



PRODUCTS



Powered by Compressed Air

AIR Pod	600	AIR Van
AIROne AIRCity		AIR Trans Container
AIR Family		AIR Tractor
AIRMultiBus		AIR Generator



MDI licenses	3
AIRPod	4
AIROne	16
AIR City	18
AIRFamily	19
AIR Multibus	20
AIRVan	22
AIR Trans Container	23
AIRTractor	24
AIRGenerator	25

MDI Products





MDI has defined several licenses to cover its whole range of products. Some of them (Licence 1, 2, 3, 4, 5, 6, 7, and 9) are linked to the MDI production concept with their adapted turnkey factories:

License 1: AIRPod

License 2: AIROne and AIRCity

o License 3: AIR Family

License 4: AIR Van

License 5: AIRMultiBus

License 6: AIR Trans Container

License 7: AIRGenerator

License 8: Bus / Engines for trucks, buses

License 9: AIRTractor

License 10: Engines for agricultural vehicles

License 11: Marine engines

Licenses







The AirPod is the outcome of MDI's studies on pollution and urban mobility.

With its **reduced size**, an **attractive price**, totally **nil pollution** in urban use, a playful and futuristic design, the AIRPod is a turning point in the range of urban vehicles, while renewing the concept of automobile and transport. Very adapted to the cities but also designed for utility purposes, with its reduced dimensions, it can be parked perpendicular to the pavement.





The latest version of AirPod has the benefit of **a unique architecture** that has never been utilised before in an urban vehicle. After conducting intense research and trials, a base consisting of a composite sandwich of fibreglass and polyurethane has been incorporated, providing the vehicle with over 30 functionalities. Cast aluminium frame fixed to this base holds the mechanical components such as the engine, the transmission, the suspension and the wheels. This type of architecture is normally only available on the high-end sports cars using carbon fibre. However, since this functionality is already built-in through integration and has also facilitated drastic reduction of mass, MDI has opted for fibreglass instead of carbon fibre; thus making such innovative technology available to all the other manufacturers of MDI vehicles.



AIR Pod









Very agile, the AirPod can turn on itself, as its turning radius is only 1,9 m









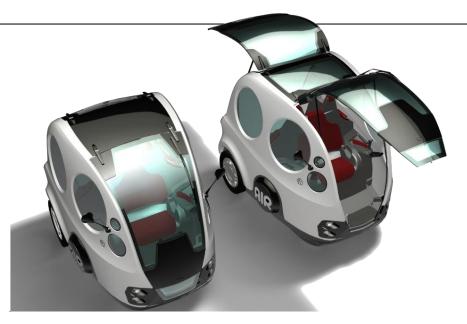






Two modes of filling the Compressed Air are available on the vehicle. A total of the Air tank can be achieved within 2 minutes on an Air station or within 3h30 to 4 hours on an electric plug. The electrical connector is concealed behind the 'AIR' Logo plate on the left flank and the connection to the Air Supply (from an 'Air Station') is concealed behind the 'AIR' Logo plate on the right.











The doors are located in the front and on the back of the AirPod. The access to the rear seats is really easy. Three people can take place in the standard version. In the process of developing such a vehicle of optimum performance, Elegance and Refinements have not been sacrificed but enhanced to such a level that the incorporated amenities can only be compared with more expensive cars.

Even in the interior, the moulding joints, sealing surfaces and matting surfaces have been smoothed out to such an extent that they have been rendered invisible. In the 'cabin' the choice of neutral and dark colours compliments the trim in perfect harmony.

The ergonomics of the cockpit have been designed to utilise the space gained by reduction of mass and has been re-distributed to give more headroom giving an overall feeling of spaciousness.

The platform has been lowered to facilitate getting on and off the vehicle with total ease, and, the front seat has been inclined further to increase the comfort of the driver.













Adhering to the theme of 'A Place for Everything and Everything in its Place', several separate compartments have been incorporated on board for maps, magazines and other knickknacks. There is even a refrigerated compartment to keep drinks at the right temperature!

