

## SÜPERKAPASİTÖR BESS TEMEL PERFORMANS KRİTERLERİ

PARAMETER	SUPERCAPACİTOR	GELENEKSEL BATARYA
<b>Döngü Ömrü</b> Cycle Life	<b>50.000 cycles</b>	<b>6000 cycles</b> (When these rules are applied: 0.5C Charge, 0.5C Discharge, 80% DoD, 25°C)
<b>Deşarj Derinliği</b> Depth of Discharge	<b>100%</b>	<b>80% - 90%</b>
<b>Kapasite Azalması (Yıllık)</b> Degradation (per Year)	<b>0%</b>	<b>2% - 3%</b> (When these rules are applied: 0.5C Charge, 0.5C Discharge, 80% DoD 25°C)
<b>Beklemede Şarj Kaybı (Aylık)</b> Self Discharge (per Month)	<b>&lt; 1%</b>	<b>&lt; 3%</b> (When these rules are applied: 30-40% SoC, 25°C)
<b>AC-AC Çevrim Verimliliği</b> AC-AC Roundtrip efficiency	<b>97%</b>	<b>88% - 91%</b>
<b>Garanti Sonrası Kapasite Kaybı</b> Capacity Loss After Warranty	<b>0%</b>	<b>&gt; 30%</b>
<b>Devreye Girme Hızı (ms)</b> Response Time (ms)	<b>miliseconds</b>	<b>miliseconds</b>
<b>Max Şarj / Deşarj Hızı</b> Max Charge / Discharge Rate	<b>1 - 20 C</b>	<b>Standard: 0.5C</b> (Can reach 1C by sacrificing cycle life)
<b>Günlük Döngü Sınırı</b> Daily Cycle Limit	<b>4 times a day</b> (Theoretically unlimited, limited to 4 times due to cable-bar technical specifications)	<b>1 time per day</b> (Can be done 2-3 times by sacrificing Cycle life)
<b>Termal Kaçak</b> Thermal Runaway	<b>NO</b>	<b>YES</b>
<b>Düşük Sıcaklıkta Çalışma</b> Low Operating Temperature (unheated)	<b>-20°C</b>	<b>-10°C</b>
<b>Yüksek Sıcaklıkta Çalışma</b> High Operating Temperature (without cooling)	<b>75°C</b>	<b>35°C</b>