

# PANIGALE V4





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# The Evolution of Speed

The Panigale V4 2022 represents the last step in the characteristic path of the Borgo Panigale sports bikes and it takes life from Ducati Corse long-time experience married to continuous knowledge and technology sharing from the world of racing directly to production bikes.

With the 2022 version, the Panigale V4 project completes the most significant evolution since its birth. The improvements involve all areas: aerodynamics, ergonomics, engine, chassis and electronics. The result is an even faster bike on the racetrack and at the same time more intuitive and less tiring for a wide range of riders. In short, it offers great and rewarding excitement to pro-rider and amateur alike.





## ENGINE

# Engine and gearbox optimised for the track

The heart of the bike is represented by 1,103 cm<sup>3</sup> Desmosedici Stradale MotoGP-derived, which has undergone a series of updates. The Desmosedici Stradale completes a further evolution for 2022, thanks to the introduction of some dedicated technical elements that allow an increase of power together with an instant throttle response.

The Desmosedici Stradale delivers 215.5 hp at 13,000 rpm, with a power increase of 1.5 hp compared to the previous version, which rises to 2.5 hp over the peak of maximum power at 14,500 rpm.

The engine also delivers a torque of 123.6 Nm (12.6 kgm) at 9,500 rpm, and already from 6,000 rpm it provides 80% of the maximum torque available.

A new Ride by Wire map management system with dedicated calibration for each of the six gears has been developed so as to guarantee the rider optimum thrust every time the throttle is opened.

**Silencer**

The diameter of the two silencer outlets has been increased to 38 mm (increase of the gas section by 18% compared to the silencers of the MY2021), allowing to reduce the backpressure in the exhaust and, consequently, to improve the performance of the engine.

**Oil pump**

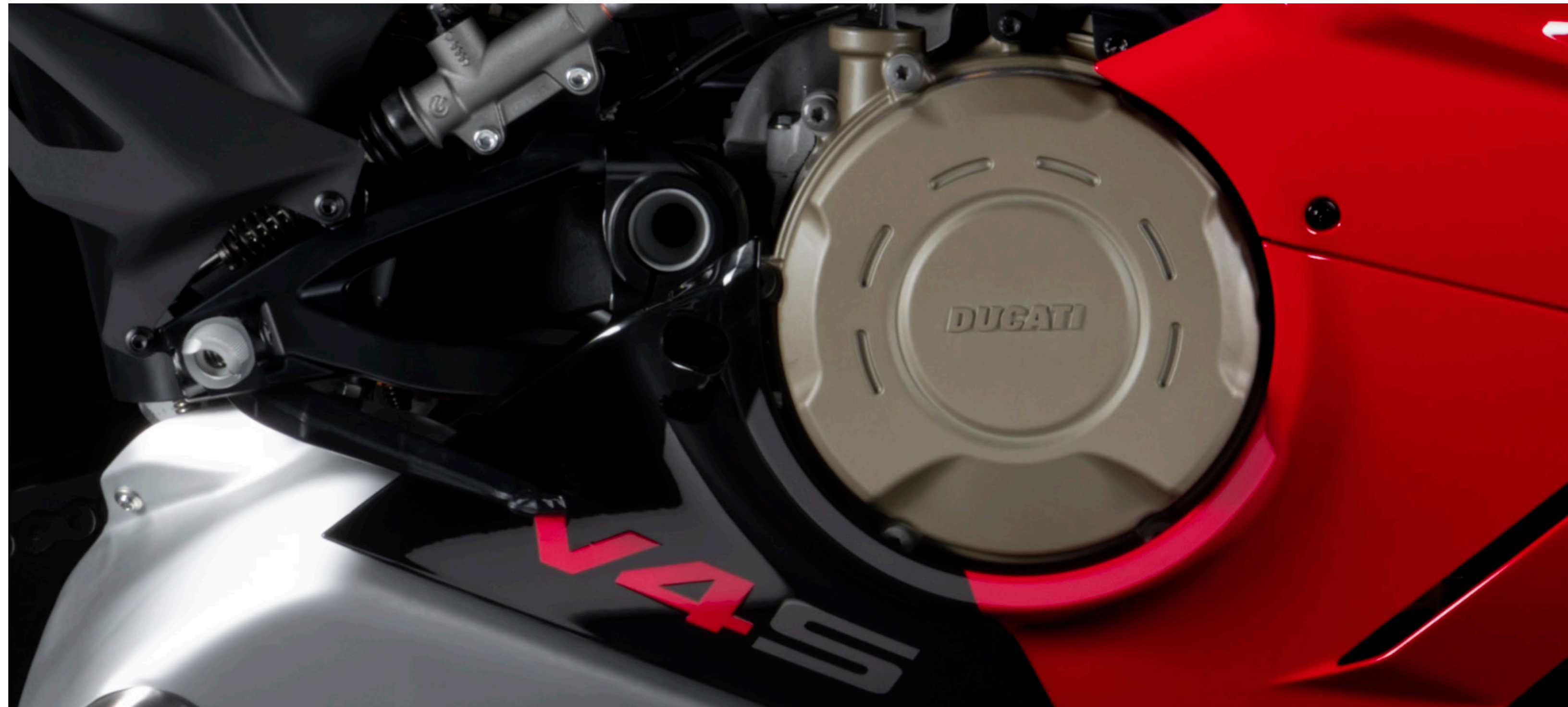
The oil pump with smaller displacement and optimisation of the calibration of the oil circuit allows to reduce power absorption.