In the AirPod, the driver controls the steering with a Joystick. The handling is very intuitive safe, accurate and comfortable.

The AirPod has been designed in seven versions adapted to various markets.







The standard version is intended to the transport of persons, with four seats (3 adults and a child) and space for the luggage. The AirPod standard is dedicated to multiple purposes, both in the private- and public sectors. Airports, railway stations and municipalities also need cheap, non-polluting vehicles with a great mobility.

AIRPod STANDARD

Number of seats	3
Length	2.13 m
Width	1.59 m
Weight	275 kg
Power	7 kW
Range in urban cycle	120-150 km
Charging time on air station	2 min
Charging time on electric plug	3h30 – 4h
Top speed	80 km/h
Price incl. of tax	6 000 - 7 000 €







The Cargo versions, with one or two seats and more than a cubic meter load capacity (Mini Cargo), and almost 3 M3 for the MaxiCargo, greatly facilitate deliveries in cities. Intended to couriers, parcel services as well as to craftsmen and communities, the AIRPod Cargo introduces the zero pollution into institutions. Post offices, industrial handling and neighbourhood deliveries are favourite markets for the AIRPod Cargo. Caterers, butchers, fishmongers can benefit from a refrigerator version of the AirPod Maxi Cargo.

AIRPod MINI CARGO

Number of seats	1
Length	2.13 m
Width	1.59 m
Weight	260 kg
Boot volume	1 m ³
Pay load	250 kg
Power	7 kW
Range in urban cycle	120-150 km
Charging time on air station	2 min
Charging time on electric plug	3h30 – 4h
Top speed	80 km/h
Price incl. of tax	5 500 - 6 500 €





The Baby versions, even shorter and easier to handle, offer two front seats and a vast boot of more than 500 litres. This is far more than most of the classic tourers. It is the ideal car for private individuals who want to "drive clean" and in a practical way; to go to their jobs, to do shopping, to drive in town and in the suburbs at a lower cost. Two versions: 45 (4kW, 45 km/h, no driving license needed) and GT (7 kW).

AIRPod BABY - 45 & GT

Number of seats	2
Length	1.95 m
Width	1.59 m
Weight	260 kg
Boot volume	500 dm ³
Pay load	250 kg
Power	4 - 7 kW
Range in urban cycle	120-150 km
Charging time on air station	2 min
Charging time on electric plug	3h30 – 4h
Top speed	45 - 80 km/h
Price incl. of tax	6 000 - 8 000 €





MaxiCargo version offers all the advantages as the Cargo one with more volume and payload.

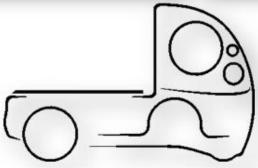
AIRPod MAXI CARGO

Number of seats	1
Length	2.70 m
Width	1.59 m
Weight	290 kg
Boot volume	3.5 m ³
Pay load	300 kg
Power	7 kW
Range in urban cycle	100-150 km
Charging time on air station	2 min
Charging time on electric plug	3h30 – 4h
Top speed	80 km/h
Price incl. of tax	7 500 - 8 500 €









Based on the MaxiCargo version and on the extended Baby version, the AirPod Pickup will offer two front seats and a load surface of 1.3 x1.4 metres. It is mainly dedicated to the urban utility.

AIRPod PICK UP

Number of seats	1
Length	2.70 m
Width	1.59 m
Weight	290 kg
Boot volume	3.5 m ³
Pay load	300 kg
Power	7 kW
Range in urban cycle	100-150 km
Charging time on air station	2 min
Charging time on electric plug	3h30 – 4h
Top speed	80 km/h
Price incl. of tax	7 500 - 8 500 €







AirPod Golf is an economic version of the AirPod Standard. It will have two main uses: as a golf car or as a low speed vehicle. Based on the design of the AirPod with a simplified body, the AirPod golf has 3 to 4 seats and the same external dimensions. AirPod Golf cars, version that will satisfy not only the golfers, but that will be used for the transport of persons in closed sites, such as airports, railway stations and other public places.

