

# BGN5500-5DWP-T

(6.0V 5500mAh)

Rechargeable Sealed Nickel Cadmium Battery Pack



Technical Specification Sheet



This specification governs the performance of the following Nickel-Cadmium Cylindrical cell and its stack-up battery. All data involves voltage and weight to stack-up battery are equal to the value of unit cell times the number of unit cell which consisted in the stack-up batteries.

## RATINGS

Description	Unit	Specification	Conditions	
Nominal Voltage	V/Cell	1.2V	Unit cell	
Nominal Voltage	mAh	5500	Standard Charge/Discharge	
Standard Charge	mA	550 (0.1C)	Ambient Temperature : Ta = 20 ± 5°C	
	Hour	16		
Trickle Charge		0.03C ~ 0.05C	Ta = 0 ~ 45°C	
Standard Discharge	mA	1100(0.2C)	Ambient Temperature : Ta = 20 ± 5°C Humidity : Max. 85%	
Discharge Cut-off Voltage	V/Cell	1.0		
Operating Temperature Range	°C	0 ~ 45°C	Humidity : Max. 85%	
Storage Temperature	°C	-20 ~ 35°C	1 Year	Fully charged state, Humidity Max.60%
		0 ~ 60°C	1 Week	Fully charged state, Humidity Max.80%
Typical Weight	g	Approx. 128.0		

## PERFORMANCE

Test	Unit	Specification	Other Condition	Remarks
Capacity	mAh	5500	Standard Charge Discharge	Up to 3 cycles are allowed
Open Circuit Voltage (OCV)	V/Cell	≥1.25	Within 1 hour after standard Charge	
Internal Impedance	mΩ/Cell	≤15	Upon fully charge (1 KHz)	
High Rate Discharge (1.0C)	minute	≥48	Standard Charge, 1 hour rest Before Discharge by 1.0C to 1.0 V/cell	Up to 3 cycles are allowed
Overcharge		No leakage nor explosion	0.1C Charge 14 days	
Charge Retention/	mAh	≥3575(65%)	Standard Charge, Storage : 45°C Ambient Temperature, Standard Discharge	
IEC Cycle Life/	Cycle	≥500	IEC61951-1(2003)7.4.1.1	(See Note)
Leakage Test		No leakage nor deformation	Fully charged at 0.5C for 2.5 hour stand for 14 days.	
Security Test		No explosion, but leakage or deformation is allowed	Charge the cell 0.1C 16hrs, Then ≤100mΩ Impedance short circuit for 1hour	Ambient Temperature : T=20±5°C
Impact Resistance		Change of voltage should be under 0.02V/Cell; change of impedance should be under 5mΩ	Charge the cell 0.1C 16hrs, then leave for 1~4hrs, check battery before/after dropped Height 50cm Wooden board (thickness 30mm) Direction not specified, 3 times.	Ambient Temperature : T=20±5°C
Vibration Resistance		Change of voltage should be under 0.02V/cell; change of impedance should be under 5mΩ	Charge the battery 0.1C 16hrs, then leave for 24hrs, check Battery before/after vibration, Amplitude 1.5mm Vibration 3000CPM, Any direction for 60mins.	Ambient Temperature : T=20±5°C