

Battery Package BS06 Series

Ni-MH Battery Package,
a Substitute for 24V Lead Battery

Lead Ni-Cd **Ni-MH** Other

RoHS
Directive

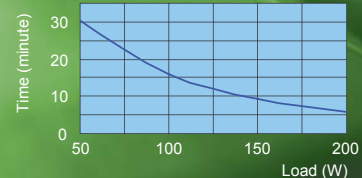


BS06A-H24/2.5L

BS06B-H24/2.5L

Battery backup discharge characteristics

Be aware that it is a reference value at initial use of the battery package. It is not a guaranteed value.



Model	Description	Stock
BS06A-H24/2.5L	Standby use (for backup use at blackout)	Standard stock
BS06B-H24/2.5L	Cycle use (for everyday backup)	Standard stock

Model Name Coding

BS06 * - H 24 / 2.5 L

① ② ③ ④ ⑤ ⑥

- Series name
- A: Standby use
B: Cycle use
- Ni-MH battery
- Output voltage (24 VDC)
- Capacity
- Long life expectancy battery

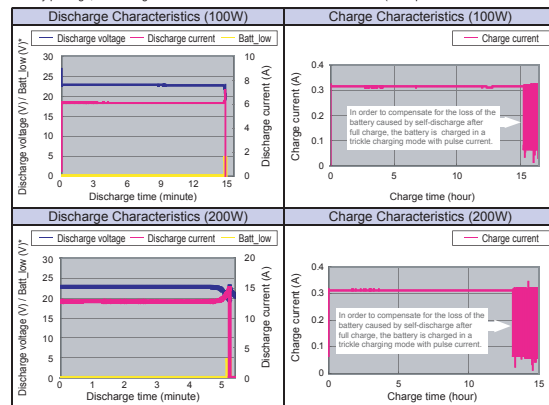
Compatible Power Supply

eNSP-300P series	p.47
aNSP3-250P-S20	p.55
NSP2-250 series	p.63
NSP3-150-F2S	p.95
NSP2-250-F2S	p.87

Battery Charge/Discharge Characteristics (used with eNSP-300P-S20-11S)

Be aware that it is a reference value at initial use of the battery package; it is not a guaranteed value.

(Examples of actual measurement)



* Battery low voltage signal for TTL (open collector output signal from the power supply)

Features

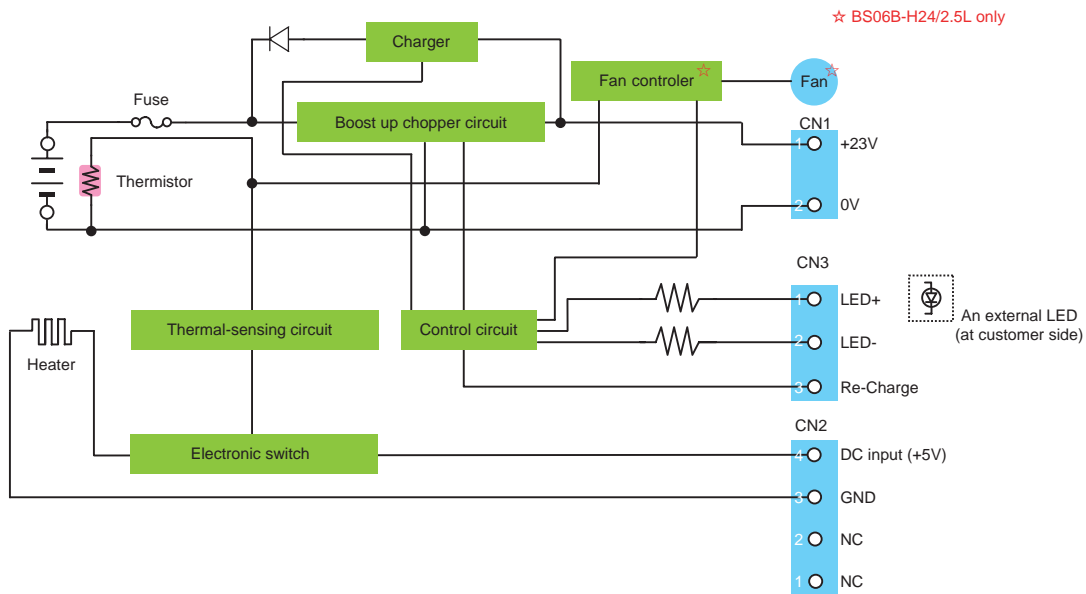
- 5-inch bay embedded type, which is compatible with lead battery package. A lead battery can be replaced with this Ni-MH at maintenance.
- Compared with a lead battery package, this unit has 1.5 times as large discharge time and three times as long life expectancy.
- An embedded heater helps the startup at low temperature and prevents capacity drop.
- Condition of the battery package (charge/backup) can be visible.
- Leakage current prevention circuit is mounted.