AIR Pod GOLF

Number of seats	3 – 4
Length	2.13 m
Width	1.59 m
Weight	240 kg
Power	4 kW
Range in urban cycle	120-150 km
Charging time on air station	2 min
Charging time on electric plug	3h30 – 4h
Top speed	45 km/h
Price incl. of tax	5 500 − 6 500 €





AIROne

Sort of «Mehari» of the modern ages, the AirOne is a simple and light car, easy to service. Ideal at the country side, it also finds a place in cities. Within the framework of the emergence of markets in countries that have a strong growth, the need for a low-cost car appeared as an evidence. AirOne is a rustic and light car, easy to service. Ideal at the country side, it also finds a place in cities. It will be equipped with dual energy engines mode 2 and/or 3.











AIROne

Number of seats	3-5
Length	3.4 m
Width	1.65 m
Weight	400kg
Power	15 kW
Range in urban cycle	100-120 km (360 km dual energy engine)
Charging time on air station	2 min
Charging time on electric plug	3 - 4h
Top speed	98 km/h
Price incl. of tax	4 000 − 6 000 €







AirCity is a 3.30 m long urban car with 3 or 5 seats. It will be equipped with dual energy engines mode 2 and/or mode 3. It can thus travel on long distances.



AIRCity

Number of seats	3 – 5
Length	3.4 m
Width	1.62 m
Weight	600 kg
Boot volume	>500 dm ³
Range in urban cycle	100-120 km (360 km dual energy engine)
Charging time on air station	2 min
Charging time on electric plug	4h
Top speed	130 km/h
Price incl. of tax	7 800 – 9 500 €





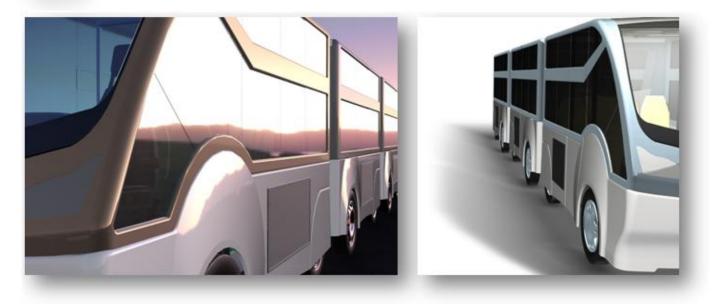
It will come in numerous versions, thanks to a modular concept that allows producing multiple models using an identical body-molding base: pick-up — monospace — multi volume saloon — station wagon — small van — taxi...



AIR Family

Number of seats	3-6
Length	4.10 m
Width	1.80 m
Weight	800 kg
Boot volume	1000 dm ³
Range in urban cycle	150 km (mode 2: 500km mode 3: >1000km)
Charging time on air station	2-4 min
Charging time on electric plug	6h
Top speed	130 km/h
Price incl. of tax	13 000 - 16 000 €



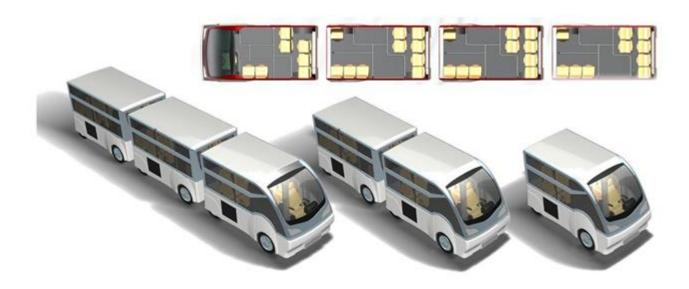


AirMultiBus is constituted of several modules including a pilot module and one or several transport modules. Every module is self-driven by an MDI engine and equipped with its own tanks of compressed air and its own steering system.

