

## Renewable Energy Storage Batteries

Narada's REX battery is designed for Renewable Energy Sources such as Solar and Wind Power. REX protects our environment using Green Technology and benefits the World's Urban and Rural Population by Generating Power Economically from a Clean Source of Energy. REX is a product developed by Narada's R&D with an "eXtra" in Performance and Life Span.

### Standards

Test standards	IEC60896-21/-22, IEC61427, YD/T 799 etc.
Safety standard, ventilation	EN 50272-2
Manufactured under system	ISO9001/TL9000 & ISO14001 by Narada

### Features & Benefits

- Long life design for both cyclic and float applications
- Superb security and reliability
- Robust design inside and out
- Excellent deep discharge recovery fast recharge performance
- Extra long back-up times
- More cost effective than nearest equivalent



### Technical specifications

Electrical data	
Nominal voltage	2 V
Number of cells	1
Rated capacity(25°C)	1000 Ah - 100A for 10h to 1.80V/cell 1200 Ah - 10A for 120h to 1.85V/cell
Internal resistance	0.15 mΩ ( acc. to IEC 60896-21)
Short circuit current	12835 A (acc. to IEC 60896-21 )
Self discharge(25°C)	less than 2% per month
Design life at 25°C	20 years
Mechanical data	
Weight ready for use	76 kg (167.6 lbs)
Length	231 mm (9.09 in)
Width	282 mm ( 11.10 in)
Height of monobloc	396 mm (15.59 in)
Total height	408 mm (16.06 in)
Terminal	M8 female
Terminal hardware torque	10 - 12 Nm

### Constant Current Discharge Data Units: Amperes (25°C,77°F)

End voltage	Time (minutes)		Time (hours)										
	15	30	1	3	5	8	10	12	20	24	48	72	120
1.70V	1087	827	586	274	186	127	105	90.2	55.5	47.5	24.3	16.6	10.5
1.75V	1023	763	554	268	183	125	105	89.8	55.1	47.1	24.1	16.5	10.5
1.80V	954	714	526	262	178	123	103	88.8	54.1	46.1	23.8	16.3	10.3
1.83V	879	667	496	254	176	122	102	88.0	54.0	46.1	23.7	16.2	10.3
1.85V	812	628	464	240	167	118	99.0	84.8	52.3	44.8	22.8	15.6	10.0
1.90V	641	522	384	215	151	107	90.2	78.3	48.6	41.8	20.8	14.2	9.02

### Constant Power Discharge Data Units: Watts per cell (25°C,77°F)

End voltage	Time (minutes)		Time (hours)										
	15	30	1	2	3	4	5	6	7	8	10	12	24
1.70V	1959	1596	1167	733	564	455	384	338	303	277	230	192	107
1.75V	1875	1501	1100	701	553	447	377	328	294	271	228	190	106
1.80V	1767	1403	1013	675	536	440	367	321	289	265	224	187	104
1.83V	1653	1311	947	650	524	428	357	312	283	258	220	184	102
1.85V	1544	1211	868	626	506	416	348	303	274	250	212	177	98.3
1.90V	1251	990	736	564	462	385	325	286	255	234	200	167	92.5

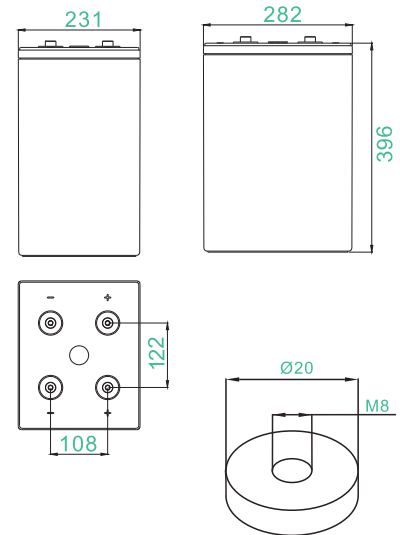
## Construction

Positive plate	Reinforced grids in a corrosion-resistant pure lead, high tin, low calcium alloy
Negative plate	Lead-calcium alloy grid
Separator	High density microporous glass mat with low electrical resistance
Container & lid	High strength ABS(HB). 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	2.27V per cell at 25°C -3mV/°C/cell
• Cycle and equalize charge voltage: compensation in function of temperature	2.35V per cell at 25°C -5mV/°C/cell
• CC-CV charge current	unlimited, otherwise 250A max. if T>25°C
• Preferred operating temperature range	15°C to 25°C (68°F to 77°F)
• Maximum operating temperature range	-40°C to 50°C (-40°F to 122°F)
• A separate battery room	is not necessary
• Reduced maintenance	no water addition required

## Dimensions (mm)



Terminal Dimensions

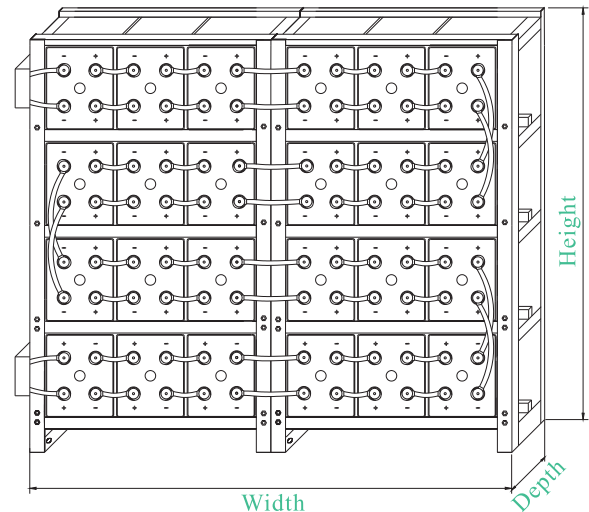
## Racking (optional)

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: REX-1000  
Number of cells: 24  
System Voltage: 48

Cell Configuration	4high 6wide	In outdoor cabinet
Rack width (mm)	1646	Cabinet width (1520)
Rack depth (mm)	405	Cabinet depth (1710)
Rack height (mm)	1408	Cabinet height (1520)
System weight (kg)	1914	2560

\* Please allow 100mm for terminal boxes



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