

Battery Package BS14A-H24/2.5L

BS14A-H24/2.5L

Battery Package for GPSA 24V output series

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

RoHS Directive



BS14A-H24/2.5L

Battery backup discharge characteristics*



Model	Description	Stock
BS14A-H24 / 2.5L		Standard stock

Model Name Coding

BS14A - H 24 / 2.5 L

① ② ③ ④ ⑤

1. Series name	4. Capacity
2. Ni-MH battery	5. Long life expectancy battery
3. Output voltage (24 VDC)	

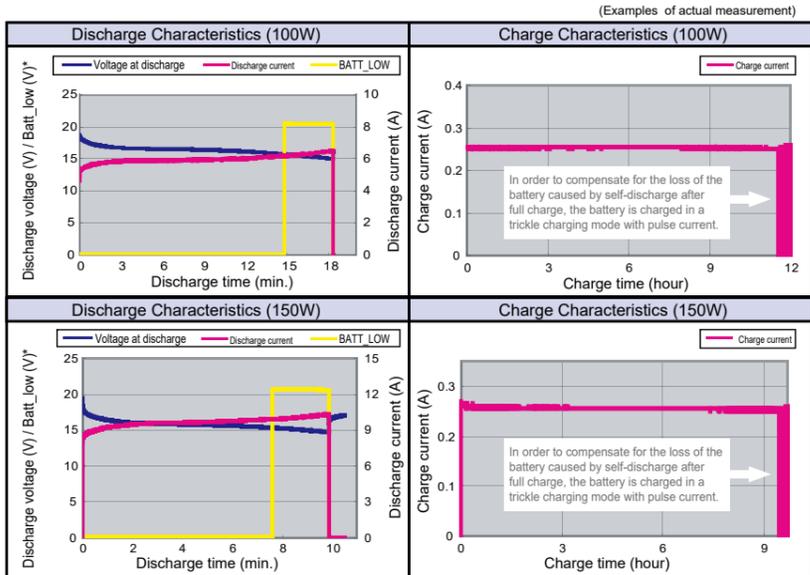
Compatible Power Supply

- OZP-120-24-*B*
- OZP-170-24-*B*
- GPSA-360-24-TP
- GPSA-600-24P-TP
- GPSA-750-24-TP
- mGPSA-360-24-TP

Features

- Long life as Ni-MH battery is adopted.
- With parallel connection function, multiple batteries can be connected in parallel when capacity is short.
- Discharge halt by Dip switch is available.

Battery Charge/Discharge Characteristics* (used with OZP-170-24-JB0)



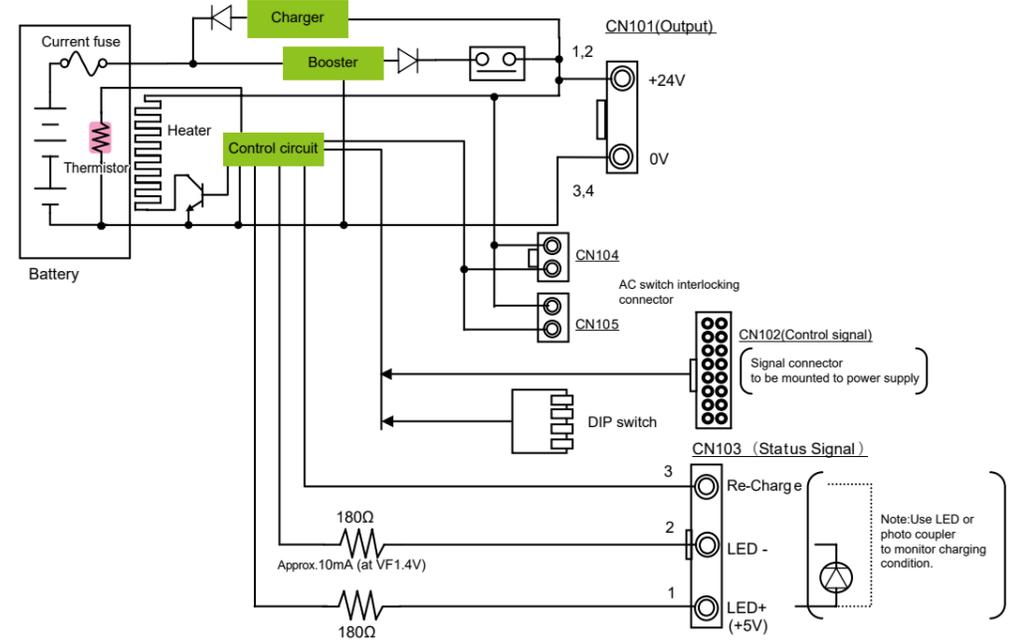
* Battery voltage low signal with Open collector from connected power supply.
 * Be aware that it is a reference value at initial use of the battery package; it is not a guaranteed value.