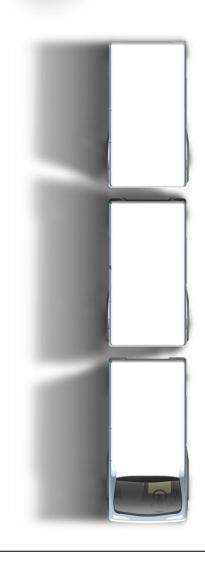
AirMultibus is:

- A minibus (pilot module)
- A 9 metres bus (pilot module + 1 transport module)
- A 13.5 metres bus (pilot module + 2 transport modules)
- An 18 metres bus (pilot module + 3 transport modules)

AIR Malti Bas







Respect to a normal bus, the AirMultibus is:

Without emissions in town

Three times lighter

10 times less consumer of energy

10 times cheaper to use

2.5 times cheaper to buy

Rate of occupancy 64% on one day (vs. 28% for a normal bus)

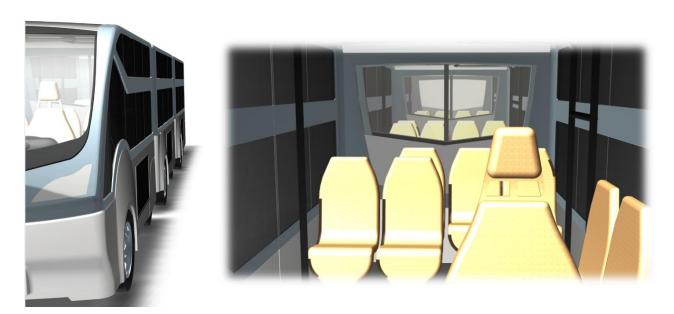
Modular

Agile

Free for the municipalities (the actual daily cost of fuel of a normal bus corresponds to the leasing + the energy of the AirMultibus)

Free for the end user (ticket paid by advertising on AirMultibus)

AIR MultiBus







Based on the same technology as others vehicle, MDI has integrated in its range of products a delivery Van.

AIR Van

Number of seats	3
Length	4.60 m
Width	1.90 m
Weight	800 kg
Range in urban cycle	150 - 200 km (Mode 3: >1000km)
Power	60 kW
Top speed	110 km/h
Price incl. of tax	18 000 - 27 000 €







AirTranscontainer: used to transport 2500 kg of garbage into a container.

It can replace the Ampliroll having huge costs and energetic advantages (10 times less expensive to use).

AIR Trans Container

Number of seats	2
Length	7.50 m
Width	2.50 m
Weight	1700 kg
Range in urban cycle	100 - 130 km (Mode 3: >1000km)
Power	60 kW
Top speed	80 km/h
Price incl. of tax	35 000 - 40 000 €





A range of tow tractors and forklift tractors is part of the MDI licensed products. A prototype tractor capable to pull 5 tons was produced and tested. The development of these types of products will be scheduled as opportunities arise.

AIR Tractor





This document does not constitute a contractual obligation. MDI reserves the right to modify without prior notice. MDI - MOTOR DEVELOPMENT INTERNATIONAL 17, Rue des Bains L – 1212 Luxembourg – www.mdi.lu - – mdint@pt.lu

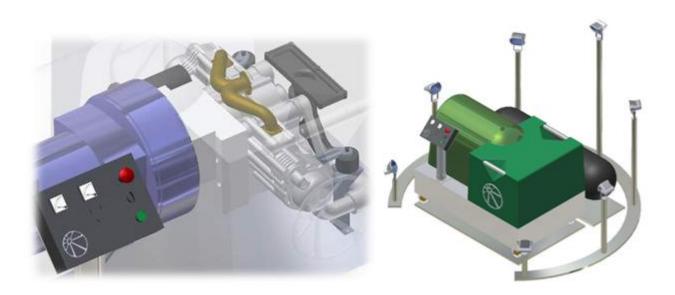




The MDI technology is applicable to a wide range of **Generator** powered by compressed air or dual energy engines. Various kinds of generator can be implemented:

- Emergency Air generator
- Production Air generator
- Renewable Air generator
- Solar Air generator

