



2012 DUCATI HYPERMOTARD

The hype continues

The 2012 Hypermotard family continues to shape the sector it created, innovatively bridging the gap between refined sportbikes and minimalist supermotards with the accessible Hypermotard 796, the exciting Hypermotard 1100^{EVO} and the extreme, track-ready and stylish new entry of the Hypermotard 1100^{EVO} SP Corse Edition.

The Hypermotard prototype was an instant success when first shown and soon became a top seller when its production started in 2007. Since then, its unique design has excited riders around the world and praise for this thrilling and versatile bike has never stopped – and neither has its evolution. Today, the range remains as Hyper as ever from the user-friendly 796 to the new 1100^{EVO} SP Corse Edition.

Both the 796 and 1100^{EVO} are offered in Ducati red with matching beak section, red frame and black wheels, while the 796 extends the options further with matte black or matte white with matte black beak, black frame and black wheels. The Hypermotard 1100^{EVO} SP Corse Edition is proudly dressed in the full Ducati Corse official colours, appropriate with its track-ready character.

HYPERMOTARD FAMILY FEATURES

Lightweight Trellis frame

The quick and precise handling that the Hypermotard provides is down to the construction and geometry of its famous Trellis frame. Its ability to handle the abundant torque from the L-Twin engine and its rigidity under powerful Brembo braking are just a few reasons why Ducati's chassis department would never want to change it.

Light and powerful engines

The engine department went back to the drawing board for the 796 and started with a clean sheet of paper. Their complete redesign of the crankcases rewarded them with an incredible weight saving and the 796 crankshaft, with 848-style flywheel, reduced weight even further to become a very credible package.

The 1100 air-cooled Desmodue Evoluzione engine truly was an 'evolution' – both in power and weight – and is responsible for the model name extension 1100 EVO. Engineers used the same Vacural® technology employed for the lightweight Superbike engines when they vacuum die-cast the Hypermotard 1100 crankcases, a process that achieves a significant weight saving and ensures consistent wall thickness and increased strength. This process and a lightweight crankshaft assembly reduced the 1100's engine weight by a staggering amount and combined with a boost to 95hp delivers impressive results.

Compact and efficient, the Desmodue engine's hyper-lightweight and narrow L-Twin layout, no wider than a single cylinder, ensures that all Hypermotards remain lean and agile. The air-cooled design eliminates the need for water radiators, hoses, reservoirs and pumps, keeping the motorcycle's weight down to a minimum and its lines clean and race-like.



Desmo

The incredible valve performances of the Desmodue engine are only possible because of Ducati's unique Desmodromic system, where valve closure is activated mechanically. At high rpm it would be almost impossible for the valve to follow the steep closure profile of the cam lobe if it were relying upon a normal valve spring. With the Desmo system, the valve is closed mechanically with the same accuracy as it is opened, enabling steep cam profiles and radical cam timings. This system is used on every single Ducati power unit including their world-beating Superbike and Desmosedici MotoGP engines.

Hyper mirrors

Ducati pushed motorcycle design limits to find an innovative solution for the original Hypermotard mirrors and these are used throughout the family. The challenge of maintaining a clean, racing look around the handlebar area motivated the design of the folding mirror concept which is based on the handguards typically found on off-road bikes. Flipped out for high visibility street mode and easily folded in for a quick change to 'Hypermotard', the mirror handguard assemblies also integrate the LED directional indicators for an even cleaner front-end.

Controls and instrumentation

The slim-line switch bodies house easy-to-use switches and buttons, and feature a unique weapons-like 'trigger catch' that slides down to cover the starter button when the kill-switch is activated. Their minimalist design fits perfectly in the clean and essential lines of the Hypermotard's sporting image.

Looking clean and purposeful, the display provides an extensive amount of data including speed, revs, time, oil temperature, battery voltage, A & B trips, fuel reserve trip and scheduled maintenance, while the warning lights illuminate for neutral, turn signals, high-beam, rev-limit, oil pressure and fuel reserve. In addition, it can list recorded lap times by using the high-beam flash button as a stopwatch. Both the 1100^{EVO} and 1100^{EVO} SP Corse Edition use a white back-lighting while the 796 uses an orange back-lighting.

The instrument display also doubles as a control panel for the activation of the Ducati Data Analyser (DDA) system, which is available as an accessory from Ducati Performance for the 'system-ready' Hypermotard 796 and 1100^{EVO} and supplied as standard equipment on the 1100^{EVO} SP Corse Edition. The DDA-intended USB connection port under all of the Hypermotard seats doubles as a charging point for a handy battery charger, which is available as an accessory from Ducati Performance.

