



# CENTRAL SECURITY DISTRIBUTION



## CSD-1218


## (12V18Ah)

## AUS CELL No. 1


CSD-1218 is a general purpose 12V 18Ah sealed lead acid (SLA) battery with a 5 year floating design life that meets both IEC and JIS standards. Suitable for a wide range of domestic and commercial applications such as Mobility, UPS, Fire and Security systems.

### Specification



<b>Cells Per Unit</b>	6
<b>Voltage Per Unit</b>	12
<b>Capacity</b>	18Ah@20hr-rate to 1.75V per cell @25°C
<b>Weight</b>	Approx. 5.0 Kg
<b>Max. Discharge Current</b>	180 A (5 sec)
<b>Internal Resistance</b>	Approx. 14 mΩ
<b>Operating Temperature Range</b>	Discharge: -20°C~60°C Charge: 0°C~50°C Storage: -20°C~60°C
<b>Normal Operating Temperature Range</b>	25°C±5°C
<b>Float charging Voltage</b>	13.7 to 13.9 VDC/unit Average at 25°C
<b>Recommended Maximum Charging Current Limit</b>	5.4 A
<b>Equalization and Cycle Service</b>	14.6 to 14.8 VDC/unit Average at 25°C
<b>Self Discharge</b>	Valve Regulated Lead Acid (VRLA) batteries can be stored for more than 6 months at 25°C. Self-discharge ratio less than 3% per month at 25°C. Please charge batteries before using.
<b>Terminal</b>	Faston F3/F13
<b>Constrainer Material</b>	A.B.S. (UL94-HB) , Flammability resistance of UL94-V2 can be available upon request.



MH28539



G4M20206-0910-E-16

ISO9001:2000 Certificate

### Dimensions

**Unit: mm** Dimension: 181(L)×77(W)×167(H)

The drawings show a top view with a length of 181mm, a side view with a width of 77mm and a height of 167mm, and a detailed view of the terminals (Terminal F3) with a diameter of 12mm and a height of 12mm. The bottom view shows the terminal layout with a distance of 12mm between terminals and a diameter of 12mm for the terminal posts.

#### Constant Current Discharge Characteristics : A(25°C)

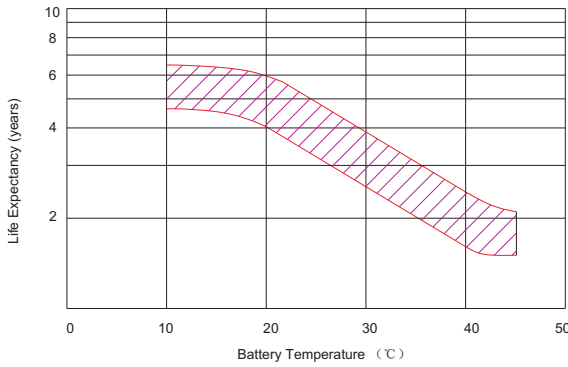
F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	73.19	47.99	37.61	21.11	12.55	7.226	4.910	3.929	3.263	2.078	1.799	1.010
10.0V	70.55	46.79	36.41	20.84	12.20	7.080	4.820	3.875	3.208	2.070	1.781	0.973
10.2V	66.40	44.47	35.40	20.53	12.09	7.005	4.777	3.837	3.173	2.051	1.754	0.955
10.5V	59.69	41.58	33.39	19.96	11.85	6.914	4.734	3.800	3.135	2.033	1.745	0.927
10.8V	53.48	38.78	31.50	19.30	11.64	6.857	4.679	3.781	3.102	2.025	1.716	0.873
11.1V	46.79	35.55	29.06	18.57	11.32	6.581	4.587	3.748	3.070	2.009	1.689	0.858

#### Constant Power Discharge Characteristics : W(25°C)

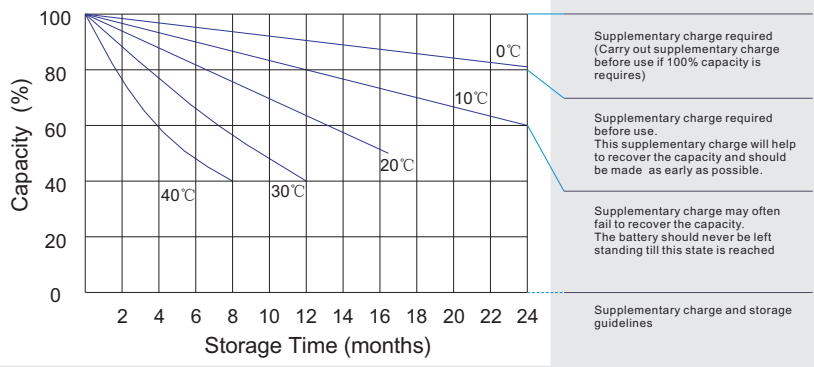
F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	770.0	510.4	402.7	241.7	145.7	84.30	57.40	46.50	38.63	24.89	21.56	12.10
10.0V	749.9	499.8	396.9	239.2	143.5	83.58	57.28	46.39	38.43	24.79	21.35	11.67
10.2V	713.3	480.0	391.7	237.1	142.5	83.05	57.07	46.01	38.06	24.60	21.15	11.46
10.5V	651.0	460.2	371.3	232.3	140.6	82.38	56.83	45.59	37.61	24.40	20.93	11.13
10.8V	587.4	430.5	350.8	226.8	138.3	81.70	56.17	45.42	37.22	24.29	20.61	10.49
11.1V	518.0	400.8	330.4	220.6	135.7	78.88	55.07	44.96	36.86	24.12	20.31	10.32