AIRGenerator

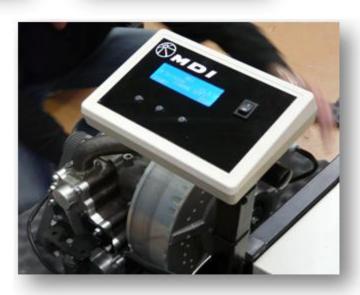




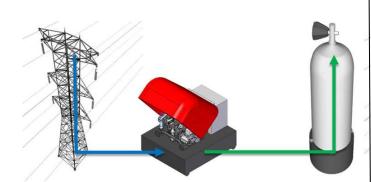




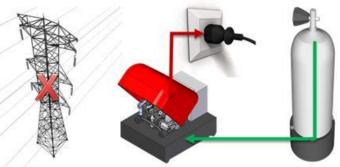
The standby power generating unit has been conceived to take over without interruption, in the event of a break down in the electric power supply. The operation is fully automatic and maintenance needed has been reduced to a very low level. It does not require any filling operation as it is automatic. There is no need to recharge its battery. As the exhaust produces cold, the generator replaces the AC function while producing electricity. Applications: Telecom, hospitals, houses, buildings etc...



EMERGENCY AIR Generator

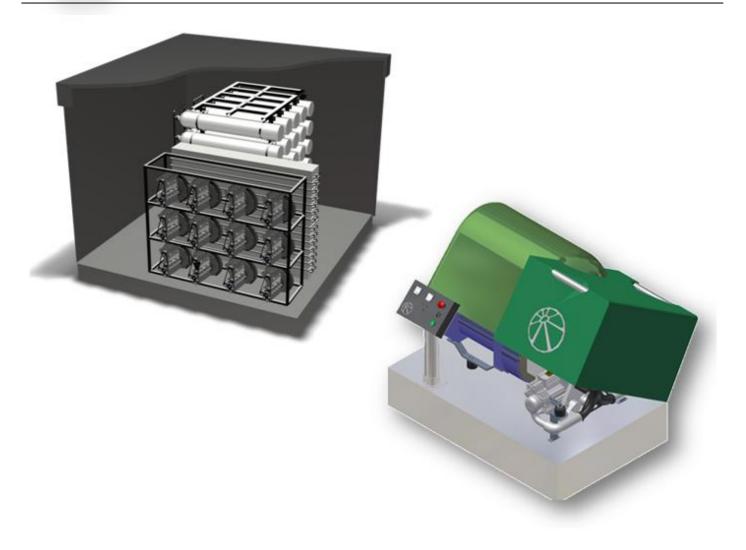


When electricity is supplied by the national network, the motoalternator unit drives the motocompressor, which fills up the tanks.



When there is a breakdown, the air stored in the tanks is expanded into the motocompressor, which starts the motoalternator to supply electricity locally. It starts immediately and can then replace UPS systems.





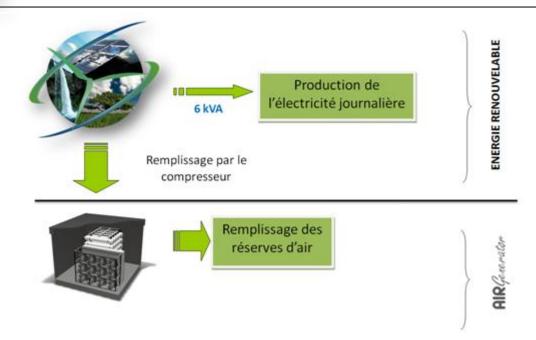
PRODUCTION AIR Generator

The **MDI production generator** uses a dual energy engine in view to deliver electricity in an autonomous way. The energy used along with the compressed air can come from fuels or gases.

When a production generator is composed of dual energy engine with an external burner, and a generator, the high efficiency of the MDI engine (up to 68%) offers low consumptions and very good results in terms of emission (the external combustion being achieved with no NOx and no HC).

MDI production generators can also be implemented with clean or renewable energy used to increase the temperature of the air before its expansion in the engine. Gazes produced by treatment of wastes, vegetables oils or other bio fuels are compatible with the MDI external burner. Solar collector can also produce the necessary heat, giving a totally clean solution for generating electricity.





