

Piaggio MP3 Hybrid – Technical Specifications

Internal combustion engine capacity	124 cc (bore x stroke - 57 x 48.6 mm)
Thermodynamic cycle	Otto cycle – 4 stroke
Valve gear	Single overhead cam, four valves
Cooling system	Liquid
Ignition system	Inductive discharge digital electronic ignition
Hybrid powertrain power	11 kW (15 CV) at 8,500 rpm
Hybrid powertrain torque	16 Nm at 3,000 rpm
Electric motor	Synchronous brushless permanent magnet motor
Power supply voltage	Three-phase alternating current
Electric motor control	Digitally controlled inverter
Electric motor cooling system	Air
Electric motor power	2.6 kW (3.5 CV)
Electric motor torque	15 Nm
Drive modes	4 modes: 2 hybrid, 2 electric (including reverse)
Battery charge modes	During braking and deceleration on the move, and from the mains (battery charger integrated in on-board electronics)
Traction batteries	Lithium ion batteries
Transmission	Variator with centrifugal and torque control
Engine control system	Ride-by-Wire with closed loop fuel injection system
Exhaust	Catalytic converter
Chassis	Double cradle in high strength tubular steel
Front suspension	Articulated quadrilateral consisting of four aluminium arms sustaining two steering tubes, and pull rod suspension geometry with offset wheel axle
Rear suspension	Two dual action hydraulic shock absorbers with adjustable spring preload
Front brake	Two 240 mm Ø stainless steel discs and floating calliper with two 30 mm Ø pistons
Rear brake	240 mm Ø stainless steel disc and calliper with horizontally opposed 30 mm Ø pistons
Front wheel rim	Die-cast aluminium alloy 12" x 3.00
Rear wheel rim	Die-cast aluminium alloy 14" x 3.75
Front tyre	Tubeless 120/70-12"
Rear tyre	Tubeless 140/60-14"
Length/Width	2,140 mm / 760 mm
Wheelbase	1,490 mm
Seat height	780 mm
Fuel tank capacity	12 litres (including 1.8 litre reserve)
Consumption (2/3 of cycle in hybrid mode – 1/3 in electric mode)	60 km/l
CO ₂ emissions (2/3 of cycle in hybrid mode – 1/3 in electric mode)	40 g/Km
Emissions compliance	Euro3