

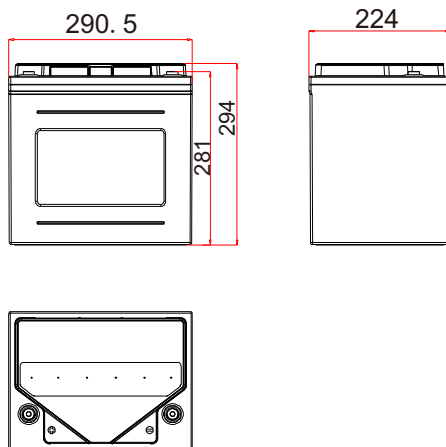
REXC series

12REXC120

Narada®



Dimension



Feature

- | Design life 20 years
- | Combine the advantage of lead acid battery and supercapacitor
- | Ideal for PSOC cycle application
- | High power, rapid charge/discharge
- | Reduce sulfation of negative plate, excellent recharge acceptance performance
- | Waterproof, anti-salt treatment, shockproof module installation design
- | Comply with IEC60896, IEC61427 etc. standard

Application

- | Home energy storage system
- | Smart power grids and microgrid system
- | Distributed energy storage system
- | Hybrid energy storage system such as solar and wind
- | Solar power generation grid/off-grid energy storage system
- | Emergency lighting system
- | Generator and battery hybrid energy system
- | Other standby, cycling system

Parameter

Nominal Voltage	12V
Capacity	120Ah (100hr to 1.85V/cell @25°C) 100Ah (10hr to 1.80V/cell @25°C)
Typical Weight	51.0kg
Internal Resistance	Approx 3.20mΩ (acc. to IEC60896-21 clause 6.3)
Short-Circuit Current	1996A
Self Discharge	Residual capacity is above 90% after 90 days storage(25°C)
Temperature Ranges	Operation(recommended): 15°C~25°C Operation(maximum): -20°C~50°C
Max. charging current	30A
Max. constant charging current	20A
Charge Voltage	Floating: 2.25V/cell(25°C) Equalizing/Cycle: 2.30V/cell(25°C)
Terminal	M8 embedded copper
Terminal Hardware Torque	>10N.m

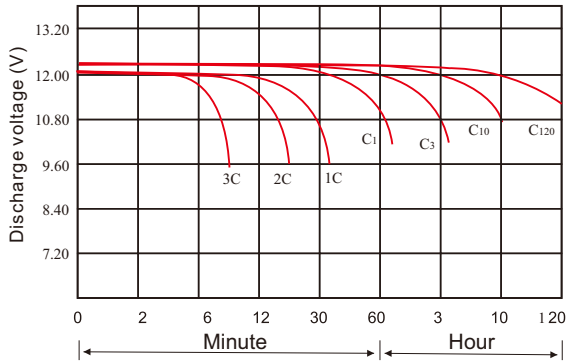
Constant Current Discharge Characteristics Units: Amperes (25°C)

End voltage per cell	1hr	3hr	5hr	8hr	10hr	24hr	48hr	72hr	120hr
1.75V	57.12	26.26	18.23	12.78	10.24	4.74	2.45	1.68	1.07
1.80V	53.48	25.45	17.83	12.53	10.00	4.67	2.39	1.64	1.04
1.83V	50.10	24.65	17.37	12.32	9.81	4.57	2.34	1.61	1.02
1.85V	48.28	24.14	17.22	12.17	9.71	4.51	2.33	1.60	1.01
1.88V	46.26	23.64	17.02	12.02	9.66	4.47	2.31	1.58	1.01
1.90V	42.88	22.63	16.57	11.72	9.42	4.41	2.25	1.54	0.98

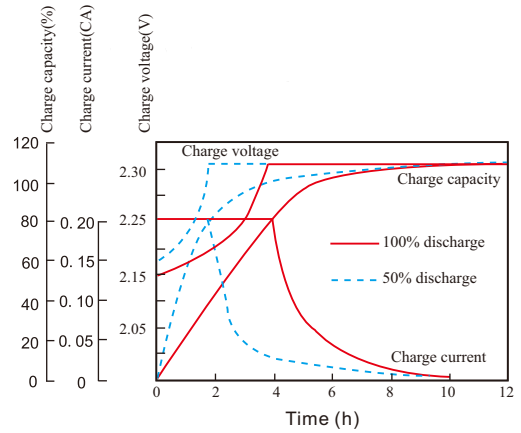
Discharge Data with Constant Power Units: Watts per cell (25°C)

