

Battery Package BS28A-H350/2.5L

5 inch bay fixed type Ni-MH battery

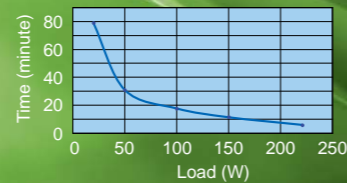
Lead Ni-Cd **Ni-MH** Other

RoHS Directive



BS28A-H350 / 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
BS28A-H350/2.5L	
■ Model name coding	① Series name ④ Output voltage
BS28 A - H 350 / 2.5 L	② Modification ⑤ Capacity
① ② ③ ④ ⑤ ⑥	③ Ni-MH ⑥ Long life battery

Supported power supply

- UZP-120 series (Supported to UZP-120-**-B*)
- UZP-220 series

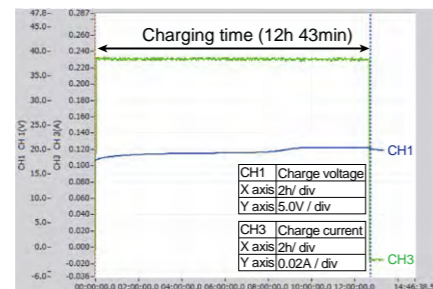
Features

- The battery pack can be fixed to a 5-inch bay.
- Ni-MH battery
- Built-in heater prevents capacity loss at low temperatures.
- It is possible to output the status of the battery pack (notification of remaining battery level and battery replacement time).
- Low standby power

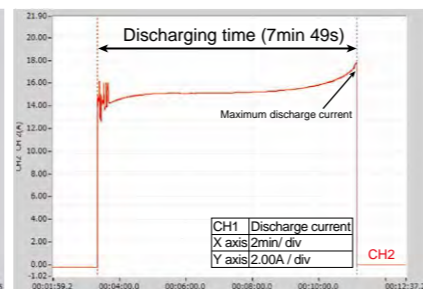
Battery Charge/Discharge Characteristics (used with UZP-220-24)

(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)

[Charge Characteristics]
Temperature: 20°C
load condition: no load



[Discharge Characteristics]
Temperature: 20°C
load condition: At 220W (at rated load of UZP-220-24)

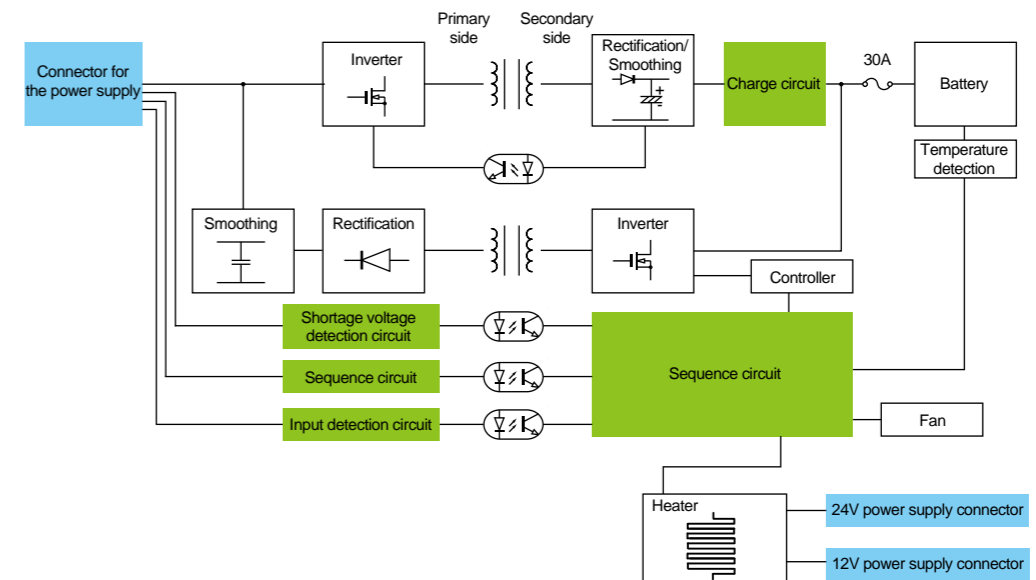


General Specification (Items are provided at normal temperature and humidity unless otherwise specified.)

