

World Solar Challenge 2011

The Dutch Nuon Solar Team – winner of four of the last five Challenges – is now chasing its fifth title in the gruelling, 3,000km bi-annual race across Australia

Crash absorbent canopy

NUNA 6

Length: 4.44m

Height: 1.8m

Weight: 145kg

Entry hatch

Solar cells: 1,690 monocrystalline silicon cells cover 6 m² surface. Sunlight converted to electrical current

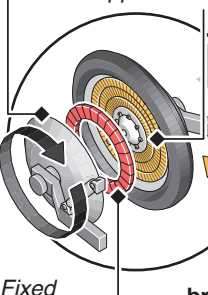
Body: Carbon fibre with braced ribs, self-supporting construction

Direct-drive electric wheel hub motor

Current through copper coils generates magnetic field around armature, causing it to rotate in relation to fixed magnets

Armature

Copper coils

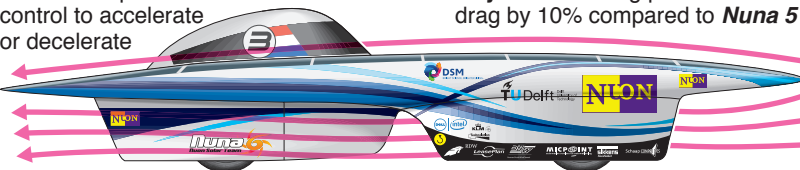


Fixed magnets

Regenerative braking: Provides additional power for motor

Driver: Adaptive cruise control to accelerate or decelerate

Aerodynamics: Wing profile reduces drag by 10% compared to *Nuna 5*



AUSTRALIA

START

Darwin

Oct 16

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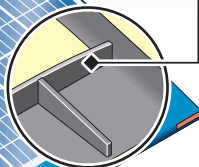
Alice Springs

Port Augusta

FINISH

Adelaide

Oct 23



Electricity
Directed to motor controller or stored in batteries

Battery
Lithium-ion cells with 5kWh capacity, weight 21kg

Low-resistance profile Michelin tyres