

STREETDRONE® ONE



STREETDRONE

OPEN, ACCESSIBLE, SELF-DRIVING



STREETDRONE ONE



Building and testing driverless technology is complex, time-consuming and expensive.

StreetDrone ONE is an affordable, accessible rolling R&D platform for any developer looking to build on the NVIDIA® Drive PX2 solution stack.

Perfect for education, for self-driving tech companies and for testing facilities, the StreetDrone ONE is helping to redefine the speed at which the world gets to full autonomy.

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StreetDrone ONE is an all electric car and provides the self-driving hardware to tackle a wide variety of testing and development challenges.

Customisable depending on your individual requirements, the vehicle comes with drive-by-wire capability via CAN bus controls, the development version of NVIDIA®'s Drive PX 2 Hardware, 8 HD cameras, 4G connectivity, and 4TB of on-board storage.

StreetDrone ONE allows you to focus on your exact interest in the self-driving sphere, without the complications, time and money associated with building your own test rig.





THE COMPLETE ROLLING DRIVE PX2 PLATFORM

The StreetDrone ONE is the centerpiece of self-driving technology development and all StreetDrone ONE customers have access to NVIDIA®'s extensive Driveworks software package and support from both StreetDrone and NVIDIA® technical teams.



ROBUST DRIVE-BY-WIRE

StreetDrone ONE has full drive-by-wire capability, controlled by our StreetDrone XCU unit, with open access to the vehicle for control of throttle, braking, steering and ancillaries. We build functional safety as a priority into all levels of the StreetDrone ONE set-up, from the tyres up. StreetDrone ensures no single point of failure with “fail-stop” design and multiple levels of operational redundancy.

At any point the safety driver can regain full control of the vehicle via 7 independent inputs, including touching the brake pedal, applying a torque to the steering wheel or simply hitting the big red stop button. The dashboard also features an “arm and engage” mode selection system.

STREETDRONE SENSOR SUITE

Data is key in AV learning and development, and StreetDrone ONE connects a set of 8 GMSL cameras to 4TB of onboard storage.

We can supply optional state-of-the-art sensors including RADAR and LiDAR installed and set-up by our expert engineers.

Whether you choose one of our recommended set-ups, or want to bring your own sensors, StreetDrone ONE can accommodate, with custom-designed brackets close to convenient cabling.

We've also thought about the data itself, so StreetDrone ONE supports a powerful data logger expandable from 4TB, with optional 4G and Bluetooth connectivity for on-the-road connectivity.



BODYWORK

StreetDrone ONE has been designed with custom bodywork to make testing and development as easy as possible.

The bodywork has a number of bespoke openings in which to create bespoke 3D printed mountings for a multitude of sensor options. A flat area on the roof ensures robust and minimum-vibration fixing of LiDAR and 360 degree cameras.

StreetDrone ONE offers an easy-access instrumentation area at the rear of the vehicle, weatherproof seals and ancillary 12V supply to ensure that you get the maximum output from each and every testing application.





VEHICLE ARCHITECTURE

StreetDrone ONE is supported by Renault as part of the Twizy POM (Platform Open Mind) program. The Twizy is a versatile, lightweight foundation platform which provides simple reliable modular base on which to build an innovative test platform.

Key Statistics- Vehicle

Max Power	13kW / 17HP
Max Torque	57Nm
Max Speed	80kph
Range*	56km
Number of seats	2

Key Statistics - Battery

Battery Type	Lithium ion
Capacity	6.1 kWh
Charge time 0-100%	3.5 Hours
Slow charge	10A
Standard plug type	3 pin plug





PREMIUM SUPPORT

All of our customers are supported through their relationship with StreetDrone. Our Premium Support package includes:

- A named member of the StreetDrone support team and remote support via phone and email with up to a 4 hour SLA for Priority 1 issues
- Remote training and technical consulting
- Access to the StreetDrone Hub support system and documentation
- Software / firmware updates when available
- Battery lease costs where applicable

TECHNICAL SPECS

The StreetDrone ONE is currently in development and as such we expect some features to change. Whilst we have made every effort to provide accurate information, prices and technical specification may be subject to some alteration prior to product launch

