

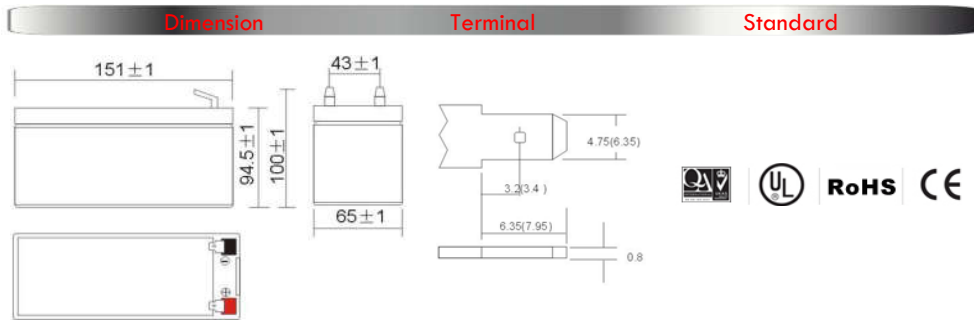
12V 9.0Ah is a long service life battery with 5 years service life under normal float charge at 20-25°C Shimastu batteries are Seal Lead Acid with Valve Regulated Lead Acid (VRLA) design. Rechargeable, Highly efficient, Leak proof and Maintenance free.



## NPH9-12

### SPECIFICATIONS

<b>Cell per unit</b>	6 Cells.
<b>Voltage per unit</b>	12 Volts.
<b>Capacity</b>	9.0 Ah at 10 hr-rate to 1.75V per cell at 25 °C
<b>Weight</b>	Approx. 2.63 Kg
<b>Maximum Discharge Current</b>	135A (5 Sec)
<b>Internal Resistance</b>	Approx. 20 milli Ohm.(Full charged battery)
<b>Normal Operating Temperature Range</b>	25 °C + 5 °C
<b>Operating Temperature Range</b>	Discharge : -20°C ~ 60°C Charge : 0°C ~ 50°C Storage : -20°C ~ 60°C
<b>Float Charging Voltage</b>	13.5 to 13.8 VDC/unit Average at 25 °C Temp.
<b>Equalization and Cycle service</b>	14.1 to 14.4 VDC/unit Average at 25 °C Temp.
<b>Maximum Charging Current</b>	2.7A
<b>Terminal type</b>	F1/F2
<b>Container Material</b>	ABS(UL94-HB),Flammability resistance of UL94-V1 can be available upon request
<b>Separator</b>	AGM (Absorbed Glass Mat type Microporous material)
<b>Self Discharge</b>	Not more than 3% per month at 25 °C



### CONSTANT POWER DISCHARGE RATING AMP PER CELL@25°C

F.V/TIME	5MIN	10MIN	15MIN	30MIN	1HR	3HR	5HR	10HR	20HR
1.60V	44.6	27.8	21.0	12.8	6.3	2.78	1.70	0.92	0.54
1.67V	41.9	26.4	20.2	12.2	6.3	2.68	1.67	0.91	0.51
1.70V	38.4	25.4	19.7	11.1	6.1	2.71	1.63	0.91	0.50
1.75V	37.7	24.6	19.1	10.6	5.8	2.42	1.60	0.91	0.49
1.80V	33.7	23.5	17.3	9.8	5.4	2.32	1.50	0.89	0.47

### CONSTANT POWER DISCHARGE RATING WATT PER CELL@25°C

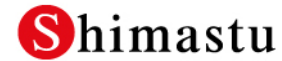
F.V/TIME	5MIN	10MIN	15MIN	30MIN	1HR	3HR	5HR	10HR	20HR
1.60V	78.3	50.2	38.3	23.0	11.4	4.9	2.9	1.9	1.1
1.67V	75.6	48.9	37.8	22.6	11.3	4.8	2.9	1.9	1.0
1.70V	71.2	48.4	37.5	21.1	11.1	4.6	2.8	1.9	1.0
1.75V	71.6	48.3	37.2	20.5	10.9	4.5	2.8	1.9	1.0
1.80V	59.4	47.6	34.4	19.5	10.3	4.3	2.7	1.8	1.0

**RANGE SUMMARY**

By combining proprietary high rate plate design with low internal resistance AGM separators, Shimastu created the innovative High Rate range of batteries. This range offers extremely high power output at 15 minutes backup time with 5 years design life and is highly suited to high rate UPS and power switchgear applications.

**FEATURES AND BENEFITS**

- 30% increased power output at 15 minutes backup time
- 5 years design life at floating condition @ 25 °C
- Optimized plate achieve low internal resistance
- Wide operating temperature range from -15°C to 60°C
- Low self-discharge rate and long shelf life (1 year at 25°C)
- Excellent deep discharge recovery capability



NPH9-12  
(12V 9.0Ah)

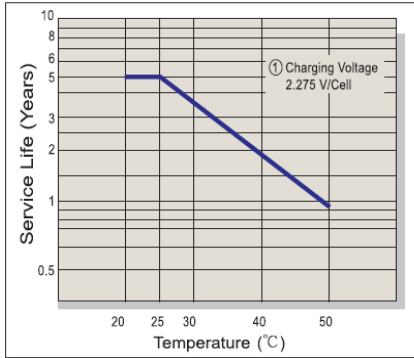
**APPLICATIONS**

- UPS systems
- Alarm Systems
- Communication Equipments
- Control Equipments
- Security Systems
- Medical Equipments
- Power Tools
- Toys
- Emergency Power Systems