General Specification Condition: at normal temperature and humidity unless otherwise specified

Items	Specification	Measurement condition, etc.
Battery	12V 2.5Ah × 14 connected in serial	Sealed Ni-MH battery
Nominal Battery Voltage	16.8 VDC	
Rated Capacity	2.5Ah	
Max. Output Capacity	310W	
Output Voltage	23.0 VDC typ.	Output terminal voltage for battery package
Charge Specification	0.25A typ. (15 hours max. typ.)	It is set at 15-hour forced charge mode at shipment.
Heater	The heater operates if the battery's temperature is 20°C typ. or less (power consumption while the heater operates: 12W / 5 VDC typ.). The warm-up time at 0°C is 1 hour.	Connect the peripheral connector of the body to CN2 connector. It operates only when the PS_ON# signal of the body is ON.
Embedded Fuse Rating	30A 32V	Do not replace fuse.
Operating Temp. / Humidity	0 to 50°C / 10 to 90%	No condensation
Storage Temp. / Humidity	1 year or less: less than -20 to 35°C / 10 to 95%, 6 months or less: -20 to 45°C / 10 to 95% 1 month or less: -20 to 55°C / 10 to 95%, 1 week or less: -20 to 65°C / 10 to 95%	No condensation
Vibration	Displacement amplitude: 0.15mm (10-55Hz), Sweep cycles: 10, Test duration: 45 minutes each axis	No condensation
Mechanical Shock	Acceleration of 150m/s ² for 11ms 1 time each in the X-Y-Z directions. No malfunction, damage, loosening, or coming-off.	No condensation
Weight	1.8 kg typ.	
Life Expectancy*	BS06A-H24/2.5L Approx. 9 to 10 yrs. (5 times/year discharge) BS06B-H24/2.5L Approx. 3 to 4 yrs. (1 time/day discharge)	Environmental temp. 30°C, 100W 3-minute discharge at a time.
Storage	When storing the battery for 6 months or longer, recharge the battery at least once a year (once every 6 months if possible).	The battery may not fully recover if it is not recharged within the period as listed on the left.
Warranty	1 year after delivery. If any faults belong to us, the defective unit shall be repaired or replaced at our cost except for malfunction caused by over-discharge.	Except for errors caused by operation not listed

* Life expectancy is a reference value. It is not a guaranteed value.

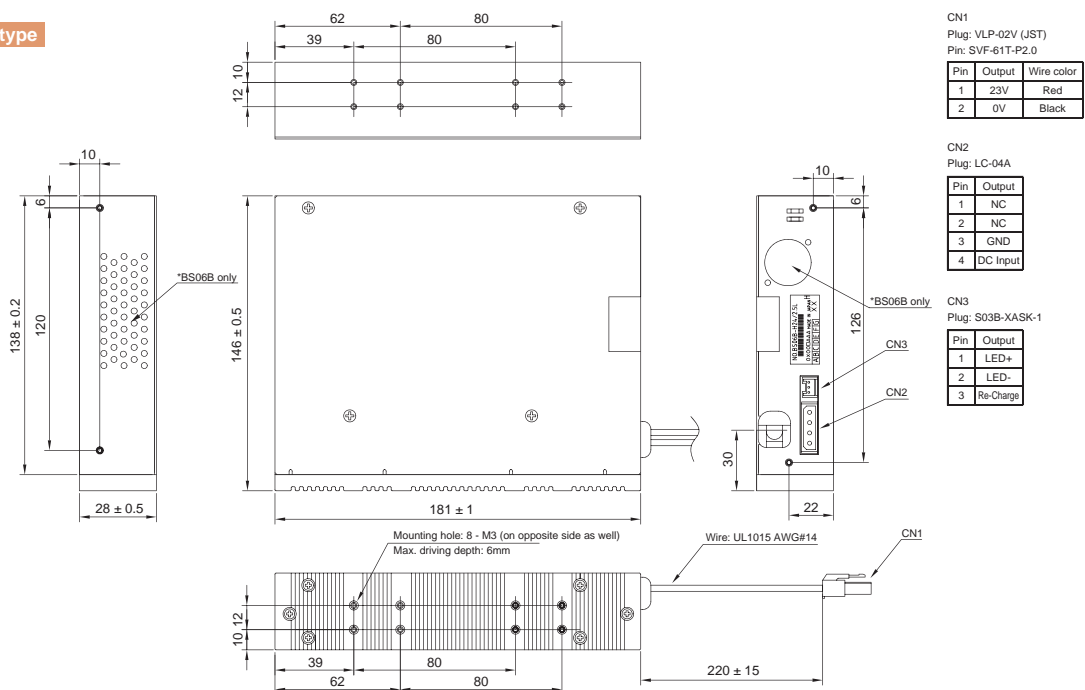
Block Diagram



Heater	If the battery's temperature is 15°C or less, the battery output may decrease and the backup function may not operate. The heater helps maintain the battery temperature at 20°C min. to keep a stable backup time.
Battery monitor signal output	A voltage output terminal is mounted so that charging (ON), discharging (blinking fast), auxiliary charging (blinking slowly) can be checked with LED.
Circuit leakage current	When charging voltage inside Nonstop power supply stops its operation, power supplied to control IC is stopped to enter prevention circuit sleep mode so that the battery package can be safely stored for long time as there is only self-discharge of the battery.
Fan	It minimizes the increase of battery temperature at discharge/charge, corresponding to cycle use with frequent charge.

Outline Drawing

5-inch bay fixed type



Q&A

Question	Answer
What is the difference between standby use and cycle use?	The backup function for blackout use (several times a year) is called standby use, and backup for everyday use is called cycle use.
What is the difference between BS06A and BS06B?	The difference is the presence or absence of a fan and fan control circuit. BS06B has a fan (and a fan control circuit) while BS06A does not. For cycle use, which has more frequent backup (discharge) time, the fan prevents the rise of temperature since increased battery temperature affects life span.