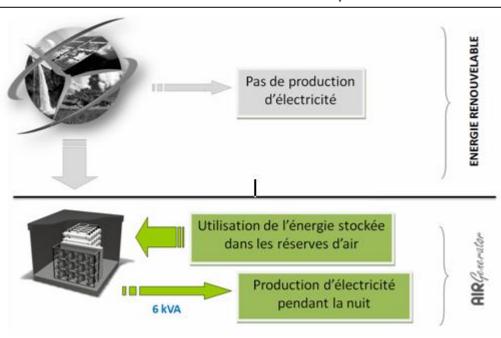
The renewable AIRGenerator is designed to produce electricity 24h/24h without being connected to the national network.

During the day the renewable energy source (solar, hydraulic, using the wind or a combination of them) is producing energy that will be used for:

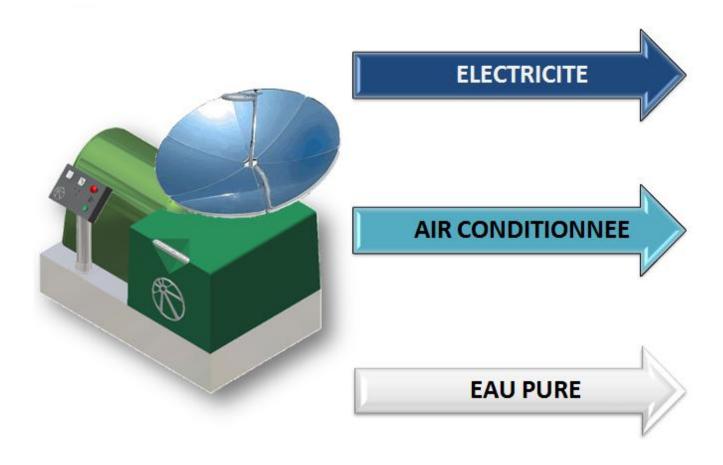
- The daily electric delivery
- The compression of the air for the MDI AIRGenerator

During the night (when renewable energy is not available), the MDI AIRGenerator will deliver the electricity.

Renewable AIRGenerator







SOLAR Generator

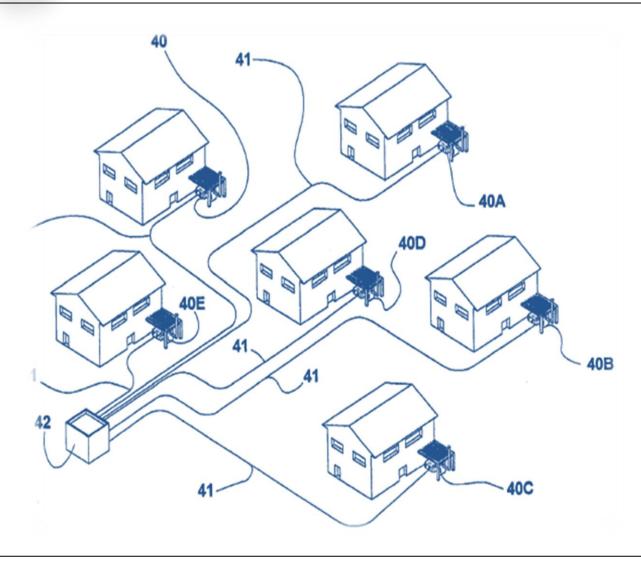
A solar collector is used to heat the air before its expansion in the MDI engine. As for the dual energy mode (with 300°C at the level of the heater), the exhaust is expulsing expanded air at a temperature below 0°C. Such a generator is then able to deliver:

- Electricity
- Air Conditioning
- Water coming from the condensation of the cold air.

This application of the MDI technology is offering tremendous possibilities in hot countries where water is rare, electric network difficult to develop and air conditioning requires energy to be implemented.

MDI Solar generator can be set as a real non polluting solution to energy delivery issues.





AIRGenerator

All MDI compressed air generators can be set as a **local network providing electric power to a group of house interconnected.**

Controlled by a central power management, this network supplies electricity to each house (from one or more Generators according to the needs).

As the local network can be set as an autonomous one, this solution is ideal for areas where the connection to the national electric network is not easy and needs expensive infrastructures.

