

# AntHaeion

## 10<sup>th</sup> Generation Vehicle Facts

- **Project Timeline:** Students designed and built the car in two years from fall 2008 to summer 2010
- **Project Budget:** \$250,000 raised by team members (including value of cash/product donations)
- **Street Legal:** DOT certified as "special" vehicle for daytime use with chase car
- **Vehicle Weight:** 480lb car + 176lb driver = 656lb
- **Solar Array:** 510 cells \$22.50ea, 97ft<sup>2</sup>, 20.5% efficient SunPower A-300 monocrystalline Si, 1.45kW
- **Batteries:** 525 Samsung ICR18650-26C Li-Ion batteries, 54lb, 5kWh peak capacity, \$0.55 to charge
- **Motor:** Single 10HP peak NGM SCM150 3-phase AC synchronous in hub motor
- **Speed:** 70+mph top speed, 42mph exclusively on solar, 45-55mph typical highway race speed
- **Driving Range:** All day long if sunny, up to 140 miles at 40mph without solar
- **Body Material:** Prepreg carbon fiber composite with Nomex honeycomb core
- **Frame:** Recycled 6061 thin walled aluminum tubular space frame
- **Suspension:** 3 wheel vehicle, double wishbone (front), trailing arm (rear), inboard mounted shocks
- **Tires:** 19" diameter high pressure Bridgestone Ecopia EP80 slick tires
- **Brakes:** Regenerative brake (rear), cable actuated disk brakes (front), parking brake
- **Honors:** PrISUM is the only team that has raced in all ten cross country American Solar Challenges
- **ASC 10:** 11<sup>th</sup> Place in 2010 American Solar Challenge from Tulsa, OK to Chicago, IL
- **FSGP 11:** 4<sup>th</sup> Place in 2011 Formula Sun Grand Prix Track Race at the Indianapolis Motor Speedway



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