



### Valve Regulated Lead Acid Battery

Maintenance-Free Sealed Lead Acid Battery.

Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99%.

### Design for Standby Power Applications

#### 【Design Life】

Up to 5 Years in Standby Service at 25°C

Eurobat (20°C) : 3-5 years, Standard Commercial

#### 【Operating Temperature Range】

Nominal Operating Temperature : 25°C (77°F)

Discharge : -15°C ~ 50°C (5°F~122°F)

Charge: -15°C ~ 40°C (5°F~104°F)

Storage: -15°C ~ 40°C (5°F~104°F)

#### 【Float Charging Voltage】

13.5 ~ 13.8 VDC/Unit at 25°C (77°F)

#### 【Equalization Charging Voltage】

14.4 ~ 15.0 VDC/Unit at 25°C (77°F)

#### 【Self Discharge】

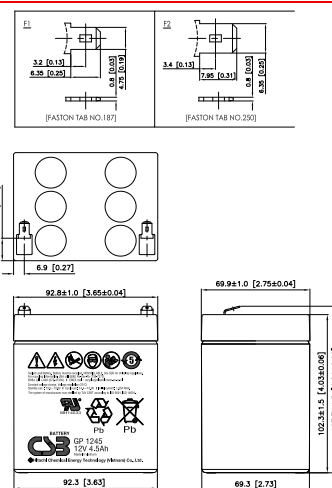
Less than 10% after 90 days, can be stored up to 6 months at 25°C (77°F);

Fully recharging is required before usage, and charged sooner if stored at higher temperature than 25°C (77°F).

### Specification

Design according with IEC 61056-1/2: 2012

Nominal Voltage	12V (6 cells per unit)	
Nominal Capacity	4.5Ah @20hr-rate to 1.75V per cell @25°C (77°F)	
Weight	Approx. 1.66 Kg (3.66 lbs)	
Maximum Discharge Current	60/90A (5sec)	
Internal Resistance	Approx. 37.7mΩ	
Short Circuit Current	160A	
Maximum Charge Current	1.35A	
Terminal types	F1/F2 terminal -Faston Tab 187/250	
Terminal tightening torque	--	
Container Material	ABS (UL 94-HB) & Flame Retardant (94-V0) available upon request	
Dimensions	Length (L)	92.8±1.0 mm      3.65±0.04 inch
	Width (W)	69.9±1.0 mm      2.75±0.04 inch
	Container Height (h)	102.3±1.5 mm      4.03±0.06 inch
	Overall Height (H)	107.7±1.5 mm      4.24±0.06 inch



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

F.V/Time	5 MIN	10MIN	15MIN	30MIN	60MIN	90MIN	2HR	3HR	5HR	8HR	10HR	20HR
1.60V	18.7	12.3	9.08	5.37	3.11	2.26	1.80	1.26	0.810	0.535	0.439	0.234
1.67V	17.6	11.8	8.88	5.31	3.09	2.25	1.79	1.24	0.808	0.533	0.438	0.233
1.70V	17.0	11.6	8.79	5.28	3.08	2.23	1.78	1.24	0.807	0.532	0.437	0.232
1.75V	16.1	11.2	8.62	5.21	3.06	2.22	1.77	1.23	0.804	0.531	0.435	0.229
1.80V	15.0	10.7	8.42	5.13	3.03	2.21	1.76	1.22	0.801	0.529	0.431	0.225
1.85V	13.8	10.3	8.21	5.04	3.00	2.18	1.74	1.21	0.798	0.528	0.428	0.221

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

F.V/Time	5MIN	10MIN	15MIN	30MIN	60MIN	90MIN	2HR	3HR	5HR	8HR	10HR	20HR
1.60V	221	145	110	65.9	38.6	27.9	22.2	16.1	10.7	7.09	5.79	3.19
1.67V	206	139	107	65.4	38.4	27.7	22.0	16.0	10.6	7.08	5.78	3.17
1.70V	199	137	105	64.9	38.1	27.6	21.9	15.9	10.5	7.04	5.76	3.16
1.75V	188	133	102	64.7	38.0	27.5	21.8	15.8	10.4	7.02	5.74	3.16
1.80V	177	128	100	63.6	37.7	27.2	21.5	15.7	10.3	6.96	5.71	3.13
1.85V	165	122	96.6	60.9	36.7	26.7	21.3	15.5	10.2	6.89	5.63	3.09

Please refer to the official site for the latest rating confirmation. URL: [www.csb-battery.com](http://www.csb-battery.com)

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Recognized under UL 1989,  
and certified by ISO 9001, 14001.