End voltage per cell	15min	30min	1hr	2hr	3hr	4hr	5hr	6hr	8hr	10hr
1.75V	249.3	188.2	115.4	75.6	54.0	44.3	37.6	32.4	24.8	20.81
1.80V	226.7	182.2	112.7	74.2	52.1	42.9	36.6	31.5	24.1	20.51
1.83V	214.7	172.8	108.6	71.2	50.8	42.2	35.8	30.5	23.7	20.10
1.85V	208.6	163.9	102.5	68.2	49.3	41.2	34.9	29.8	23.3	19.70
1.88V	187.6	153.7	96.3	63.4	47.6	39.8	33.7	28.7	22.7	19.19

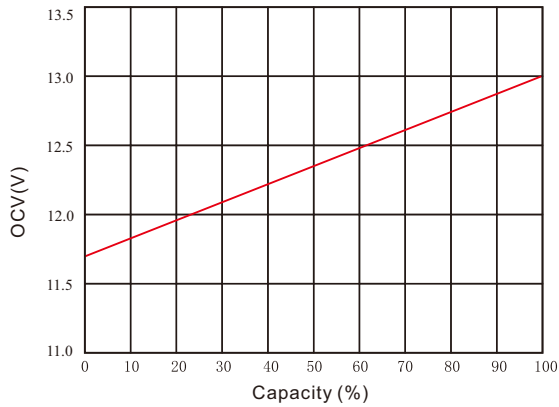
Discharge curve at different rate (25°C)



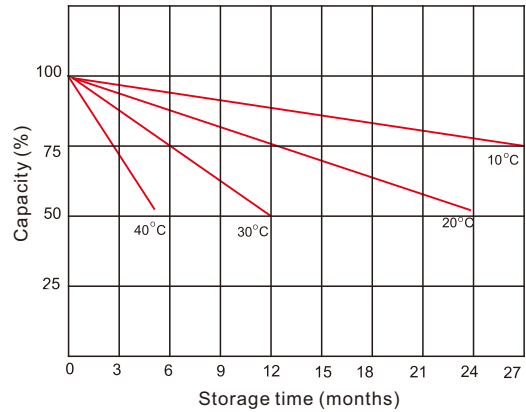
Charge curve (25°C)



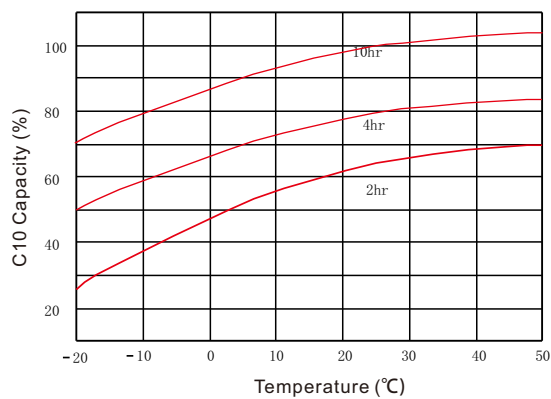
Capacity vs OCV curve



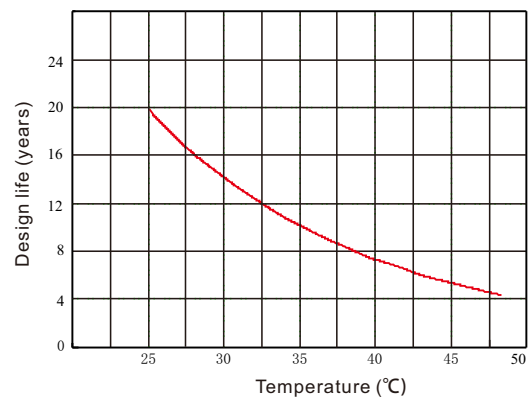
Residue capacity vs storage time



Capacity vs temperature curve



Design life vs temperature



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