

Ni-MH VHT AAL U 1100



ARTS Energy's VHT U high temperature Ni-MH series are perfectly suited to emergency lighting and power back-up requirements. With an intermittent charging regime, the design life is 4 years in high temperature environments (up + 50°C).

To meet customers' requirements, ARTS Energy provides **custom-designed and standardised battery packs**.

For your battery design and system needs, please **contact ARTS Energy**.



ELECTRICAL CHARACTERISTICS

• Nominal voltage (V)	1.2
• Typical capacity (mAh)*	1150
• IEC minimum capacity (mAh)*	1100
• IEC designation	HRMT 15/49
• Impedance at 1000 Hz (mΩ)	18

* Charge 16 h at C/10, discharge at C/5.

DIMENSIONS

• Diameter (mm)	13.9 ± 0.1
• Height (mm)	48.2 ± 0.2
• Top flat area diameter (mm)	8
• Weight (g)	22

Dimensions are given for bare cells.

CHARGE CONDITIONS	Temp. (°C)	Current
• ELU applications	0 to +50	Intermittent C/20
• Back up applications	-20 to +85	C/3 max
• Solar applications	-40 to +85	C/3 max

End of Fast charge cut-off is requested: -dV or dT°C/dt

DISCHARGE CONDITIONS	Temp. (°C)	Current
	+20 to +60	3C max
	0 to +85	C/2 max
	-20 to +85	C/5 max
	-40 to +85	C/20 max

LIFE DURATION	Cycling	Life duration
• ELU applications	1 discharge/month max	4 years at 50°C
• Back up applications	1 discharge/day max	5 to 10 years
• Solar applications	1 discharge/day max (50% DOD)	5 to 10 years

APPLICATIONS

- Emergency lighting (ELU)
- Back-up systems
- Pack shaving applications (money saving)
- Professional electronics
- Solar

MAIN BENEFITS

- Very high cycle life
- Exceptional temperature range
- Superior robustness

TECHNOLOGY

- Foam positive electrode
- Plastic bonded metal-hybride negative electrode



The VHT AA U cell is designed to accept intermittent charge in a wide range of temperatures (0°C to + 50°C).

The VHT AA U allows a significant reduction in the energy consumption of luminaires.

In back up applications, the VHT AA will offer 5 to 10 years life.

In cycling application (solar, peak shaving), the VHT AA U will offer 5 to 10 years life in an environment from -40°C to +85°C.

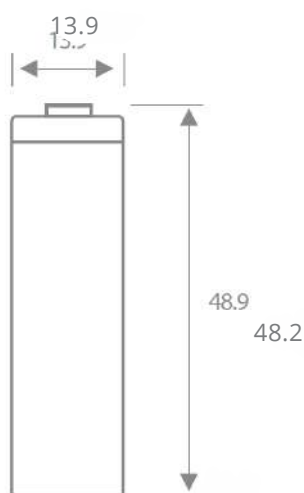
It delivers for example, 5000 cycles at 50% DOD.

STORAGE

Recommended: + 5°C to + 25°C

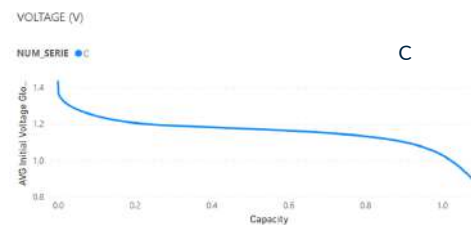
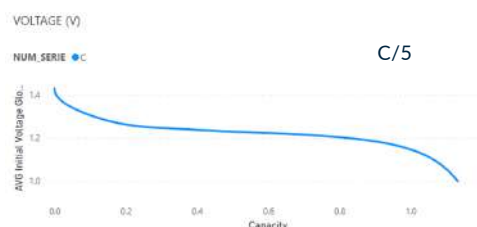
Relative humidity: 65 ± 5 %

TYPICAL DIMENSIONS

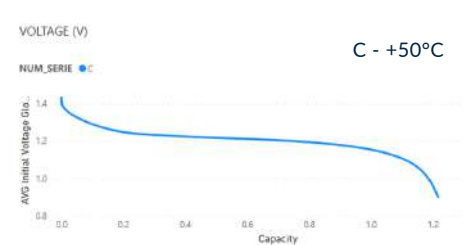
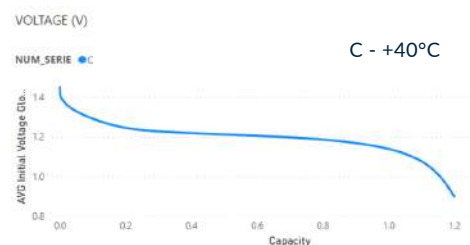
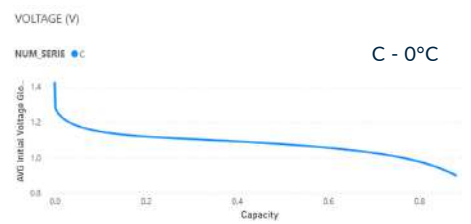
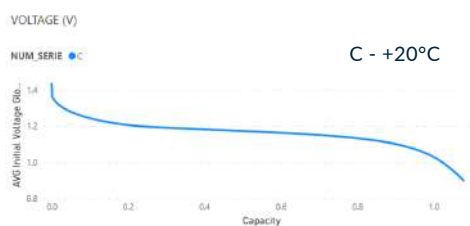


Typical dimensions (mm). Without tube.

Performances +20°C



Temperature Current Performances



The operation of the battery must strictly be in accordance with ARTS Energy technical recommendations, to obtain the performances stated by ARTS Energy.

Data is given for single cells. Please consult ARTS Energy for utilisation of cells outside specification.

Data in this document is subject to change without notice and become contractual only after written confirmation by ARTS Energy