

Battery Warranty – Throughput and Cycle Comparison

Scenario: Heavy usage pattern of 1.5 full cycles per day. Comparison between 10 kWh batteries under different warranty conditions.

Throughput Calculation Example (SigenStor BAT 10.0)

- Warranty throughput limit: 30.66 MWh – 30,660 kWh
- Daily usage at 1.5 cycles: 8.76 kWh x 1.5 = 13.14 kWh per day
- Days to reach throughput limit: $30,660 \div 13.14 = 2,333$ days
- Approximate duration: 6.39 years

Cycle Calculation Example (EcoFlow PowerOcean 5kWh x 2)

- Warranty limit: 6,000 cycles
- Days to reach cycle limit: $6,000 \div 1.5 = 4,000$ days
- Approximate duration: 10.96 years

1.5 Cycles per Day

Battery Model	Battery Capacity	Warranty Period	Warranty Usage Limit	Performance Guarantee	Estimated Warranty Length
Dyness PowerBox G2	10.24 kWh	10 Years	30.181 MWh	70%	5.38 Years
EcoFlow PowerOcean	10 kWh	15 Years	6000 Cycles	70%	10.96 Years
Huawei Luna2000-S1	10 kWh	15 Years	52.88 MWh	80%	9.66 Years
SAJ HS3 BU3	10 kWh	10 Years	30.60 MWh	60%	5.59 Years
Sig Sigenstor BAT10.0	8.76 kWh	10 Years	30.66 MWh	60%	6.39 Years

1 Cycle per Day

Battery Model	Battery Capacity	Warranty Period	Warranty Usage Limit	Performance Guarantee	Estimated Warranty Length
Dyness PowerBox G2	10.24 kWh	10 Years	30.181 MWh	70%	8.07 Years
EcoFlow PowerOcean	10 kWh	15 Years	6000 Cycles	70%	16.44 Years (Limited to 15)
Huawei Luna2000-S1	10 kWh	15 Years	52.88 MWh	80%	14.49 Years
SAJ HS3 BU3	10 kWh	10 Years	30.60 MWh	60%	8.38 Years
Sig Sigenstor BAT10.0	8.76 kWh	10 Years	30.66 MWh	60%	9.59 Years