



RE Series

48RE1200 Datasheet

2V Modular VRLA-AGM



Valve Regulated Lead Acid (VRLA) Battery with Carbon Additives

Maintenance-Free, Absorbent Glass Mat (AGM) Technology for Efficient Gas Recombination of up to 99%

Pure Lead Construction and Proprietary Elements Using Carbon to Enhance Cycle Life, up to 3,800 Cycles at 50% Depth of Discharge

10-Year Full Replacement Warranty

Suitable for Energy Storage and Power Fluctuation Control– Enhanced IEC 61427 Standard Applicability for PSoC Cycling in Renewable Energy Systems, Including Photovoltaic (PV) Applications.



Specifications

Nominal Voltage Per Cell	2V
Nominal Voltage Per System	48Vdc
Nominal Capacity (1.75 Vpc @ 25°C)	1200 Ah @ 100 hr-rate
Ah Capacity (8-Hr 1.75 Vpc @ 25°C)	824.00
Ah Capacity (20-Hr 1.75 Vpc @ 25°C)	972.00
Ah Capacity (8-Hr 1.80 Vpc @ 25°C)	816.00
Max Charge Current (A)	168
Terminal Type	I3 thread copper alloy terminal to accept M10 bolt
Terminal Torque	249±50 Kgf·cm / 216±43 Lbf·in / 24.4±4.9 N·m
Container Material	Flame Retardant Polypropylene (UL 94-V0)
Weight (kg. / lb.)	2007.2 / 4425.12
Length (L) (cm / in)	55.4 / 21.8
Width (W) (cm / in)	112.3 / 44.2
Height (H) (cm / in)	170.9 / 67.3
Design Life	2700 cycles 70% DOD at 25°C 3800 cycles 50% DOD at 25°C 5900 cycles 30% DOD at 25°C
Operating Temperature	Nominal: 25°C (77°F) Discharge: -25°C ~ 50°C (-4°F ~ 122°F) Charge: 0°C ~ 40°C (32°F ~ 104°F) Storage: -20°C ~ 40°C (-4°F ~ 104°F)
Daily energy storage Charging Voltage	Multi-step, CC-CV 2.42±0.02 VDC/Unit at 25°C, current limit 0.07CA (84A)
Power fluctuation control Eq. Charging Voltage*	2.50±0.02 VDC/Unit at 25°C, current limit 0.14CA (168A) Equalizing charge Interval: 14 days
Self-Discharge	Batteries can be stored for up to 6 months at 25°C (77°F) before a freshening charge is required.

* For detailed charging information, please review user manual



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Constant Current Discharge Characteristics Unit: A (25°C, 77°F)

F.V/Time	1H	2H	3H	4H	5H	8H	10H	12H	20H	24H	48H	100H
1.67V	501	292	217	179	154	105	87.1	74.9	49.1	42.3	23.9	12.5
1.75V	478	286	214	177	152	103	86.1	74.1	48.6	41.8	23.6	12.3
1.80V	447	277	210	173	149	102	84.8	72.9	47.9	41.2	23.3	12.2

Constant Power Discharge Characteristics Unit: W (25°C, 77°F)

F.V/Time	1H	2H	3H	4H	5H	8H	10H	12H	20H	24H	48H	100H
1.67V	958	552	416	346	298	200	168	145	96.2	82.9	47.1	25.0
1.75V	916	544	412	343	295	198	166	143	95.4	82.2	46.7	24.8
1.80V	856	528	404	338	290	196	164	142	94.2	81.2	46.1	24.5

