



For immediate release

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SIM-Drive Corporation

## **SIM-Drive produced the first on-board-direct-drive electric vehicle**

### **— Citroën DS3 Electrum—**

JAPAN--SIM-Drive Corporation (head office: Kawasaki City; president: Hiroshi Shimizu), which aims to make use of electric vehicles widespread through its high technological capabilities and new open-source business model, recently completed “DS3 Electrum” (Picture1, Table 1). “DS3 Electrum” was the world premiered in the Paris Motor Show 2012.

SIM-Drive developed “DS3 Electrum”, which based on the commercial car, as an “on-board direct-drive” electric vehicle. The purpose is to confirm the efficiency and high versatility of the direct drive motor made by SIM-Drive.

“On-board-direct-drive” (Figure 1) is a method through the drive shaft by mounting one by one to the left and right drive wheels direct drive type motor. Without using a reduction gear between the motor and the wheel, we made it possible to drive by driving high efficiency. Since the motor is housed in the hood, can be realized without changing the existing structure of the suspension has become possible. As a result, the application of this technology is also available in the type of electric vehicle conversions. “DS3 Electrum” equip with all features as electric vehicles, using only the front hood space and fuel tank space without touching interior and trunk space at all.

We do not intend sales of “DS3 Electrum” at the moment.

Main features of “DS3 Electrum” are

1. Achievement of 351 km of range per charge
2. Motor and battery layout without sacrificing the cabin space
3. Achieve a conversion while maintaining the original features, such as safety equipment

Moreover, the following characteristics of DS3 Electrum are also worthy of special mention:

1. Achievement of 154km of range per charge with 17.5kw lithium ion battery
2. Achievement of conversion only an increase of 95kg
3. 0–100 km/h acceleration in 9.8 seconds



Picture 1

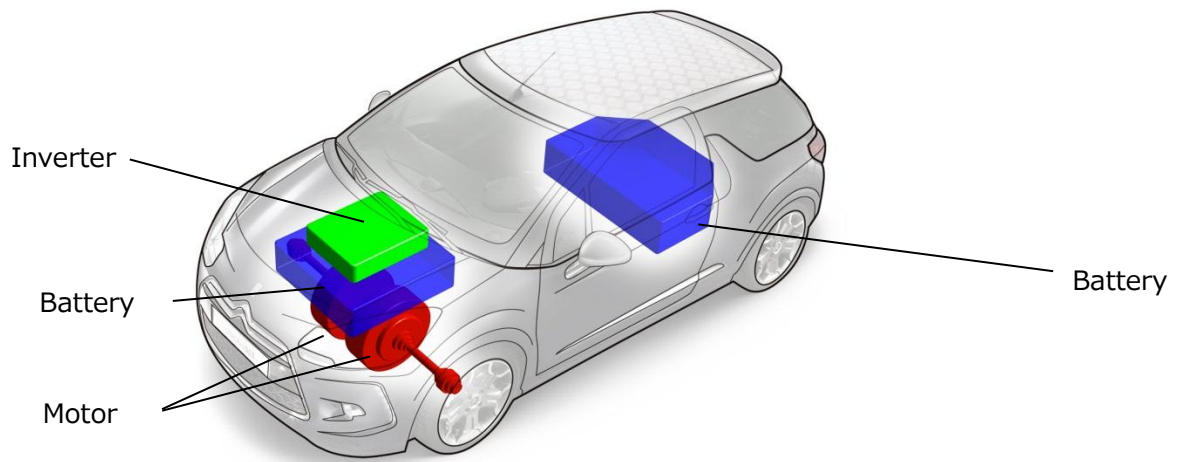


Figure 1

Overall Length/Width/Height	3,965mm/1,715mm/1,455mm
Vehicle Weight	1,285kg (original 1,190kg)
Number of seat	5 people
Drive System	PM type Synchronous 3-Phase electric motor
Drive	2 motor, front wheel drive
Range per charge (JC08 mode)	154km
Driving energy consumption (JC08 mode)	113.6Wh/km
Maximum output	65kW(88ps) (per one motor)
Maximum torque	680Nm/0~900rpm (per one motor)
0→100km/h acceleration	9.8 seconds
Battery capacity	17.5kWh (Lithium ion battery)

Table 1. Spec of DS3 Electrum (SIM-Drive Concept)

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