

Designed and manufactured with 8 exclusive patented technologies, Narada have created an innovative range of high temperature batteries. The 313K series is designed to cope with the most extreme temperatures and environments. The advanced technology and unique manufacturing methods enable 313K batteries to deliver at least twice the cycle life of conventional lead- acid batteries, making them the first choice increasing power demands in remote hybrid telecom sites and other tough off-grid applications.

Standards

Test standards

IEC60896-21/-22, IEC61427, YD/T799 etc.

Safety standard, ventilation

EN 50272-2

Manufactured under system

ISO9001/TL9000& ISO 14001 by Narada

Benefits

- Excellent deep cycling capability
- Suitable for continuous operation at temperatures in excess of 35°C
- Reduced system operating costs
- 25% electricity power saving
- Up to 100% air conditioner maintenance saving
- Up to 100% condensing agent saving
- 30% CO₂ gas emission reduce
- Less than 1 year payback period depend on environment



Technical specifications

Electrical data

Nominal voltage	2 V
Number of cells	1
Rated capacity	600Ah -60A for 10h to 1.80V/cell(25°C) 637Ah - 63.7A for 10h to 1.80V/cell(35°C)
Internal resistance	0.23mΩ (acc.to IEC 60896-21)
Short circuit current	8641 A (acc.to IEC 60896-21)
Self discharge(35°C)	less than 5% per month
Design life at 35°C	15years

Mechanical data

Weigh ready for use	46 kg (101.4 lbs)
Length	231 mm (9.05 in)
Width	180 mm (7.09 in)
Height of monobloc	396 mm (15.59 in)
Total height	408 mm (16.06 in)
Terminal	M8
Terminal hardware torque	12~15 N·m

Constant Current Discharge Data Units:Amperes(35°C,95°F)

End voltage per cell	30min	1h	2h	3h	5h	8h	10h	24h
1.75V	542.6	363.4	212.6	162.7	111.5	77.6	65.0	28.8
1.80V	506.6	347.9	206.1	159.0	108.2	75.7	63.7	28.3
1.83V	462.4	325.3	198.8	156.8	105.4	74.6	62.1	27.6
1.85V	433.1	307.8	191.9	153.8	104.3	73.7	61.3	27.1

Constant Power Discharge Data Units:Watts per cell(35°C,95°F)

End voltage per cell	30min	1h	2h	3h	5h	8h	10h	24h
1.75V	1033.1	698.9	420.0	327.1	228.0	154.6	128.8	58.3
1.80V	996.6	682.6	407.2	315.6	221.7	150.6	125.0	57.1
1.83V	939.9	658.3	395.2	307.9	217.1	146.6	121.7	56.3
1.85V	886.2	620.9	378.9	298.9	211.3	143.1	119.3	54.8

Construction

Positive plate	Reinforced grids in a corrosion-resistant pure lead, high tin, low calcium alloy
Negative plate	Lead-calcium alloy grid
Separator	High density micro-porous glass mat with low electrical resistance
Container & lid	High temperature ABS. Optional flame retardant versions available (UL94 FV-0 with L.O.I. of 28%)
Electrolyte	Sulphuric acid with a density of 1.28g/ml absorbed in AGM
Terminal design	Patented leak resistant seal configuration with brass insert
Safety valve	Calibrated opening pressure, the valve equipped with flame arrestors for increased operational safety and service life.

Installation and operation

- Recommended float charge voltage
compensation in function of temperature
 - Cycle and equalize charge voltage
compensation in function of temperature
 - CC-CV charge current
 - Preferred operating temperature range
 - Maximum operating temperature range
 - A separate battery room
 - Reduced maintenance
- 2.24V per cell at 35°C
-3mV/°C/cell
- 2.30V per cell at 35°C, or case by case
-5mV/°C/cell
- unlimited, otherwise 0.25C₁₀A max. if T>25°C
- 15°C to 35°C (68°F to 95°F)
- 40°C to 80°C (-40°F to 176°F)
- is not necessary
- no water addition required

Racking (optional)

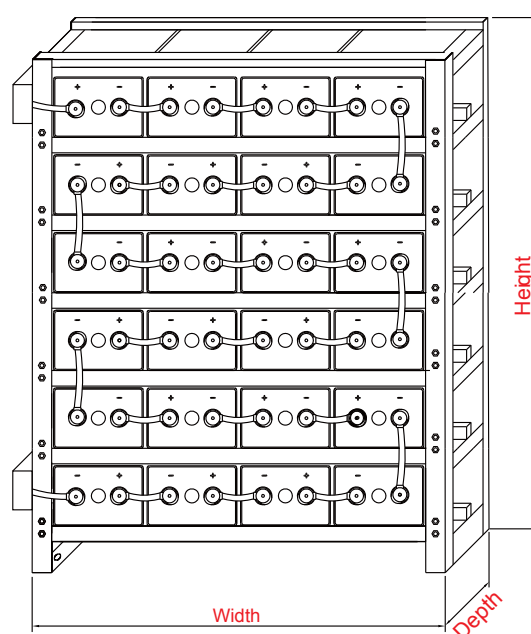
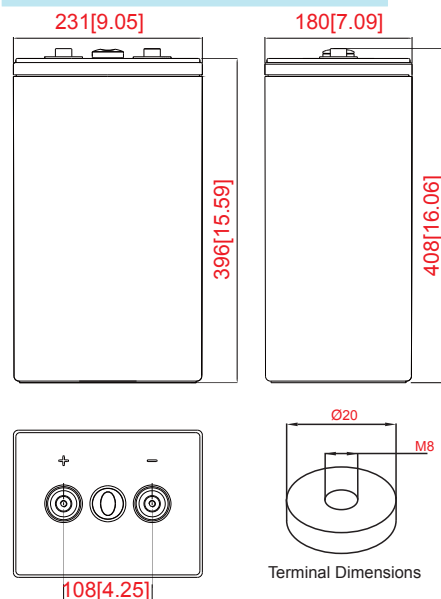
Narada racks are constructed using strong, easy to assemble, powder-coated steel tubing and come complete with sliding cover terminal (take-off) plates.

Cell model: HTB-600
Number of cells: 24
System Voltage: 48

Cell Configuration	4 high 6 wide	6 high 4 wide	In coolstar cabinet
Rack width (mm)	1646	1064	Cabinet width (1200)
Rack depth (mm)	405	405	Cabinet depth (1450)
Rack height (mm)	1000	1450	Cabinet height (1500)
System weight (kg)	1238	1225	1380

* Please allow 100mm for terminal boxes

Dimensions (mm)



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