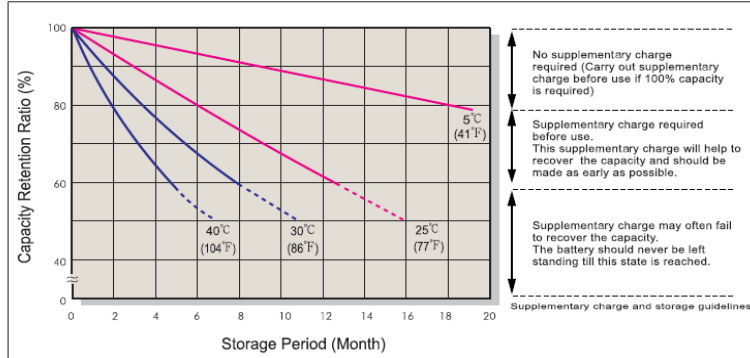
**APPLICABLE STANDARDS**

- UL1989 Second edition
- IEC60896 Part21 Valve Regulated Types-Methods of test
- IEC60896 Part22 Valve Regulated Types- Requirements

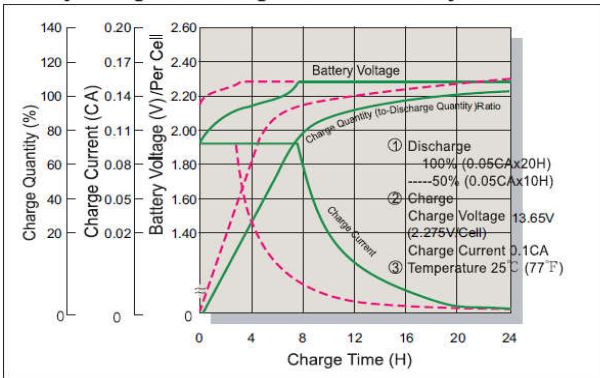
**Trickle (or Float) Service Life**



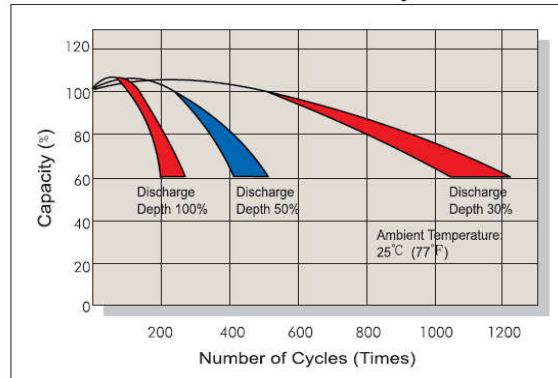
**Capacity Retention Characteristic**



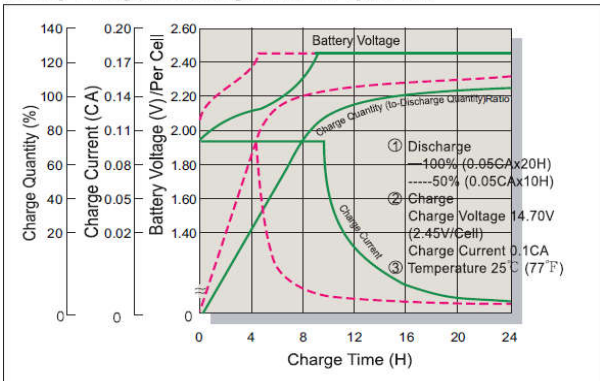
**Battery Voltage and Charge Time for Standby Use**



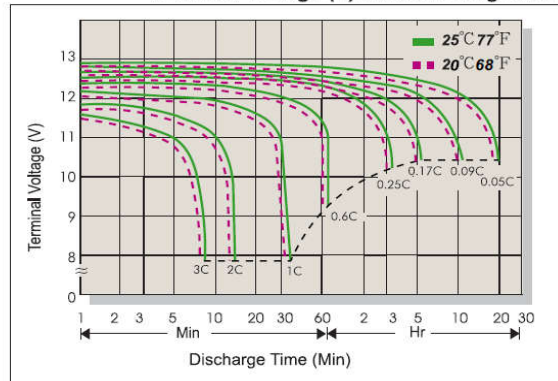
**Cycle Service Life**



**Battery Voltage and Charge Time for Cycle Use**



**Terminal Voltage (V) and Discharge Time**



Shimastu, a specialist in Sealed Lead Acid (SLA) batteries from Japan AGM technology, has been researching, developing, manufacturing and marketing SLA batteries throughout the world since 1995. Adopting the advanced technical process from Japan Technology and modern production machines and testing equipment, Shimastu has been supplying customers with NP series of SLA batteries which are longer in service life, much higher in quality, and more reliable and stable in performance.

Shimastu, a Sino-Japan joint-venture, has a staff of more than 500 people including 30 technicians. Shimastu has been exporting SLA batteries to the world under its own brand "Shimastu". Shimastu can produce more than 150,000 units of batteries every month on average and take more than 30 quality control checks from IQC to FQC. Up to now, Shimastu has been awarded ISO9001, ISO14001, UL and CE certificates.