

VNT Cs

High Temperature Series

ARTS Energy's VNT 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 + 40°C).

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

For your battery design and system needs, please contact ARTS Energy's engineers.

Applications

- Emergency lighting
- Professional lighting
- Memory back-up systems
- Security devices

Main advantages

- Good charge efficiency at high temperature
- Permanent charge
- Good storage retention
- Long life duration

Technology

- Plastic bonded positive electrode
- Plastic bonded negative electrode

Temperature range in discharge

- 20°C to + 70°C

Storage

Recommended: + 5°C to + 25°C

Relative humidity: 65 ± 5 %



Electrical characteristics	
Nominal voltage (V)	1.2
Typical capacity (mAh)*	1650
IEC minimum capacity (mAh)*	1600
IEC designation	KRMT 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 min
Weight (g)	45

Dimensions are given for bare cells.

Charge conditions Rate	Time (h)	Temp. (°C)	Charge current (mA)
Standard*	16	+ 15 to + 40	160
Permanent		+ 15 to + 40	80
Trickle**		+ 15 to + 40	40 to 53

* End of charge cut-off is requested: timer, coulomb meter.

** Trickle charge follows full charge.

Maximum discharge current	
Continuous (A) at + 20°C	5.2
Peak (A) at + 20°C*	40

* Peak duration: 0.3 second - final discharge voltage 0.65 volt/cell.

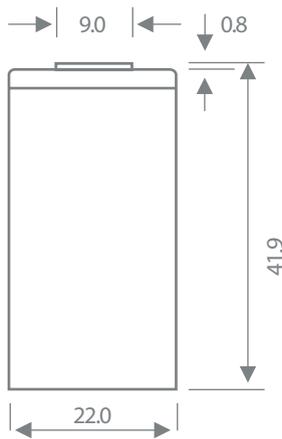


Advanced Rechargeable Technology and Solutions



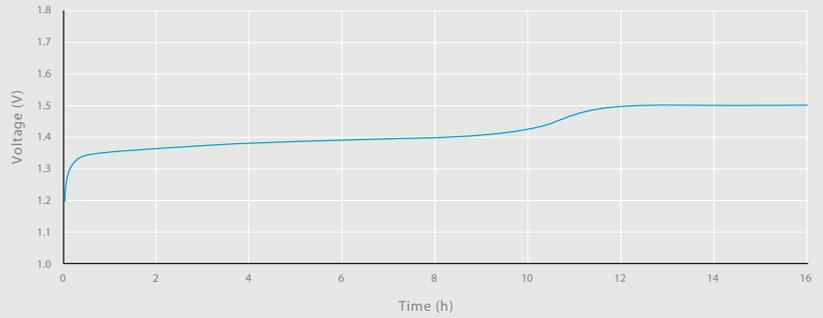
Typical performances

For graphs shown, C is the IEC₅ capacity.

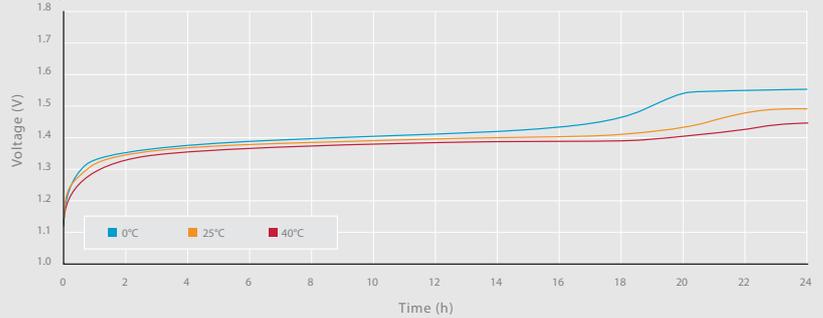


Dimensions are in mm.

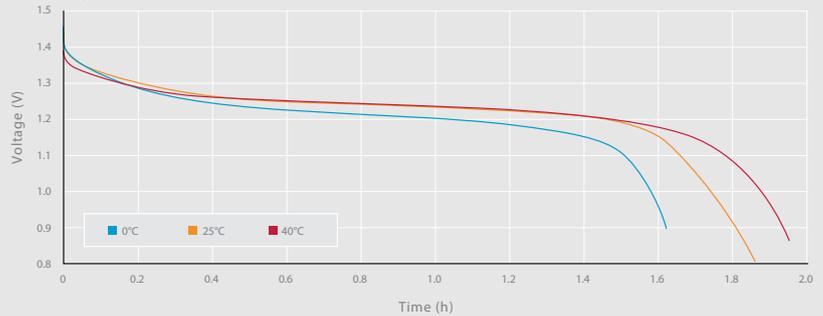
Charge 16h at C/10 at room temperature



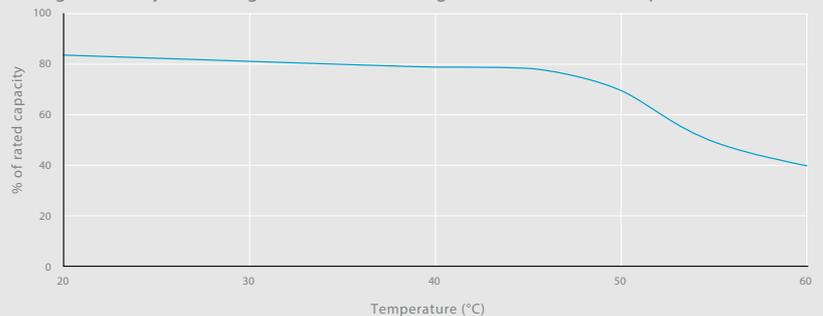
Charge 24h at C/20 at different temperatures



Discharge at C/2 at different temperatures, after charge 24h at C/20 and rest 1h



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



Data are given for single cells. Please consult ARTS Energy for utilization of cell outside this specification.

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



10, rue Ampère
Zone Industrielle
16440 Nersac, France
Tél. +33(0)5 45 90 35 50
www.arts-energy.com