Lighting and indicators

The headlamp uses a highly compact lighting shape which blends with the single piece nose fairing and front fender moulding, while the rear light employs a specially designed strip of LEDs enhanced by a high diffusion lens shaped into the sleek lines of the tailpiece. The same LEDs are intensified under braking. The front directional indicators also employ the latest in LED technology for illumination, and are ingeniously integrated into the handguards which support the foldable rear view mirrors.



Tailpiece

The high intensity LED rear light assembly is moulded into a unique tailpiece positioned high behind the seat. The supporting structure has been designed so that the under tray of the tailpiece is formed perfectly to offer a sturdy pair of pillion grab-handles. This ingenious solution not only helps to merge the rear light into the Hypermotard styling but also provides a safe grip for the passenger.

Footpegs

Rider footpegs on all of the Hypermotard models have removable rubber inserts to expose the serrated metal edge and increase boot grip on the peg during extreme riding. The 1100^{EVO} and 1100^{EVO} SP Corse Edition provide a further minimalist and no-compromise feature by having removable passenger footpegs. This attention to detail enables a clean 'monoposto' look when on the track, while allowing a fast and easy change to 'biposto' for the street.

DUCATI HYPERMOTARD 796

The easiest way to go Hyper

Just as aggressively striking as the 1100^{EVO}, the Hypermotard 796 features a lower seat height and a smooth and flexible engine to make it the perfect urban assault vehicle. Whether it's working the daily commute or attacking the open roads, the 796 rides the common ground between manners and madness by mixing Ducati's unrivalled twin-cylinder power and sportbike heredity with the lightweight and minimalist supermotard concept.

Urban upstart

The Hypermotard's rigidly triangulated and lighter-than-ever Trellis frame and track-tested chassis geometry is still stylised by a distinct high fender at the front and dual under-seat silencers at the rear, but the 796's overall profile says it all: Go Hyper!

At 825mm (32.5in), the seat height of the 796 is a sure-footed 20mm (0.8in) lower than the 1100^{EVO} and, when combined with the engine's smooth power delivery, this Hypermotard inspires confidence however and wherever its ridden. The upright seating position offers a commanding view of the road ahead, while the wide handlebars make the bike effortlessly flickable through the urban maze.



Extreme image, accessible character

The 796 has a dry weight of just 167kg (368lb), partly achieved by a lightweight engine, but also by continued chassis development that included fork clamps, and radial fork bottoms. An improved frame layout eliminated almost all of the forged elements used on the original Hypermotard. The lightweight is agile and easy to handle, while 17" wheels are produced in lightweight aluminium to keep the unsprung weight low and handling, braking and acceleration performances high. The 796 uses exactly the same 3.50 front and 5.50 rear rim sizes and Pirelli Diablo Rosso tyres as its 1100^{EVO} big brother.

Suspension duties up front are taken care of by a pair of very capable 43mm Marzocchi forks, while the rear is managed by a Sachs suspension unit featuring adjustable spring pre-load and return damping, allowing adjustments for riding style or load. The rear operates through a similar progressive link to the 1100^{EVO} and uses the signature Hypermotard single-sided swingarm.

Twin 305mm semi-floating discs gripped by radially mounted 4-piston Brembo callipers provide powerful and progressive front-end braking with that all-important rider-friendly 'feeling', while the rear is equipped with a 245mm disc and 2-piston calliper, also by Brembo.

796 performance

The 796 Desmodue power unit promises to deliver an exhilarating ride with the same smooth tractability found in Ducati's other L-Twin engines. The 66mm stroke crankshaft uses a lightweight 848-type flywheel, to maximise power to an impressive 81hp (59.6kW) @ 8000rpm and torque to 55.7lb-ft (75.5Nm) @ 6250rpm. To protect power delivery and maintain optimum efficiency, an oil cooler similar to the 1100^{EVO} is used, adding even more family resemblance to its bigger brother.

Breathing through an enlarged airbox intake duct and fed through 45mm throttle bodies, the 803cc swept volume is compressed to a ratio of 11:1 before being injected and ignited with Siemens controlled electronics. The 2-1-2 catalytic exhaust system uses an efficient pre-silencer configuration with twin lambda probes providing finer fuel mapping and Euro3 conformity. The system's lightweight and compact design is achieved by using 1mm thick tubing and terminates in Ducati's trademark twin under-seat, black exhaust mufflers, stylishly contrasted with great looking aluminium end caps.

An APTC 'wet' clutch gives a 'slipper' type action that prevents destabilizing of the rear-end under aggressive down-shifting and also gives the extra benefit of a super-light feel at the lever, a great benefit in stop-start city traffic or during longer journeys. The 21-plate oil-bath clutch (11 friction and 10 steel) represents a power-enhancing weight reduction over the 'dry' system as well as having a quieter operation and requiring less maintenance. The clutch and alternator outer casings of the engine are finished in an 1100-style carbon grey.

