

LAMPO³ (PURE BATTERY EV): SPECIFICATIONS

Unique features

Purpose design chassis:

- 1) For the first time a pure electric **2+2 coupé** features a chassis specifically built around the electric components, unlike most OEMs' EV-chassis, which are adapted from internal combustion versions. LAMPO3 is the worldwide first pure electric sports car being a 2+2 seater and providing enough luggage space.
- 2) The light weight chassis carries **actively cooled batteries**, optimally positioned **in the central tunnel** to improve drive dynamics, safety and payload.
- 3) **Three motors** - of which two on the rear axle and one on the front axle - allow an improved dynamic behaviour of the car and an optimized torque vectoring, not only between front and rear axles, but also between the two rear wheels (the motors actively drive on different adapted RPMs for instance in curves, where the inner wheel turns slower than the outer wheel).

Four wheel drive with active torque vectoring: thanks to the 3 electric motors it is possible to control the torque of each rear wheel separately.

Charging: LAMPO³ is equipped with the new BRUSA on-board charger NLG6 allowing up to a 22kW of charging power. This means that LAMPO³ can be charged with every kind of power actually on the market: from a standard single-phase 10 A plug, up to a three-phase 32A for charging at industrial plugs (fleet users). Moreover LAMPO³ has an interface for DC fast charging based on CHAdeMO standard

External charging status LED

Integrated charging cable

Performances and consumption

Max. speed (km/h): approx. 220

Acceleration (sec., 0-100 km/h): approx. 4.5

WtW emissions (g CO₂): 0

Max shaft torque (Nm): 900 (from 0 to 4'500 rpm)

Max torque on the wheels (Nm): 900 x 6.4 = 5'760

Max power (kW): 420 (570 HP)

Range (km): 180

Cost of energy (CHF/100km): approx 2.40

Motorization

Electric vehicle (3 electric motors and Li-ion batteries), fixed ratio gearbox (1/6.4)

Electric motors

Type: Brusa HSM1-10.17.12 hybrid synchronous with transaxle gearbox, powered by a Brusa DMC534 inverter

Quantity: 3, one on front axle, two on rear axle

Max Power (kW): 420

Max shaft torque (Nm): 900 (from 0 to 4'500 rpm)

Cooling: water

Batteries

Type: Brusa EVB2 Li battery packs based on prismatic Kokam SLPB cells (Li-ion with polymeric electrolyte)

Quantity: 4

Total rated energy (kWh): 32

Full charge (EU domestic plug) (h): 12

Capacity 0.5C (Ah): 80

Nominal voltage (V): 400

Max continuous discharge current (A): 200

Max peak discharge current (A): 400

Max charging current (A): 80

Number of cells: 216

Weight (kg): 360

Cooling: water

Estimated life time @ 80% DOD (cycles/km): >800 / >160'000

Battery chargers (on board)

Type: Brusa NLG6

Quantity: 1

Power (kW): 22

Cooling: water

DC/DC converter for the on board devices

Type: Brusa BSC624-12V

Vehicle structure

Tubular steel chassis, composite material body

Dimension & weight

Seats: 2 + 2

Length (mm): 4'687

Width (mm): 1'998

Height (mm): 1'307

Wheelbase (mm): 3'000

Weight (empty, kg): 1'700

Tires: 245/40 R18 front, 295/35 R18 rear

Safety equipment

Airbag

Rigid occupant safety cell

Front and rear crash zones

Side impact door beams

Seatbelt pretensioners

Integrated headrests

Vehicle theft-deterrent

Voltage Insulation System

Emergency stop button

Interior equipment

Driving style settings

Sport steering wheel

Electric heating

Central locking system

Electric brake button on steering wheel

Boost button on steering wheels

Exterior equipment

Aerodynamic flat floor

Targa roof

Aerodynamic shaped back wheels cover

LED tail lights

Price

Single prototype, not for sale

Remote photovoltaic plant

Type: photovoltaic laminate by United Solar Ovonic, amorphous silicon cells

Surface (m²): 260

Rated power (kW): 16

Energy production per year (kWh/year): 16'800

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