

Sealed Lead Acid Rechargeable Battery

SN18-12 12Volt 18Ah

Specifications

Nominal Voltage(V) 12V

Nominal Capacity

20 hour rate	(0.9A to 10.50V)	18Ah
10 hour rate	(1.71A to 10.50V)	17.1Ah
5 hour rate	(3.06A to 10.20V)	15.3Ah
1 C	(18A to 9.60V)	11.4Ah
3 C	(54A to 9.60V)	7.2Ah

Weight Approx. 5.6Kg(12.32Lbs.)

Internal Resistance (at 1KHz) Approx. 10.5mΩ

Maximum Discharge Current for

5 seconds: 270A

Charging Methods at 25 °C (77 °F)

Cycle use:

Charging Voltage 14.4 to 15V

Coefficient -5.0mV/°C/cell

Maximum Charging Current: 5.4A

Standby use:

Float Charging Voltage 13.5 to 13.8V

Coefficient -3.0mV/°C/cell

Operating Temperature Range

Charge -15 °C (5 °F) to 40 °C (104 °F)

Discharge -15 °C (5 °F) to 50 °C (122 °F)

Storage -15 °C (5 °F) to 40 °C (104 °F)

Charge Retention (shelf life) at 20 °C(68 °F)

1 month 92%

3 month 90%

6 month 80%

Case Material ABS UL94 HB

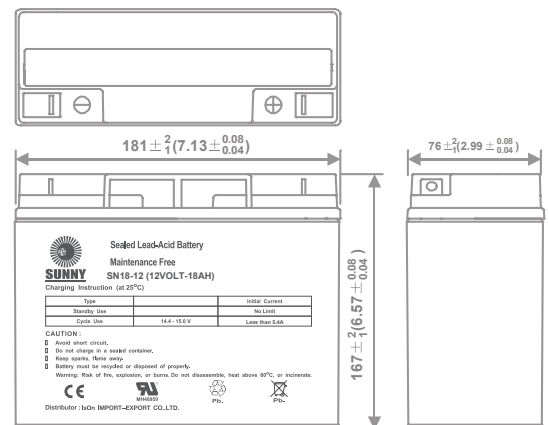
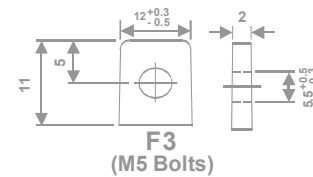
Option: Flammability resistance of (UL94 V-0)

Terminal F3

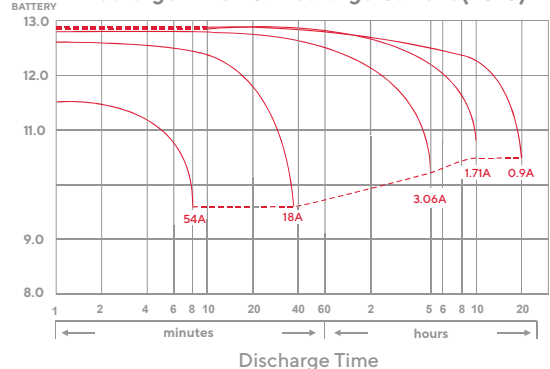


Dimensions

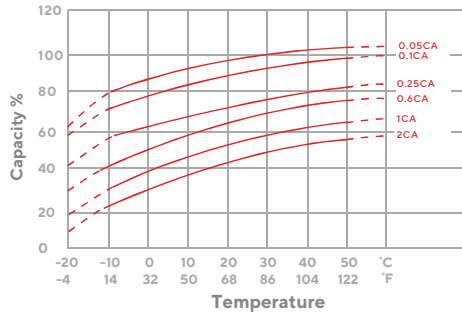
mm(inch)