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

Items	Specification	Measurement conditions, etc.
Battery	1.2V 2.5Ah × 14 connected in serial	Sealed Ni-MH battery
Battery's Nominal Voltage	16.8 VDC	
Rated Capacity	2.5Ah	
Max. Output Capacity	Rated 170W (Peak 240W within 10 sec., the peak duty ratio 35% max.)	Average output power shall be within 170W
Rated output voltage	24VDC	Voltage is adjustable by voltage adjustment variable resistor in the power supply to be connected. (Note. 1)
Charge Specification	0.25A typ. (15 hours typ.)	Timer charging method. The output of connected power supply (24V) charges. (Note.2)
Heater	The element operates at 20 deg. typical or lower, and stops at 22 deg. typical or higher of battery temperature. It also operates during 0 deg. to 20 deg. to maintain battery discharging characteristics in rating. Warm-up. The warm-up time is approx. one hour from 0 deg.. (Heater consumption power at operation: approx. 13W).	24V output voltage of connected power supply provides the power. (Note. 2)
Embedded Fuse Rating	30A 32V	
Operating Temp. / Humidity	0 to 50°C / 10 to 90% RH	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
Weight	1.9 kg typ.	
Life Expectancy(Note 3)	Approx. 9 to 10 yrs. (5 times/year discharge), approx. 3 to 4 yrs. (1 time/day discharge)	Environmental temp. 30°C, 100W 3-minutes discharge at a time
Warranty	1 year after delivery. If any faults belong to us, the defective unit shall be repaired or replaced at our cost. (Except for inside battery.)	Except for errors caused by operation not listed

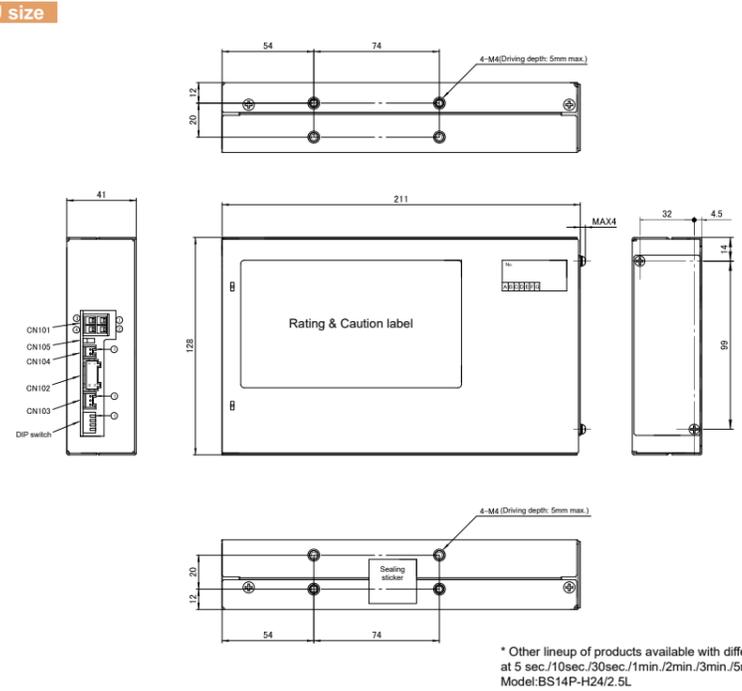
(Note.1)Voltage range shall be 22.8-28.8V. In case of out of the range, it might not charge or backup.
 (Note.2)When battery package is connected to power supply, 20W typ. power is consumed due to charging battery package and heater function. At battery package connected, please reduce output load of power supply.
 (Note.3)Life expectancy is a reference value. It is not a guaranteed value.

Block Diagram



Outline Drawing

1U/3U size



Pin	Input / output	Connector
1	Batt +	Plug S04P-XL-HDB (JST)
2	Batt +	
3	Batt -	
4	Batt -	

Pin	Input / output	Connector
1	LED+	Plug S03B-XASK-13 (JST)
2	LED-	
3	Re-Charge	

CN102 (Please wire the controlled signal connector at power supply side.)
 Note: In the case that AC switch is used, remove the shorting connector and use CN104 so that CN104 goes short when AC switch is on, and CN104 goes open when AC switch is off.
 When AC switch is turned on or off without using CN104 with shorting connector, CN105, connected, backup operation starts.
 *Please note that backup function will be operated at applying CN105 short connector, if you turn ON and OFF the AC switch without using the CN104. (CN105 shorting connector in use)

Dip switch setting:
 With DIP switch setting, back up time after AC fail can be set as in the chart below. (Setting time accuracy: ±10%. At shipping configuration, the pattern shall be 16: discharge cut-off voltage.)

Mode	(1)	(2)	(3)	(4)	Discharge setting time
1	1	1	1	1	1 min.
2	0	1	1	1	5 min.
3	1	0	1	1	10 min.
4	0	0	1	1	15 min.
5	1	1	0	1	20 min.
6	0	1	0	1	25 min.
7	1	0	0	1	30 min.
8	0	0	0	1	35 min.
9	1	1	1	0	
10	0	1	1	0	
11	1	0	1	0	
12	0	0	1	0	To discharge cut-off voltage
13	1	1	0	0	
14	0	1	0	0	
15	1	0	0	0	
16	0	0	0	0	

1: Switch ON, 0: Switch OFF

* Other lineup of products available with different shutdown times at 5 sec./10sec./30sec./1min./2min./3min./5min./10min.
 Model:BS14P-H24/2.5L

Optional Components Sold separately

Model	Type	Description
WH-16PAD04XA-350	Battery connection cable (signal cable)	Signal harness to be connected to a power supply.
WH-16PAD04XA-350-01	Battery connection cable (signal cable)	Signal harness to be connected to a power supply. (for two battery packages in parallel connection)
WH-02XL02XL-350	Battery connection cable (power cable)	Power harness to be connected to a power supply.
WH-04XL04XL-350	Battery connection cable (power cable)	Power harness to be connected to a power supply. (Two harnesses are used in the parallel connection of two battery packages)
WH-02XL04XL-350-01	Battery connection cable (power cable)	Power harness to be connected to a power supply (for two battery packages in parallel connection).
ACC3318	D-sub harness with RS232C signal board (signal harness)	Signal output is possible by RS232C signal.