

Renewable Energy Storage Batteries

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



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

Technical specifications

Electrical data

Nominal voltage	2 V
Number of cells	1
Rated capacity(25°C)	800 Ah - 80A for 10h to 1.80V/cell 960 Ah - 8A for 120h to 1.85V/cell
Internal resistance	0.18 mΩ (acc. to IEC 60896-21)
Short circuit current	10873 A (acc. to IEC 60896-21)
Self discharge(25°C)	less than 2% per month
Design life at 20°C	20 years

Mechanical data

Weight ready for use	62 kg (136.7 lbs)
Length	231 mm (9.09 in)
Width	231 mm (9.09 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	870	662	469	219	149	102	84.4	72.2	44.4	38.0	19.4	13.3	8.44
1.75V	819	610	443	214	146	100	83.6	71.8	44.1	37.7	19.3	13.2	8.36
1.80V	764	571	421	210	143	98.4	82.5	71.0	43.3	36.9	19.0	13.0	8.25
1.83V	703	533	397	203	140	97.8	82.1	70.4	43.2	36.9	18.9	12.9	8.21
1.85V	649	502	371	192	134	94.4	79.2	67.9	41.8	35.8	18.2	12.5	8.00
1.90V	513	417	307	172	121	85.6	72.1	62.6	38.9	33.5	16.6	11.4	7.21

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	1567	1277	933	586	451	364	307	270	242	222	184	154	85.2
1.75V	1500	1201	880	561	442	357	302	262	236	217	183	152	84.5
1.80V	1414	1122	810	540	429	352	294	257	231	212	180	150	83.0
1.83V	1323	1049	758	520	419	342	286	249	226	207	176	147	81.6
1.85V	1235	969	694	500	405	333	278	242	219	200	170	142	78.6
1.90V	1001	792	589	451	369	308	260	229	204	187	160	133	74.0

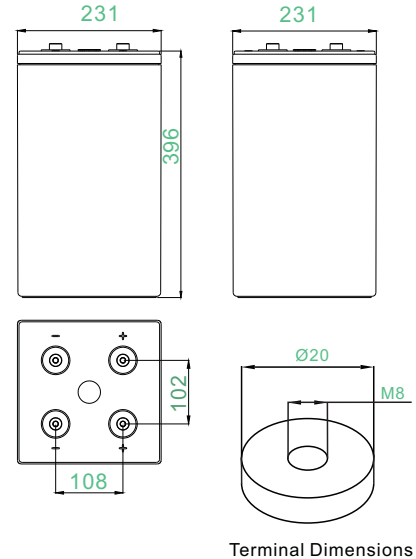
Construction

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
• Equalize charge voltage: compensation in function of temperature	2.35V per cell at 25°C -5mV/°C/cell
• CC-CV charge current	unlimited, otherwise 200A 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)



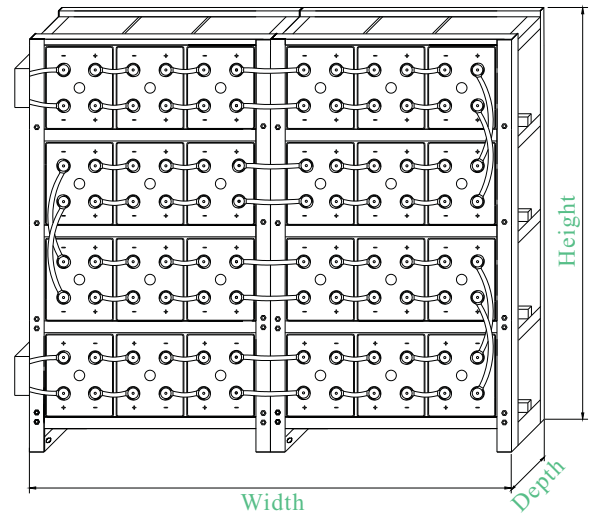
Racking (optional)

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-800
Number of cells: 24
System Voltage: 48

Cell Configuration	2 high 12 wide	3 high 8 wide	4 high 6 wide
Rack width (mm)	3100	2230	1550
Rack depth (mm)	460	460	460
Rack height (mm)	652	928	1204
System weight (kg)	1585	1580	1580

* Please allow 100mm for terminal boxes



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