

The Peugeot ION: Virtual Reality

At the Paris Motor Show, the boundary between fantasy and reality disappears. The show offers manufacturers an ideal opportunity to present their idea of the car of the future and to submit it to the approval of the public.

Automobiles Peugeot has chosen this unique showcase to display the ION. The bold new styling may surprise the onlooker at first, but the design is not excessively futuristic.

Designed solely for city use, the ION offers a range of specially adapted solutions to satisfy the requirements of urban customers.

The solutions adopted for the ION, which is a trial vehicle, point the way to the future.

The electric solution

Peugeot's presentation of a vehicle designed and built around an electric engine is a step forward in the industrial and commercial strategy pursued by the PSA Peugeot Citroën Group with respect to urban vehicles.

For the past few years, the Group has been shaping new solutions to protect the urban environment, notably through efforts to develop electric vehicles. This is currently one of the main areas of research.

In many ways, electric cars are the same as conventional vehicles. They are "real" cars, easy to drive, and guaranteeing a surefooted, comfortable and pleasurable drive. Moreover the quiet, pollution-free power offered by electric engines is a huge advantage for urban driving. The electric car is fully automated and, with the increased use of electronics, it is becoming the smart car *par excellence*.

City slicker

Designed for city driving, the ION respects the environment while also being comfortable and user-friendly.

The ION is a compact car, just 3.23 m in length with a monospace body, short bonnet and rounded shaping. The overall dimensions are optimized in relation to the size of the four-seater passenger compartment.

Overhang is reduced to the extreme, while the corner location of the wheels provides excellent handling.

For driving in heavy traffic, the lighting and signalling functions are located in the most visible and least exposed areas of the vehicle. The ellipsoidal headlamps are installed at

the base of the windscreen while, at the back, the indicators and third brake light are at the top of the rear window.

The lower part of the vehicle has built-in side strips to absorb minor knocks, as well as large bumpers at the front and back. These bumpers are equipped with a sensor and a buzzer to warn the driver when he gets too close to another vehicle during parking manoeuvres.

A coat of special ductile paint, of the same pearlescent yellow as the bodywork, provides extra protection against minor bumps and scratches on the lower part of the bodywork.

The vehicle exudes a highly reassuring air of robustness.

Easy access

To help passengers get in and out of the car simply and easily when there is little room available, the ION's doors are fitted with a highly innovative control mechanism.

The hinge pin is tilted so the upper part of the door opens far faster than the doors on a conventional vehicle.

Fans of the unexpected will admire the design of the doors, which have no manual controls. You simply press the sensitive area of the rear wing. Thus the door can thus be opened with the elbow or hip even when the user is laden with parcels.

The sensitive area is outlined when the plip button is pressed.

Manual controls are also absent on the hatch, which is fixed by a single central hinge. The mechanism is activated by a button on the remote control unit.

An amusing styling detail that respects tradition: the battery recharge flap is located behind the lion on the radiator grill. The ION has a range of 150 km.

All-round visibility

The large windows and specially designed translucent roof give passengers a view of the sky, something that is particularly appreciated in dense city traffic. The ION has been designed to be open to its surroundings and to offer passengers perfect visibility from all angles.

The glass roof is covered with a tinted film, which filters 80% of UV rays. It protects passengers from the sun while also providing complete privacy: they can see out but others cannot see in.

The ION has an extremely large windscreen, a rear window descending to an unusually low level and - at the side - a fixed window and conventional moveable window with highly original styling.

In view of the exceptional size of the windscreen, the single-blade wiper relies on an unusual mechanism in which the movements of two arms are combined to optimize the ratio between the size of the windscreen and the surface covered by the wiper.

A comfortable interior

The passenger compartment was designed with comfort and reliability in mind. Materials and colours work together to create an airy and pleasant atmosphere.

The original trim wrapped around the interior of the passenger compartment gives it a snug appearance and makes the occupants feel comfortable and secure. The front seats are designed to leave sufficient room for the knees of the passengers behind. The integrated head-rests are styled in the same way as the back rests. The back seat has a single long cushion and half of the squab can be folded down. With the two-part rear shelf fixed above the back rests, the configuration of one half of the back can be changed around at will. When the half-shelf is pushed, the back rest folds down: a manoeuvre that can be performed easily from the boot. When the half-shelf is pulled, the back rest returns to its original position.

The ION is equipped with child's booster seat that can be stored under the cushion of the rear seat. When the seat is in position, a plastic-coated fabric covers the upholstery to prevent the child's feet making dirty marks.

Attractive equipment

The wide range of driving and communications equipment forms an entertaining but totally practical whole.

For easy driving, the forward/reverse selector consists of a small three-position lever located close to the steering wheel. The ION has no ignition key. To unlock and start the car, the owner inserts the plip into the housing of the steering column. This action also powers the vehicle. The instrument cluster comprises two liquid crystal screens displaying a range of functions: traffic information, proximity detector and car radio. The dashboard is equipped with a removeable CD player that can also be used outside the vehicle. A hands-free cellphone using the same aerial as the radio is installed in the central console on the arm rest. The back panel comprises a housing for children's video games.

Naturally, the rearview mirrors and window lifts are electric. To further improve passenger comfort, the ION is also equipped with a pre-programmable temperature control system.

A particle filter conditions the air before it enters the passenger compartment by eliminating pollen, soot and other pollution.

PEUGEOT ION

PROPULSION	
SA 13 DC motor with independent excitation	
Maximum power	20 kW at 1,500 rpm
Motor torque	127 m.N at 1,500 rpm
BATTERY	
Nickel-cadmium	SAFT
MECHANICAL CHARACTERISTICS	
Epicyclic train gear	7.2
Max. estimated speed	105 km/h
Special Michelin Proxima tyres	155/65 R 14 T
WEIGHT	
In running order	850 kg
ONBOARD BATTERY CHARGER	
Power supply	230 V
RANGE (depending on use)	between 110 and 150 km

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