

ARTS ENERGY

ARTS Energy's VNT U high temperature Ni-Cd series are perfectly suited to emergency and security equipment applications. It is designed to accept a permanent charge for a minimum of 4 years in high temperature environments (up to +55°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's engineers.

APPLICATIONS

- Emergency lighting
- Back-up systems
- Security devices

MAIN BENEFITS

- Permanent charge
- Good charge efficiency at high temperature
- Superior robustness
- Long life duration

TECHNOLOGY

- Plastic bonded positive electrode
- Plastic bonded negative electrode



ELECTRICAL CHARACTERISTICS

| | |
|-----------------------------|------------|
| Nominal voltage (V) | 1.2 |
| Typical capacity (mAh)* | 1650 |
| IEC minimum capacity (mAh)* | 1600 |
| IEC designation | KRMU 23/43 |
| Impedance at 1000 Hz (mΩ) | 8 |

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

DIMENSIONS

| | |
|-----------------------------|-------------------|
| Diameter (mm) | 22.0 ± 0.15/-0.05 |
| Height (mm) | 41.9 ± 0.3 |
| Top projection (mm) | 0.8 ± 0.2 |
| Top flat area diameter (mm) | 9.0 |
| Weight (g) | 43 |

Dimensions are given for bare cells.

| CHARGE CONDITIONS | Time (h) | Temp. (°C) | Current |
|-------------------|----------|------------|---------|
| Standard | 16 | +5 to +55 | C/10 |
| Permanent | | +5 to +55 | C/20 |

| DISCHARGE CONDITIONS | Temp. (°C) | Current |
|----------------------|------------|----------|
| | +5 to +55 | 4.8A max |

CYCLING CONDITIONS

| | |
|----------------------|-------------------------|
| ELU applications | 1 discharge / month MAX |
| Back up applications | Consult ARTS Energy |

NI-CD

VNT Cs U

High Temperature Series

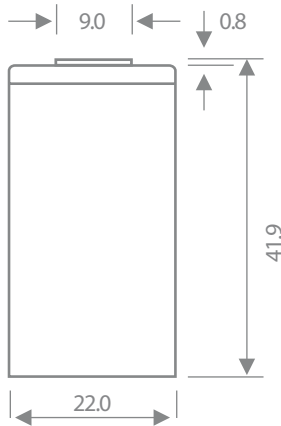
VNT Cs U

High Temperature Series

STORAGE

Recommended: + 5°C to + 25°C
Relative humidity: 65 ± 5 %

TYPICAL DIMENSIONS



Typical dimensions (mm). Without tube.

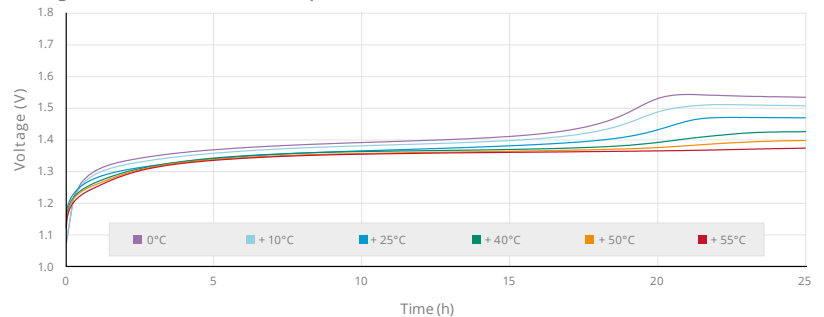
The operation of the battery must strictly be in accordance with ARTS Energy technical recommendations, to obtain the performances stated by ARTS Energy.

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

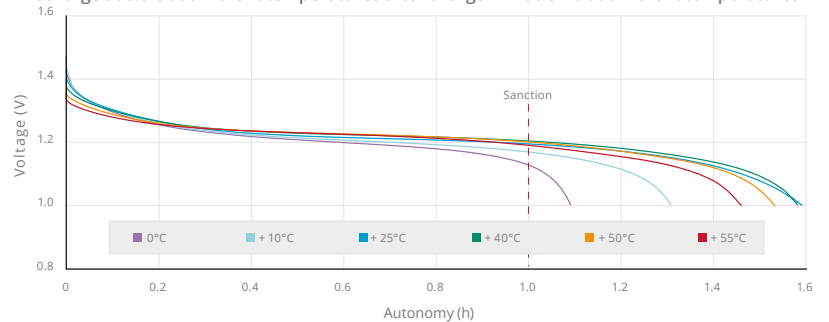
Data in this document is subject to change without notice and become contractual only after written confirmation by ARTS Energy.

For graphs shown, C is the IEC₅ capacity.

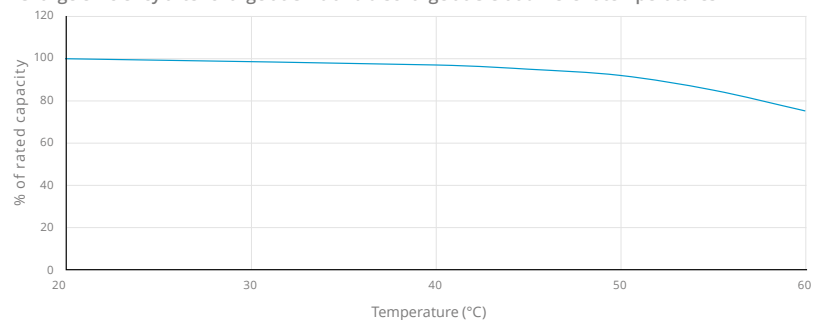
Charge 24h at C/20 at different temperatures



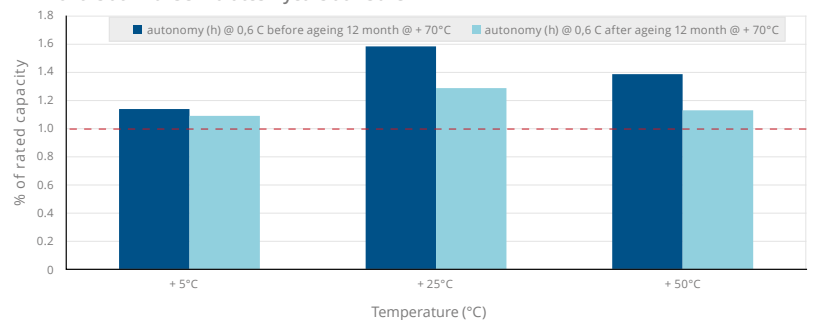
Discharge at 0.6 C at different temperatures after charge 24h at C/20 at different temperatures



Charge efficiency after charge at C/20 and discharge at C/5 at different temperatures



12 months at + 70°C simulates 4 years at + 50°C



10, rue Ampère
Zone Industrielle - 16440 Nersac, France
Tél. +33(0)5 45 90 35 52 /35 53
contact@arts-energy.com

Doc No.: 040-A-0417 - Edition: April 2017
ARTS Energy SAS. Stock capital 971.002
RCS Angoulême 792 635 013
Conception in FR by Alain Bruneaud Création



www.arts-energy.com