Items	Specification	Measurement condition, etc.
Battery	16.8V 2.5Ah	Sealed nickel hydride battery
Nominal Battery Power Voltage	16.8V	
Rated Capacity	2.5Ah	10 hour rate
Max. Output Capacity	230W (Peak 380W)	Peak output within 10ms. (time ratio 10%) The effective value should not exceed 230W.
Over Discharge Protection	11.2V typ	Backup operation shut down
Charge Specification	0.25A typ	27 VDC Max.
Heater	The elements operates at battery temperature 20°C (typ.) or less. (It warm up in order to improve the battery discharging characteristics at low temperature. The warm up time is about 1 hour from 0°C.) (Heater consumption power at operation: 10W typ)	It is valid when AC input is available, regardless of the PS_ON# signal of the power supply unit.
Built-in Fuse rating	30A	
Operating Temp./Humidity	0-50°C, 20-90%	There shall be no condensation.
Storage Temp./Humidity	-20-65°C, 20-90%	Internal heater will operate at 20°C typ. or less.
Vibration	To endure the vibration acceleration of 2G with vibration frequency of 10 to 55Hz for 10 sweep cycles in each X, Y, Z direction.	Follow JIS-C-60068-2-6 at no operation (With the normal packaging)
Mechanical Shock	Left one bottom edge of the unit 50mm high with the opposite edge placed on the test bench, and let it fall. Number of bumps: 3 each of 4 edges. There shall be no malfunction observed.	Follow JIS-C-60068-2-31 at no operation (With the normal packaging)
Weight	1.8 kg typ	
Reliability Grade	FA	Following our standard
Expected Life*	About 9-10 years (5 times/year discharge), about 3-4 year (1 time/day discharge)	Environmental temp. 30°C, 100W 3min discharge at a time
Storage condition	Recharging once at least per year (or 6 months if available) is required for 6 months or longer storage. 1 year or less storage: -20 to lower than 30°C/10 to 95% Within 90 days storage: -20 to lower than 40°C/10 to 95% Within 30 days storage: -20 to lower than 50°C/10 to 95%	When recharging is not conducted beyond the period on the left, the battery may not recover the enough capacity. It may charge input about 12 hours max. at inputting after long term storage.
Warranty	One year after delivery: If any defects belong to us, the defective unit shall be repaired or replaced at our cost. Except for failure by over discharge.	Except for errors caused by operation not specified in this specification.