The Hypermotard 796 engine combines all recent advances in Ducati's ongoing design, manufacture and production quality campaigns to offer competitive service intervals of 7,500 miles (12,000 kilometres).



796 controls

While its motard feeling is enhanced by wide, tubular handlebars and handguards, the 796's minimalist image is further characterised with integral construction Brembo master cylinders for both the clutch and brake systems. They maintain a clean handlebar arrangement for the rider and are fitted with user-friendly 4-point adjustable levers that provide easy-to-reach control for all hand sizes. Furthermore, the APTC clutch provides a super-light lever action ideal for use in the city.

796 colours

The 796 comes in an urban-style Dark finish with matte black tank and beak section, black frame and black wheels or, alternatively, matte white tank with contrasting matte black beak, black frame and black wheels. For the purists, an 1100 look-alike red tank with matching beak section, red frame and black wheels keeps the 796 in traditional livery.

DUCATI HYPERMOTARD 1100^{EVO}

Hypermotard evolution

The 1100^{EVO} further enhanced the original Hypermotard concept of 'ruling the road' by achieving a super-light dry weight of 172kg (379lb) and an impressive 95hp to become the 'evolution' of the Hypermotard.

Continued chassis development to the Hypermotard resulted in an improved frame layout which eliminated almost all of the heavier forged elements used on the original model. The rigidly triangulated Trellis frame and track-tested chassis geometry is matched by a state-of-the-art suspension. 50mm Marzocchi forks are gripped by a sturdy triple screw lower fork clamp for precise steering performance. These forks work as impressively as they look, with special high rigidity stainless steel sliders and external adjustability for compression and rebound damping, plus spring pre-load. The rear suspension performs with equal precision by using a fully adjustable ZF Sachs shock mounted to a robust single-sided swingarm.

Lightweight wheels mounted on large diameter axles are fitted with Pirelli Diablo Rosso tyres. Stopping power is controlled by two radially mounted Brembo 4-piston callipers gripping lightweight 305mm twin discs up front, and a 245mm disc at the rear. All of this combines to make stopping as thrilling as accelerating.



The Desmodue 1100 Evoluzione engine

The lightweight, L-Twin stands at the pinnacle of more than three decades of Desmo air-cooled development and its torquey power delivery has excited riders worldwide. The Evoluzione version is positively awesome and makes it the perfect engine to give its name to the Hypermotard 1100^{EVO}.

The 1100cc Desmodue Evoluzione power unit uses a bore and stroke of 98 x 71.5mm, and its long list of refinements boosted its power to 95hp (69.9kW) @ 7500rpm with 76lb-ft (10.5kgm) of torque @ 5750rpm giving it outstanding power delivery, from grunting low rpms to the singing howl at redline.

The 1100's crankcases are vacuum cast using the same Vacural® technology employed for the lightweight Superbike engines, a process that achieves significant weight saving and ensures consistent wall thickness and increased strength.

But the crankcases were just the starting point of the evolution. Apart from the magnesium alternator cover, the 1100 has a lighter crankshaft assembly by using an 848-style Superbike flywheel and the search for further weight reduction even went as far as using lightweight rare-earth magnets for the generator assembly. The result reduced the original 1100 power unit's weight by a staggering 5.2kg (11.5lb) and contributed towards making the Hypermotard 1100^{EVO} even more agile.

Power gains came not only from the new lightweight crankshaft assembly, but also from an evolution of the top-end of the Desmodue power unit. The cylinder head, not only improved lubrication and cooling performance, but also used a redesigned inlet port shape for optimum flow and a modified combustion chamber shape for improved burn efficiency. This improved efficiency is the result of a higher compression ratio and the change to a single spark per cylinder ignition managed by high-speed Siemens electronics. Ensuring a sufficient feed to the higher compression set-up is a high-flow airbox intake duct and high-lift valves for maximum volumetric efficiency.

In keeping with its extreme character, Ducati continue to use the 'dry' racing-style clutch for the Hypermotard 1100^{EVO}, the popular preference of thousands of Ducatisti the world over. The clutch and alternator covers are finished in carbon grey for the 1100^{EVO} and in gold for the 1100^{EVO} SP Corse Edition.

An impressively efficient oil cooler protects the increased power output of the Hypermotard 1100^{EVO}, whether ridden on the open roads or through stop-start urban traffic. Conforming to Euro3 regulations, the 2-1-2 exhaust system is monitored by twin lambda probes to ensure the most efficient fuel injection under all conditions. The exhaust terminates with twin under-seat mufflers.

Having more experience with twin-cylinder high performance engines than any other manufacturer, the air-cooled L-Twin remains central to Ducati's philosophy of motorcycling. This experience - plus constant investment in quality by design, advanced materials and engineering techniques - has enabled 7,500 miles (12,000 kilometres) between service intervals, making Ducati ownership even more enjoyable than ever.