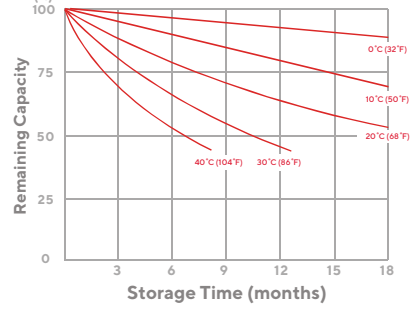
(V) FOR 12V BATTERY Discharge Time VS. Discharge Current (25 °C)



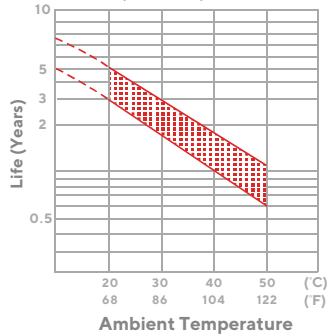
Effect of Temperature on Capacity 25°C(77°F)



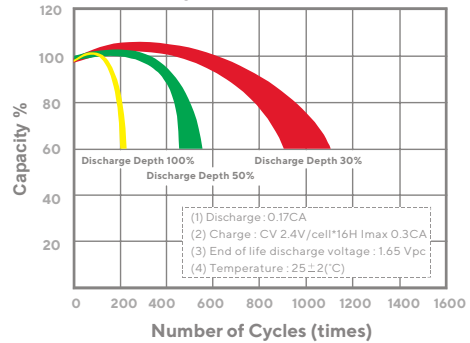
Capacity Retention Characteristic



Trickle (or float) Service Life



Cycle Service Life



PERFORMANCE DATA

- Discharge Rates in Watts to Various End Voltages at 25°C(77°F)

Time	End Voltage	1.85V	1.80V	1.75V	1.70V	1.67V	1.65V	1.60V
5	min	98.9	116	128	135	137	139	141
10	min	67.0	77.1	84.5	89.1	90.2	91.7	92.9
15	min	57.2	64.5	69.4	72.5	73.3	74.2	75.1
30	min	32.7	35.1	37.7	39.4	39.8	40.3	40.8
60	min	18.8	19.8	20.7	21.3	21.5	21.8	22.2
120	min	11.9	12.4	12.7	13.1	13.2	13.3	13.5
180	min	8.75	9.10	9.33	9.53	9.60	9.68	9.78
240	min	6.63	6.93	7.12	7.27	7.32	7.38	7.46
300	min	5.82	6.05	6.17	6.27	6.30	6.35	6.41
600	min	3.40	3.52	3.60	3.67	3.68	3.72	3.75
1200	min	1.77	1.83	1.88	1.92	1.93	1.95	1.96

- Discharge Rates in Amperes to Various End Voltages at 25°C(77°F)

Time	End Voltage	1.85V	1.80V	1.75V	1.70V	1.67V	1.65V	1.60V
5	min	62.6	68.3	71.9	75.1	76.4	77.8	80.2
10	min	38.6	41.8	44.3	46.5	47.4	48.4	50.1
15	min	31.9	34.6	36.3	37.7	38.2	38.8	39.7
30	min	17.4	18.7	19.8	20.7	21.0	21.4	21.9
60	min	9.74	10.3	10.7	11.0	11.1	11.3	11.5
120	min	5.98	6.23	6.39	6.53	6.58	6.64	6.72
180	min	4.35	4.52	4.64	4.73	4.76	4.80	4.85
240	min	3.43	3.52	3.58	3.62	3.63	3.65	3.68
300	min	2.96	3.02	3.07	3.11	3.12	3.14	3.16
600	min	1.73	1.77	1.80	1.82	1.83	1.84	1.85
1200	min	0.893	0.914	0.931	0.946	0.952	0.959	0.962

All data on the spec. sheet is an average value:

The tolerance range : $X < 6\text{min}$ (+15%~-15%), $6\text{min} \leq X < 10\text{min}$ (+12%~-12%), $10\text{min} \leq X < 60\text{min}$ (+8%~-8%), $\geq X > 60\text{min}$ (+5%~-5%)