.4	26.8	18.1	11.9	10.1	5.37
1.75V	169	107	64.2	36.8	26.5	17.9	11.8	10.0	5.35
1.80V	157	102	62.5	36.1	26.3	17.4	11.7	10.0	5.32
1.85V	140	93.3	57.9	34.3	24.8	16.5	11.2	9.65	5.23

Constant Power Discharge Characteristics Unit: W/cell (25°C, 77°F)

FV/Time	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.60V	323	202	125	71.5	52.2	35.0	23.5	19.9	10.7
1.65V	318	200	124	71.4	51.6	34.8	23.3	19.7	10.7
1.70V	314	200	123	71.1	51.3	34.5	23.2	19.5	10.6
1.75V	312	199	122	70.7	51.0	34.3	23.0	19.3	10.6
1.80V	295	194	121	70.5	50.8	33.9	22.9	19.1	10.5
1.85V	264	178	112	67.3	48.3	32.4	22.1	18.8	10.4

Disclaimer: Manufacturers have the right to self-modify the parameters of the product updates, please keep in touch with manufacturers to obtain the latest information.

The graph illustrates the relationship between discharge voltage and discharge time for different discharge rates. The y-axis represents Discharge voltage (V) from 7.00 to 13.0. The x-axis represents Discharge time on a logarithmic scale, with markers for 1, 2, 4, 6, 8, 10, 20 minutes and 2, 4, 6, 8, 10, 20 hours. The curves show that as the discharge rate increases (from 0.05C to 2C), the voltage drops more rapidly, resulting in a shorter discharge time for a given voltage level.

Figure 10 is a line graph titled "Constant charge at 0.1CA-14.1V(25°C)". The x-axis represents "Time(hour)" from 0 to 24. The left y-axis has three scales: "Charge capacity (%)" from 0 to 120, "Charge current (CA)" from 0 to 0.10, and "Charge voltage (V)" from 10.0 to 14.5. The graph shows three data series: "Charge voltage" (solid blue line), "Charge capacity" (solid blue line), and "Charge current" (dashed red line). The "Charge voltage" starts at 10.0V, rises to 13.0V at 4 hours, and then to 14.1V at 8 hours, remaining constant thereafter. The "Charge capacity" starts at 0% and rises to 100% DOD (100%) at 8 hours, then continues to rise to 140% DOD (140%) at 24 hours. The "Charge current" starts at 0.1CA and decreases to 0.05CA at 4 hours, then continues to decrease to 0.01CA at 24 hours. The legend indicates 100% DOD (solid red line) and 50% DOD (dashed red line).

Ambient temperature (°C)	Capacity (%)
-40	30
-30	48
-20	60
-10	72
0	80
10	90
20	98
30	100
40	102
50	102
60	100

Figure 1 is a line graph showing the capacity retention of a battery over 2000 cycles for three different Depth of Discharge (DOD) levels: 100%, 50%, and 30%. The y-axis represents Capacity (%) from 0 to 120, and the x-axis represents the Number of cycles from 0 to 2000. The 100% DOD curve shows the fastest capacity loss, reaching approximately 60% capacity by 300 cycles. The 50% DOD curve shows a more gradual decline, reaching about 60% capacity by 900 cycles. The 30% DOD curve shows the slowest decline, maintaining over 60% capacity until approximately 1600 cycles.

Number of cycles	Capacity (%) at 100% DOD	Capacity (%) at 50% DOD	Capacity (%) at 30% DOD
0	100	100	100
250	85	100	100
500	65	95	100
750	-	85	98
1000	-	65	95
1250	-	-	85
1500	-	-	75
1600	-	-	60

Storage time (months)	0°C Capacity (%)	10°C Capacity (%)	20°C Capacity (%)	40°C Capacity (%)
0	100	100	100	100
3	98	96	92	72
6	96	92	88	65
9	94	88	82	62
12	92	84	78	-
15	90	80	-	-
18	79	76	-	-

Remaining capacity (%)	Open circuit voltage (V)
0	11.8
20	12.05
40	12.3
60	12.55
80	12.8
100	13.1