

Sealed Lead Acid Rechargeable Battery

SN24-12 12Volt 24Ah

Specifications

Nominal Voltage(V) 12V

Nominal Capacity

20 hour rate	(1.2A to 10.50V)	24Ah
10 hour rate	(2.28A to 10.50V)	22.8Ah
5 hour rate	(4.08A to 10.20V)	20.4Ah
1 C	(24A to 9.60V)	12.8Ah
3 C	(72A to 9.60V)	8.4Ah

Weight Approx. 8.0Kg(17.6Lbs.)

Internal Resistance (at 1KHz) Approx. 11mΩ

Maximum Discharge Current for

5 seconds: 360A

Charging Methods at 25 °C (77 °F)

Cycle use:

Charging Voltage 14.4 to 15V

Coefficient -5.0mV/°C/cell

Maximum Charging Current: 7.2A

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 F6

Description of torque value of hard ware for the terminals:

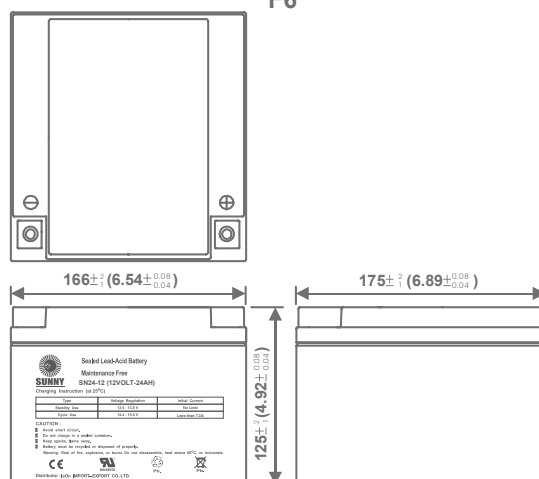
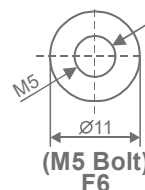
Recommended torque value M5: 5 N-m (51kgf-cm)

Maximum allowable torque value M5: 6 N-m (61kgf-cm)

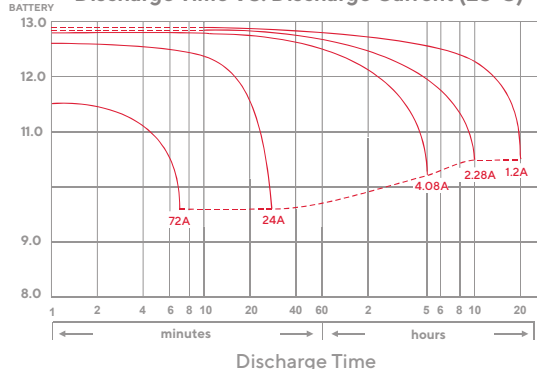


Dimensions

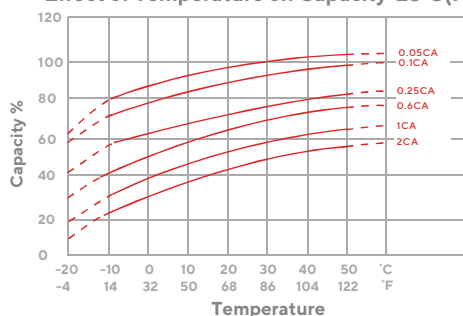
mm(inch)



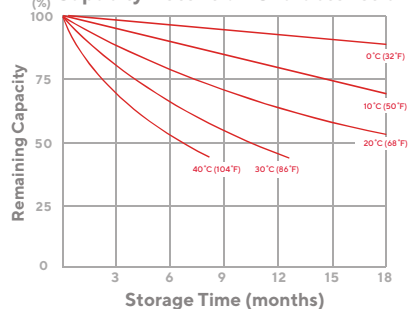
(v) Discharge Time VS. Discharge Current (25 °C)



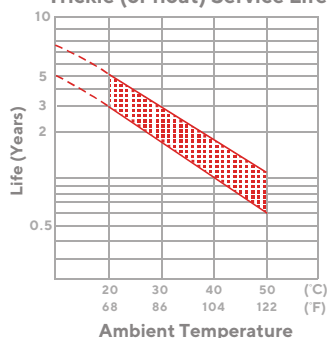
Effect of Temperature on Capacity 25°C(77°F)



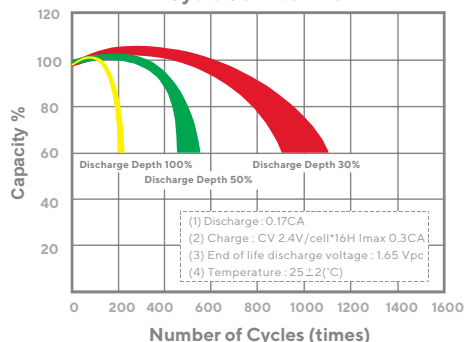
Capacity Retention Characteristic



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	114	129	142	155	159	165	177
10	min	88.2	99.7	106	111	114	117	122
15	min	70.2	76.5	80.8	84.3	86.7	88.2	91.3
30	min	41.0	44.5	46.5	48.0	48.8	49.5	50.3
60	min	27.0	28.5	29.3	30.0	30.2	30.5	30.8
120	min	14.6	15.4	15.9	16.2	16.4	16.5	16.7
180	min	12.2	12.7	12.9	13.1	13.1	13.2	13.3
240	min	9.82	10.2	10.4	10.5	10.6	10.6	10.7
300	min	8.47	8.70	8.82	8.93	8.97	9.02	9.05
600	min	4.93	5.12	5.22	5.30	5.32	5.35	5.38
1200	min	2.53	2.62	2.68	2.73	2.75	2.77	2.78

- 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	70.2	82.3	90.7	96.1	98.3	101	105
10	min	45.8	50.4	54.6	58.8	60.5	62.4	65.6
15	min	37.9	41.1	43.7	46.2	47.3	48.2	49.8
30	min	20.8	23.2	24.7	25.6	26.2	26.9	27.7
60	min	14.5	15.0	15.3	15.5	15.6	15.7	15.8
120	min	7.65	7.96	8.08	8.19	8.22	8.26	8.31
180	min	6.21	6.41	6.50	6.53	6.55	6.58	6.62
240	min	4.97	5.07	5.14	5.20	5.22	5.25	5.28
300	min	4.22	4.35	4.40	4.44	4.45	4.47	4.49
600	min	2.48	2.56	2.60	2.61	2.62	2.63	2.64
1200	min	1.29	1.33	1.35	1.36	1.37	1.38	1.39

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%), $X \geq 60\text{min}$ (+5%~-5%)