

VT 1/2 D

High Temperature Series

ARTS Energy's VT 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 + 55°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
- Memory back-up systems
- Security devices

Main advantages

- Good charge efficiency at high temperature
- Permanent charge
- Good storage retention

Technology

- Sintered 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)*	2500
IEC minimum capacity (mAh)*	2200
IEC designation	KRMT 33/36
Impedance at 1000 Hz (mΩ)	10

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

Dimensions	
Diameter (mm)	32.15 ± 0.1
Height (mm)	36.2 ± 0.4
Top projection (mm)	1.4 ± 0.4
Top flat area diameter (mm)	5.6
Weight (g)	80

Dimensions are given for bare cells.

Charge conditions Rate	Time (h)	Temp. (°C)	Charge current (mA)
Standard	16	+ 15 to + 55	220
Permanent		+ 15 to + 55	110
Trickle*			55 to 110

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

* Trickle charge follows fast charge.

Maximum discharge current	
Continuous (A) at + 20°C	7.7
Peak (A) at + 20°C*	65

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

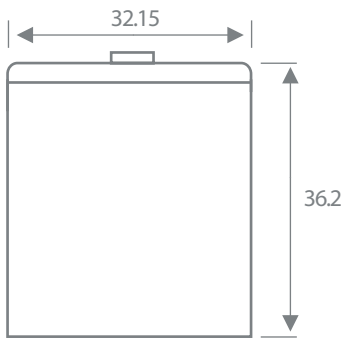


Advanced Rechargeable Technology and Solutions



Typical performances

For graphs shown, C is the IEC₅ capacity.

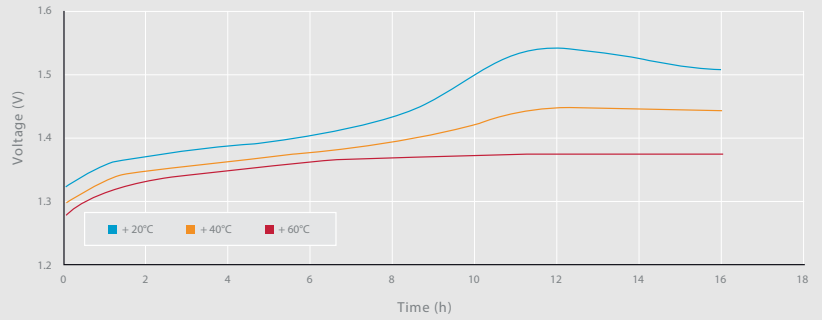


Dimensions are in mm.

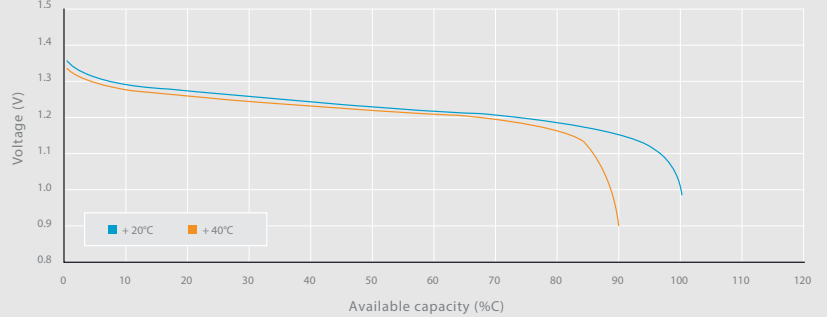
Data are given for single cells. Please consult ARTS Energy for utilization of cell outside this specification.

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

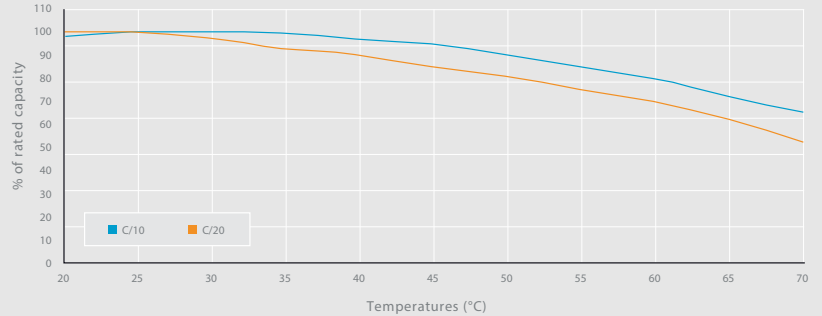
Voltage in normal charge (current 0.1 C)



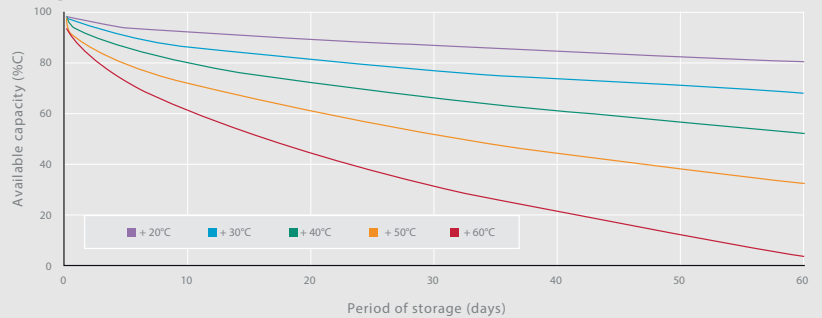
Voltage in discharge at 0.5 C rate (after charge 0.05 C x 48 hours)



Charge efficiency after different charge rate discharge at C/2



Charge retention (between + 20°C and + 60°C)



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