Category	Feature	Description
Platform	Drive-by-Wire	✓
	CAN bus interface	✓
	Control of vehicle ancillaries (lights, indicators)	✓
	Auxiliary Power	Additional 12V system
Autonomous Ready	AV Platform	NVIDIA® DRIVE PX 2
	AV Software	NVIDIA® DriveWorks
Functional Safety	Emergency Stop Button	✓
	GPS Bounding	Optional
	Remote Kill Switch	Optional
Data	On-board storage	Samsung EVO 4TB
	4G, Bluetooth Connectivity	Optional
Bodywork	Front, roof, side and rear sensor mounting points	✓
	Spacious and accessible	✓
	Flat roof mounting area for LiDAR and GPS	✓
	Flexible wiring options	✓
	Personalised Vehicle Wrapping	Optional


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Category	Feature	Description
Sensors	GPS	PCAN
	IMU	PCAN
	Wheel Speed Sensors	✓
	Steering Angle Sensors	✓
	Power Performance Diagnostics	✓
	Actuator Monitoring	✓
	LiDAR	Various Optional LiDAR available
	RADAR	Optional Continental ARS510
	Cameras	2 x GMSL FOV 60 2MP, 6 x GMSL FOV 120 2MP
	360 Camera	Optional Samsung Gear 360




FIND OUT MORE

 www.StreetDrone.com

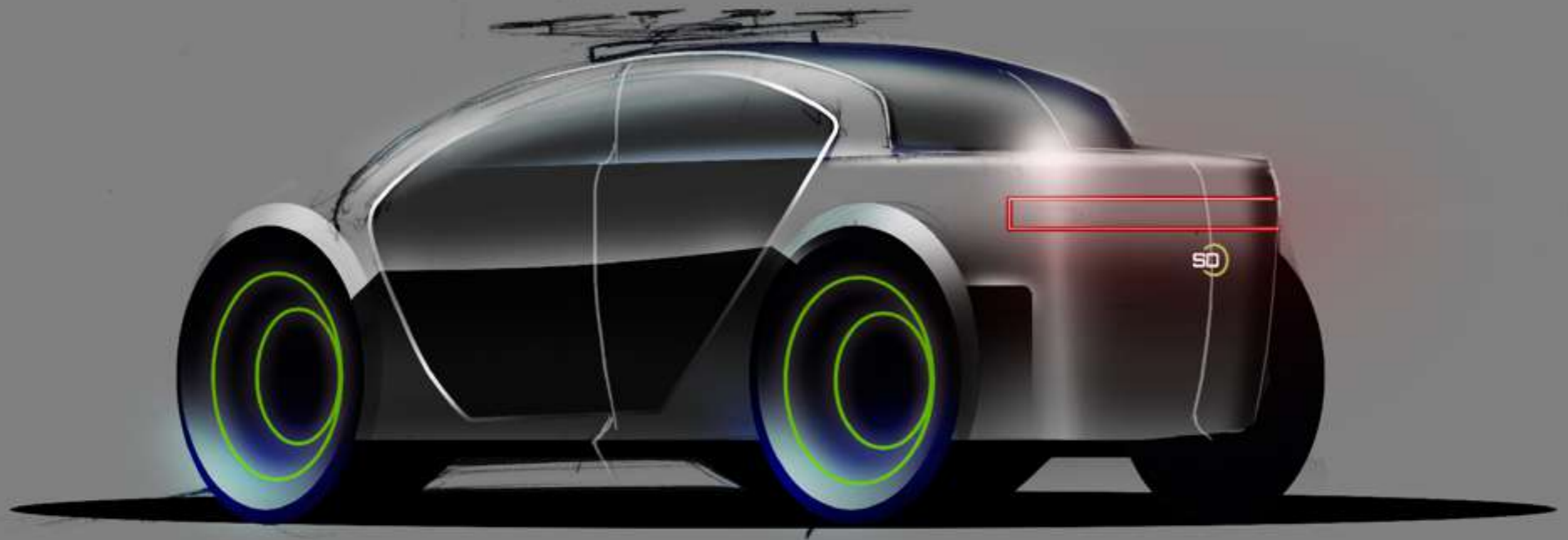
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