

ARTS ENERGY

ARTS Energy's VSE Ni-Cd series have been designed to meet the fast charge and increased capacity needs of light and compact equipment.

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.



ELECTRICAL CHARACTERISTICS

Nominal voltage (V)	1.2
Typical capacity (mAh)*	980
IEC minimum capacity (mAh)*	940
IEC designation	KRMR 15/49
Impedance at 1000 Hz (mΩ)	16

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

DIMENSIONS

Diameter (mm)	13.9 ± 0.1
Height (mm)	48.9 ± 0.3
Top projection (mm)	0.8 ± 0.2
Top flat area diameter (mm)	4 ± 0.2
Weight (g)	22

Dimensions are given for bare cells.

CHARGE CONDITIONS

	Temp. (°C)	Current
Fast	0 to +40	0,94A max
Topping (after fast charge)	0 to +40	Consult ARTS Energy
Trickle (after topping)	0 to +40	Consult ARTS Energy
Charge below 0°C	-40 to 0	Consult ARTS Energy

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

DISCHARGE CONDITIONS

	Temp. (°C)	Current
	10 to +60	2,9A max
	-20 to +60	1C max
	-30 to +60	C/3 max
	-40 to +60	C/5 max

CYCLING CONDITIONS

	Cycling	Life duration
	Full cycles (100% DOD)	> 500 cycles

APPLICATIONS

- Professional electronics
- Professional lighting equipment

MAIN BENEFITS

- Excellent cycling performance
- High power
- Extreme low temperatures (-40°C)

TECHNOLOGY

- Foam positive electrode
- Plastic bonded negative electrode

NI-CD

VSE AA
High Energy Serie

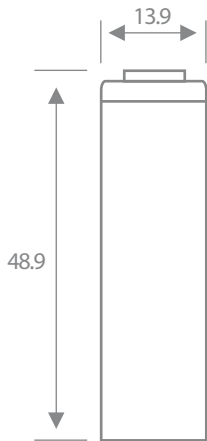
VSE AA

High Energy Series

STORAGE

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

TYPICAL DIMENSIONS



Typical dimensions (mm). Without tube.

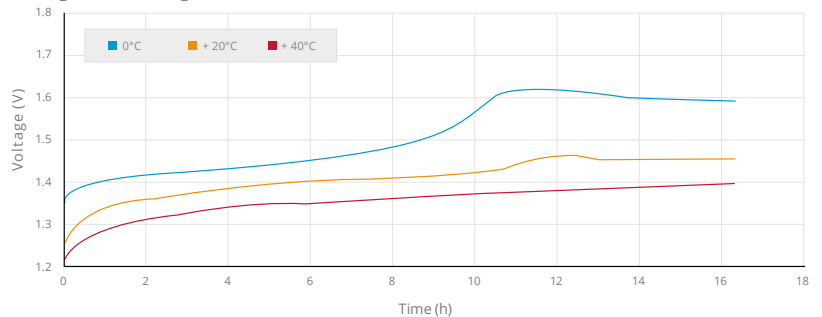
The operation of the battery must strictly be in accordance with ARTS Energy technical recommendations, to obtain the performances stated by ARTS Energy.

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

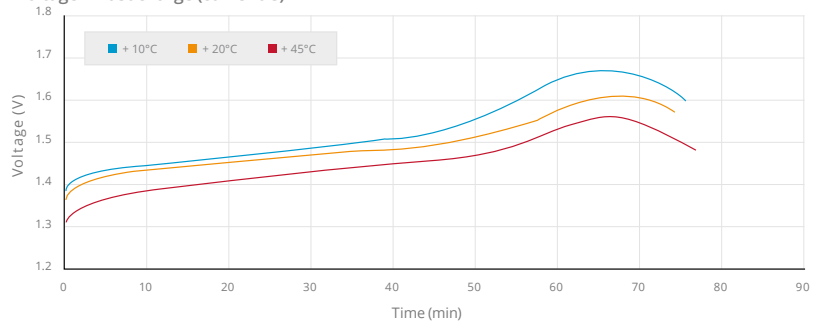
Data in this document is subject to change without notice and become contractual only after written confirmation by ARTS Energy.

For graphs shown, C is the IEC₅ capacity.

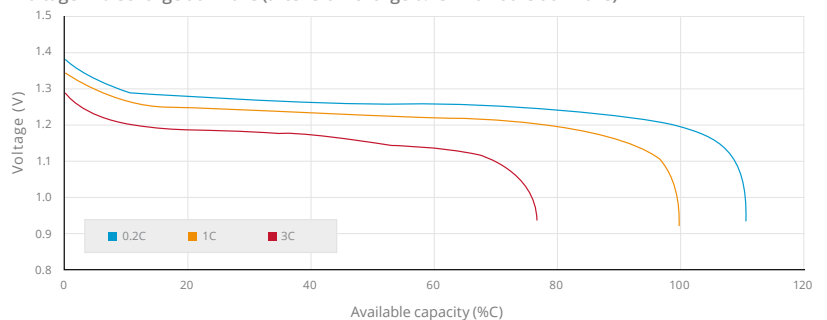
Voltage in slow charge (current 0.1C)



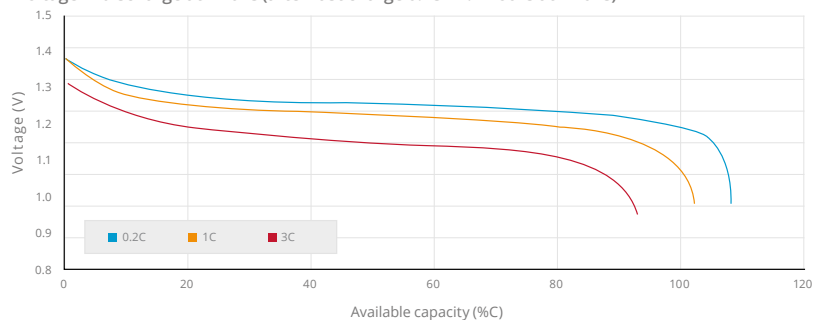
Voltage in fast charge (current C)



Voltage in discharge at + 20°C (after slow charge 0.1C x 16 hours at + 20°C)



Voltage in discharge at + 20°C (after fast charge 0.1C x 1.2 hours at + 20°C)



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