



		Schneider/Rolls LFP	Tesla Powerwall	Tesla 2X Powerwall
<b>AC Electrical</b>	continuous AC (watts)	<b>6800</b>	<b>5000</b>	<b>10000</b>
	peak AC (watts)	<b>12000</b>	<b>7000</b>	<b>14000</b>
	max (overcurrent) AC	<b>60A</b>	<b>30A</b>	<b>60A</b>
	extra hardware required for backup	<b>no</b>	<b>yes - backup gateway</b>	<b>yes - backup gateway</b>
	transfer time	<b>20ms (instantaneous)</b>	<b>10 sec</b>	<b>10 sec</b>
	generator input	<b>yes</b>	<b>no</b>	<b>no</b>
	charge from generator	<b>yes</b>	<b>no</b>	<b>no</b>
<b>DC Electrical</b>	max charge ADC	<b>140A</b>	<b>100A</b>	<b>200A</b>
	storage capacity (kWh)	<b>26.6</b>	<b>13.5</b>	<b>27</b>
	solar architecture	<b>DC or AC coupled</b>	<b>AC coupled</b>	<b>AC coupled</b>
<b>Other</b>	warranty	<b>10 year</b>	<b>10 year</b>	<b>10 year</b>
	internet connection required for warranty	<b>no</b>	<b>yes</b>	<b>yes</b>
	whole system monitoring	<b>yes</b>	<b>no - battery/inverter only, no solar</b>	<b>no - battery/inverter only, no solar</b>
	field serviceable	<b>yes</b>	<b>no - replace only</b>	<b>no - replace only</b>

## HIGHLIGHTS:

- Tesla Powerwall is designed and configured to shift time of use and offset peak loads only. It is not designed or suitable to run without grid-connected power (ex. off-grid applications).
- Rolls S48-6650LFP ESS & Schneider XW+ Pro combination offers the best solution for customers seeking a scalable whole home backup power with instantaneous transfer time, generator input for emergency recharge, DC coupling compatibility for solar charging & serviceability.
- Nearly the same AC peak power of two (2) Tesla Powerwall units (14000W) can be supplied with a single Schneider XW+ Pro and Rolls LFP S48-6650LFP ESS (12000W)
- DC coupled architecture will be less expensive to install, more efficient and have better system-level monitoring.
- Cost of Tesla Backup Gateway is unknown.
- Powerwall uses NMC (Nickel Manganese Cobalt) cells. Rolls LFP ESS models use lithium iron phosphate (LiFePO<sub>4</sub>) cells which are more tolerant to full charge conditions and performs comparably better when kept at high voltage for a prolonged period.
- Rolls LFP (LiFePO<sub>4</sub>) cells do not generate heat or require ventilation or cooling and do not pose the same risk of thermal runaway characteristic of lithium cobalt-based batteries.
- Powerwall supply and availability is known to be irregular as Tesla's priority has been vehicle sales. Sourcing supply on schedule is often a challenge.
- Powerwalls are not field serviceable and require a 100% up-time internet connection to maintain their warranty.