All mentioned values are average values.

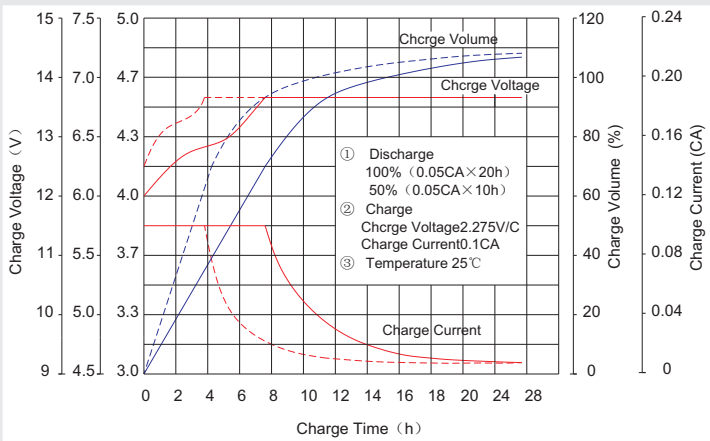
**Effect of temperature on long term float life**



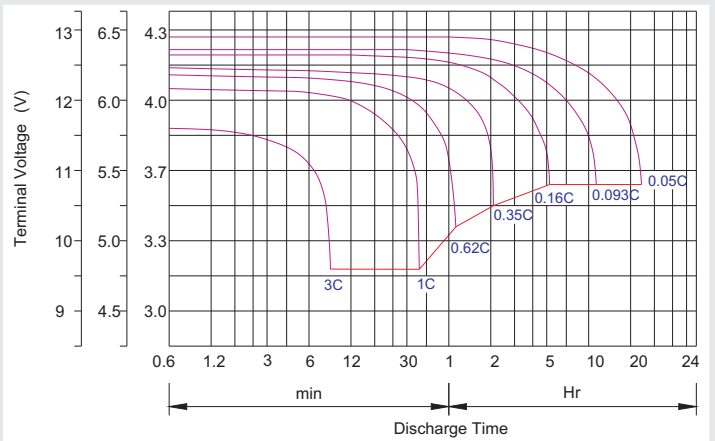
**Storage characteristic**



**Charge characteristic Curve for standby use**



**Discharge characteristic Curve**



## Capacity Factors With Different Temperature

Battery Type		-20°C	-10°C	0°C	5°C	10°C	20°C	25°C	30°C	40°C	45°C
GEL Battery	6V&12V	50%	70%	83%	85%	90%	98%	100%	102%	104%	105%
	2V	60%	75%	85%	88%	92%	99%	100%	103%	105%	106%
AGM Battery	6V&12V	46%	66%	76%	83%	90%	98%	100%	103%	107%	109%
	2V	55%	70%	80%	85%	92%	99%	100%	104%	108%	110%

## Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/cell	1.75V	1.70V	1.60V
Discharge Current (A)	(A) ≤ 0.2C	0.2C < (A) < 1.0C	(A) ≥ 1.0C

**Charge the batteries at least once every six months, if they are stored at 25°C.**

Charging Method:

Constant Voltage	-0.2Cx2h+2.4-2.45V/Cellx24h, Max. Current 0.3CA
Constant Current	-0.2Cx2h+0.1CAx12h
Fast	-0.2Cx2h+0.3CAx4.0h

## Maintenance & Cautions

<b>Float Service:</b>
※ Every month, recommend inspection every battery voltage.
※ Every three months, recommend equalization charge for one time.
Equalization charge method:
Discharge: 100% rate capacity discharge.
Charge: Max. current 0.3CA, constant voltage 2.4-2.45V/Cell charge 24h.
※ Effect of temperature on float charge voltage: -3mV/°C/Cell.
※ Length of service life will be directly affected by the number of discharge cycles, depth of discharge, ambient temperature and charging voltage.



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