

Ni-MH VHT 7/5 Cs U



ARTS Energy's VHT high temperature Ni-MH series are perfectly suited to professional applications requiring a battery with an exceptional robustness. It is designed to operate in very demanding environment.

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)*	4200
• IEC minimum capacity (mAh)*	4000
• IEC designation	HRMU 23/62
• Impedance at 1000 Hz (mΩ)	20

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

DIMENSIONS

• Diameter (mm)	22.0 ± 0.05
• Height (mm)	60.0 ± 0.3
• Top flat area diameter (mm)	9.0
• Weight (g)	74

Dimensions are given for bare cells.

CHARGE CONDITIONS

	Temp. (°C)	Current
• ELU applications	0 to +55	C/20 permanent, consult ARTS Energy
• Standard	-40 to +85	C/10
• Fast	-20 to +85	C/3 max charge termination required

DISCHARGE CONDITIONS

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

CYCLING CONDITIONS

	Cycling	Life duration
• ELU applications	1 discharge/month max	4 years
• Back up applications	1 discharge/day max	5 to 10 years
• Solar applications	1 discharge/day max	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



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The VHT 7/5 Cs U has been designed to offer a very long life duration in a wide range of temperature.

In ELU the VHT 7/5 Cs U will offer more than 4 years life at 50°C permanent temperature (T type cell).
In back up applications, the VHT 7/5 Cs U will offer 5 to 10 years life.

In cycling application (solar, peak shaving), the VHT 7/5 Cs 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.

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

For applications below -20°C and above +60°C, please contact ARTS Energy to confirm the optimum battery design, and to agree the usage profiles.

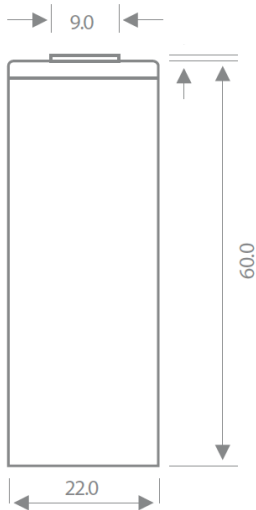


STORAGE

Recommended: + 5°C to + 25°C

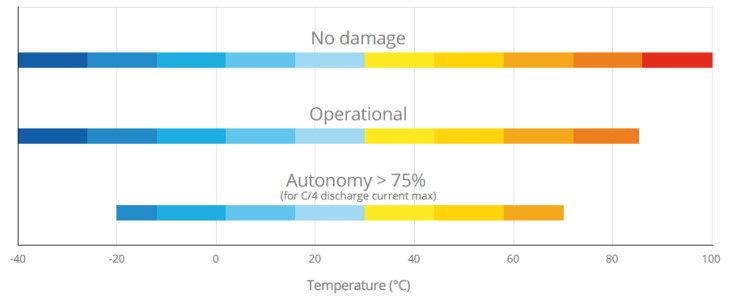
Relative humidity: 65 ± 5 %

TYPICAL DIMENSIONS

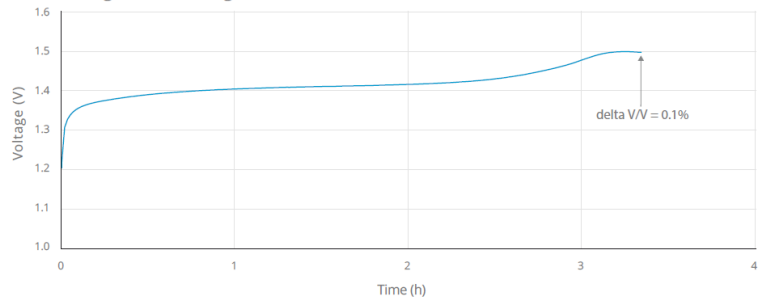


Typical dimensions (mm). Without tube.

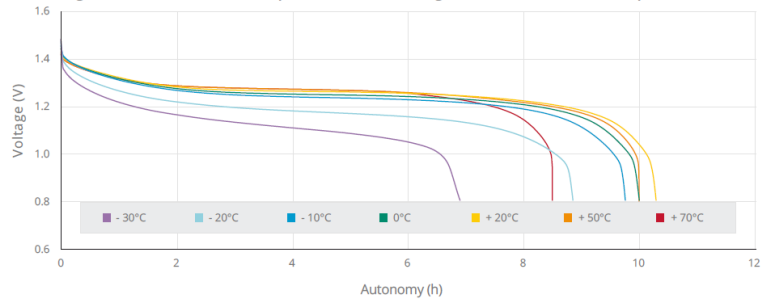
Electrical performances at different temperatures



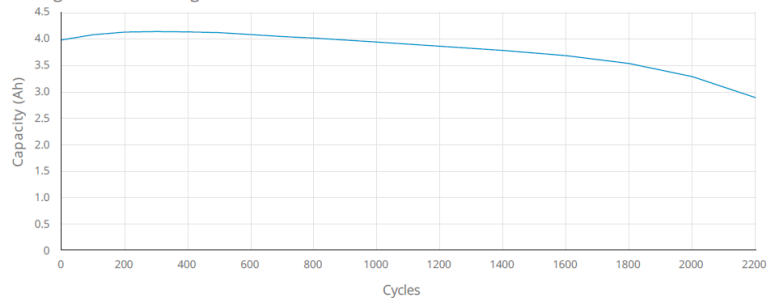
End of charge cut-off - charge at C/3



Discharge at C/10 at different temperatures after charge at C/10 at different temperatures



Charge at C/3 - discharge at 2 A



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



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