DUCATI HYPERMOTARD 1100^{EVO} SP Corse Edition

Hyper thrill, Corse style

The Hypermotard 1100^{EVO} SP Corse Edition takes the whole Hypermotard concept to a higher level of extreme in style. High ground clearance, high spec suspension, high bars and less weight makes the 1100^{EVO} SP Corse Edition track-ready for action and dressed for the part in full Ducati Corse official colours.

When Ducati first launched the Hypermotard project they knew that there would be extreme riders out there who wanted more – they just didn't realise there would be so many! With a racing heritage built on direct rider feed-back Ducati's reputation for listening to owners to improve their motorcycles has become legendary and the Hypermotard 1100^{EVO} SP Corse Edition is no exception.

Extreme riders all wanted the same thing from the Hypermotard: More power, more ground clearance, more control in extreme situations, more detail and less weight. Ducati's engineers ticked all the boxes.

SP suspension

Long, black-bodied, fully adjustable 50mm Marzocchi forks have 30mm (1.2in) more travel than the 1100^{EVO} and increase the SP's ground clearance by 30mm (1.2in), extending the SP's extreme cornering performance and providing a more track-oriented set-up. Coated with a durable low friction, DLC (diamond-like carbon) black coating, the sliders enable the Hypermotard 'SP' to respond effortlessly to every minute variation in the tarmac, improving on its already impressive road holding. The advanced 'SP' suspension is further enhanced with an Öhlins remote reservoir rear shock, renowned in racing as the ultimate performance choice. This incredible shock is fully adjustable for compression and rebound damping as well as spring pre-load, ensuring that the 'SP' is readily adaptable to every riding style and road or track it challenges.

SP brakes

With a bike as extreme as the Hypermotard 1100^{EVO} SP Corse Edition, superior stopping power is fundamental, so world-class braking performance is assured by using the same Brembo Monobloc callipers as on Ducati's top Superbikes. Machined from a single piece of alloy, the callipers achieve a higher rigidity and resistance to distortion during extreme braking, which not only delivers incredible braking power, but also provides an enhanced and precise 'feel' at the brake lever. The twin Monobloc callipers, each with four 34mm pistons gripping 305mm discs, guarantee spectacular braking performance.

SP lightweight wheels by Marchesini

Extreme riders know that one of the best ways to improve the handling and performance of a motorcycle is to reduce its unsprung weight by upgrading to superior lightweight wheels. Even from a distance, the 5-spoke black Marchesini wheels with red pin-striping confirm the high performance of the Hypermotard 1100^{EVO} SP Corse Edition. Created from forged then machined alloy, both front and rear wheels are significantly lighter and create a lower moment of inertia and unsprung weight, resulting in improved acceleration and braking as well as quicker steering. Mounted to the lightweight wheels are Z-rated Pirelli Diablo Supercorsa SP tyres. Designed to deliver racing performance on the road, they give great feedback, are stable under severe braking and feature a sure-footed 'feel' when braking or accelerating is applied at considerable lean angles.



SP extras

The Hypermotard 1100^{EVO} SP Corse Edition has serrated footpegs for increased boot grip during extreme conditions and a Teflon slider under each peg for protection in extreme lean angles. Ducati include a rubber insert with the bike for riders who prefer to cover the serration for increased comfort.

To enhance control, the tapered alloy handlebars have a 20mm longer bar-riser than the 1100^{EVO} which effectively changes the riding positioning to enable greater leverage under extreme riding conditions. The risers are finished in black along with the new Marzocchi forks, upper and lower fork clamps, footpeg carriers and pedals, exhaust guard, rear subframe and rear sprocket carrier.

A carbon fibre rear hugger is fitted as standard equipment, enhancing the SP's already extreme image and also providing protection for the Öhlins rear suspension unit. The advanced composite is also used for the fork protectors, timing belt covers, front fender rear section and tail side covers.

Hyper data

Supplied as standard equipment on the 1100^{EVO} SP Corse Edition, the Ducati Data Analyser (DDA), which includes PC software, a USB-ready data retrieval card and instructions, enables owners to review and analyse the performance of the bike and its rider, and make comparisons between various channels of information.

The system records numerous channels of data including throttle opening, vehicle speed, engine rpm, engine temperature, distance travelled, laps and lap times. It also automatically calculates engine rpm and vehicle speed data, enabling it to display gear selection as an additional channel of information. At the end of a ride or track session, up to 4mb of data can be downloaded ready to compare, analyse and get an inside view of the performance of both the rider and the Hypermotard.

SP Corse Edition colours

The Hypermotard 1100^{EVO} SP Corse Edition is proudly finished in Ducati Corse's official colours of red, white and black further underlining its competition intention.

The brand new scheme has a red Trellis frame with black wheels and the Ducati Corse logo proudly displayed on the Hypermotard's beak section.