

VNT D U Hc

High Temperature Series

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 + 55°C).

It also brings an improvement at low temperature, suiting perfectly with severe outdoor application.

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

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)*	4500		
IEC minimum capacity (mAh)*	4200		
IEC designation	KRMU 33/62		
Impedance at 1000 Hz (mΩ)	6		
<small>* Charge 16 h at C/10, discharge at C/5.</small>			
Dimensions			
Diameter (mm)	32.15 ± 0.1		
Height (mm)	59.9 ± 0.4		
Top projection (mm)	3.1 ± 0.4		
Top flat area diameter (mm)	5.6		
Weight (g)	124		
<small>Dimensions are given for bare cells.</small>			
Charge conditions Rate	Time (h)	Temp. (°C)	Charge current (mA)
Standard*	16	+ 15 to + 55	420
Permanent		+ 15 to + 55	210
Trickle**			100 to 130
<small>* End of charge cut-off is requested: timer, coulomb meter.</small>		<small>** Trickle charge follows full charge.</small>	
Maximum discharge current			
Continuous (A) at + 20°C	14		
Peak (A) at + 20°C*	150		
<small>* Peak duration: 0.3 second - final discharge voltage 0.65 volt/cell.</small>			

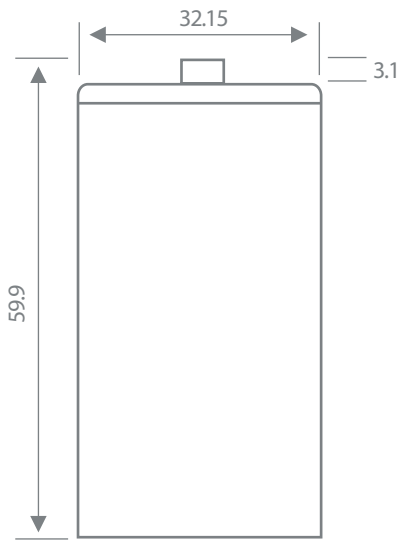


Advanced Rechargeable Technology and Solutions



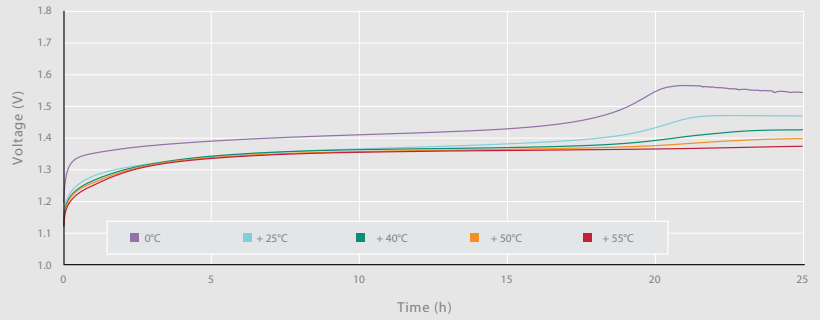
Typical performances

For graphs shown, C is the IEC₅ capacity.

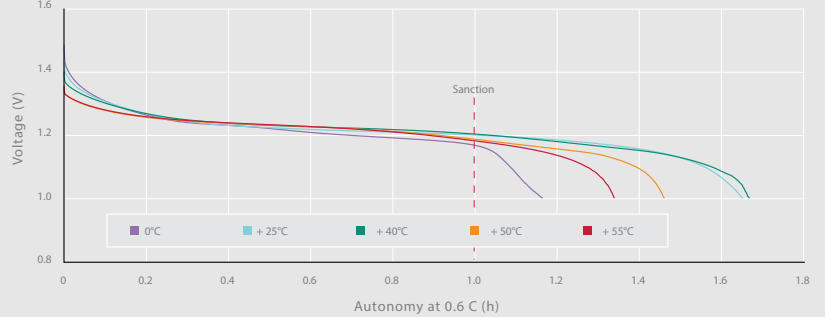


Dimensions are in mm.

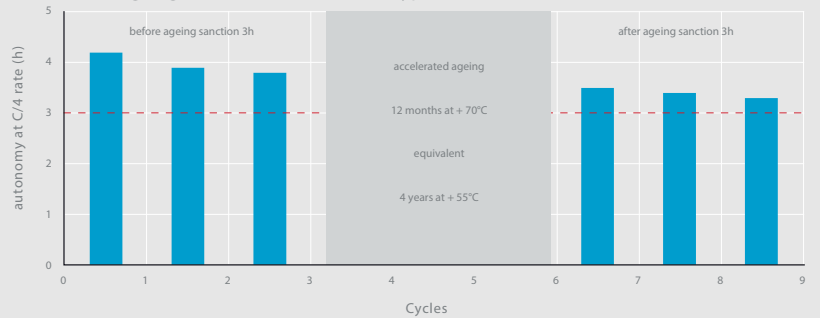
Charge 24h at C/20 at different temperatures



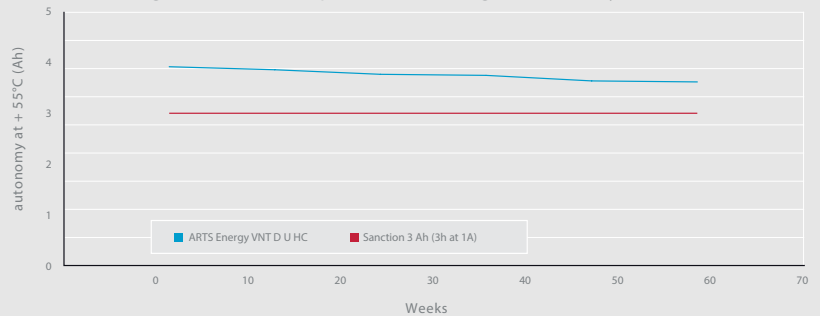
Discharge at 0.6 C at different temperatures after charge 24h at C/20 at different temperatures



Accelerated ageing test ICEL 1010: 2009: E55 type



Permanent charge at C/20 @ + 55°C permanent discharge at 1.0 A every 10 weeks



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.



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