

2010 Tesla Roadster



100% electric vehicle

- 244 miles per charge
- 3.5 hours for a full recharge (or more; depends on source)
- It costs about \$5 for a full charge
- 6831 laptop battery cells (most laptops have about 6 of them)
- Cells are isolated in case one fails. About 53 kWh at 375V
- 3-phase, 4-pole AC inductive motor with regeneration
- The motor weighs 115 pounds. 248hp, 276lb-ft torque
- Single-speed transmission
- Rear-wheel drive
- Top speed is limited to 120mph
- 0-60 in 3.9 seconds, 1/4 mile in 12.9. Sport model is faster
- HVAC is for cabin AND batteries
- American-made (in California)
- Extruded aluminum monocoque chassis; carbon-fiber body
- 2723 pounds; 992 of that is lithium-ion battery
- Wheel-to-wheel energy efficiency is 120mpge; 2x that of a Prius
- This example uses carbon-free energy sources!