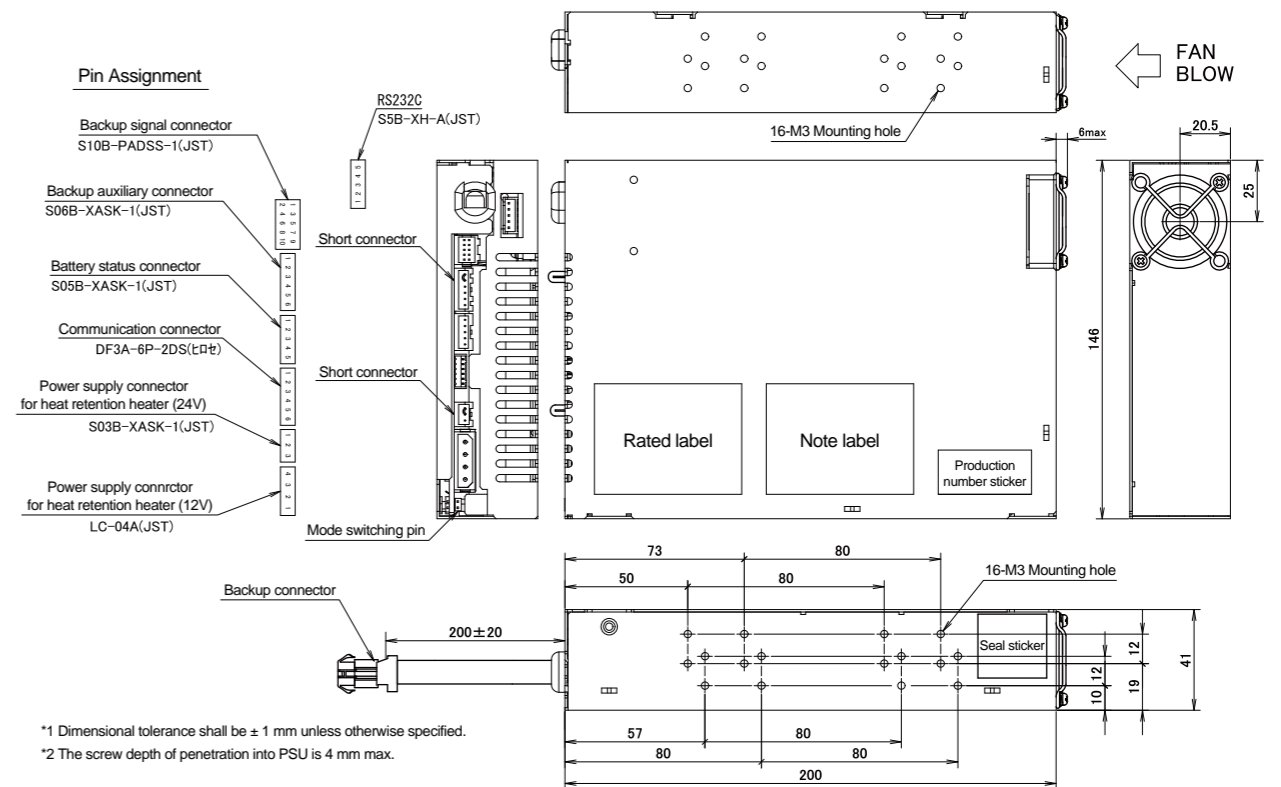
*Life expectancy is a reference value. It is not a guaranteed value.

Block Diagram



Outline Drawing

5-inch bay fixed type



*1 Dimensional tolerance shall be ± 1 mm unless otherwise specified.
*2 The screw depth of penetration into PSU is 4 mm max.

Connector pin allocation

Connector	Pin#	Signal name	Note
Backup signal connector (SIG_T)	1	AC_FAIL_T	
	2	SHUT_DOWN_T	
	3	BATT_LOW_T	
	4	-	
	5	FAN_M	
	6	-	
	7	GND	
	8	-	
	9	-	
	10	VCC5V	Total output of VCC 5V: 0.02A max

Connector	Pin#	Signal name	Note
Backup auxiliary connector	1	VCC5V	Total output of VCC 5V: 0.02A max
	2	R_ON	
	3	-	
	4	GND	
	5	Reserved	
	6	BATT+	Max. 0.02A

Connector	Pin#	Signal name	Note
Battery status connector	1	VCC5V	Total output of VCC 5V: 0.02A max
	2	BATT_E0	
	3	BATT_E1	
	4	BATT_E2	
	5	BATT_LIFE	

Connector	Pin#	Signal name	Note
Communication connector	1	VCC5V	Total output of VCC 5V: 0.02A max
	2	Reserved	
	3	Reserved	
	4	Reserved	
	5	Reserved	
	6	GND	

Connector	Pin#	Signal name	Note
RS232C	1	VCC5V	Total output of VCC 5V: 0.02A max
	2	GND	
	3	BATT_LOW_R	
	4	SHUT_DOWN_R	
	5	AC_FAIL_R	

Connector	Pin#	Signal name	Note
Power supply connector for heat retention heater (12V)	1	Power input for 12V heater	12V ± 5%
	2	GND	
	3	GND	
	4	-	

Connector	Pin#	Signal name	Note
Power supply connector for heat retention heater (24V)	1	Power input for 24V heater	24V ± 5%
	2	GND	
	3	-	