**SBK Gear**

The new gearbox provides for a lengthening of the ratio for the first, second and sixth gears. This new SBK gear ratio is therefore more “racing-oriented”, more suitable for use on track. The first gear has been lengthened by 11.6%, while the second by 5.6%.

Thanks to this new gearbox, it is now easier to tackle the tightest corners in first gear, enjoying greater engine braking and better acceleration out of corners.

Furthermore, the smaller jump in speed between the first two ratios allows the DQS, equipped with new calibration, to work more effectively, offering better performance. Lastly, sixth gear has been lengthened by 1.8% allowing, in combination with the increase in engine power, a top speed of 5 km/h higher than the Panigale V4 2021.



## DESIGN

# Aerodynamic evolution

The 2022 Panigale V4 stands out for its new fairings, the subject of significant work in the aerodynamics field. As a result, the bike gains a brand-new look, flaunting a decidedly aggressive aesthetic.

The aerodynamic updates centre around two main aspects, namely the new winged appendages and the optimisation of air flow with a view to cooling. As with the Desmosedici GP, the new aerodynamics solutions are designed and developed virtually, before being tried and tested in the wind tunnel.



The 2022 Panigale V4 adopts a new dual-element wing configuration, with a main element and a flap, conceptually similar to that of the rear wing of an F1 car. The new wings are 40% more compact and 50% thinner than those of the previous model, despite guaranteeing the same downforce, of up to 37 kg at 300 km/h.

The aerodynamic load generated ensures stability during all riding phases and reduces the bike's tendency to wheelie. This dynamic behaviour results in quicker lap times because it reduces electronic control intervention and allows the rider to keep the throttle open for longer and brake later into the turn.



In terms of cooling, the lower semi-fairing has been redesigned to encourage heat dissipation from the oil cooler, with the addition of lateral extractors and others located lower down, in the area facing the ground. The first, designed for use in a racing configuration, increase the average speed of oil passing through the radiator by 6% and are located so as to respect the technical standards required for SBK racing.

Nothing is left to chance on the Panigale V4. Another example of this is the small air vent located to the left of the lower fairing, which helps to control the temperature of the Quickshifter sensor during extreme track use.

The new look is completed with innovative graphics designed by the Centro Stile Ducati that feature black on the fairing logos and dual-fabric seat (two-tone on the S version) and, again for the S version, a red tag on black wheels.



## CHASSIS

# Improved in every way

Even the redefinition of the Panigale V4 and Panigale V4 S 2022 chassis brings numerous important innovations. Specific technical choices are the result of experiences honed in MotoGP and SBK and are aimed at improving on-track performance. The final target is very clear: better times, achieved with less effort and with greater consistency.

The Desmosedici Stradale is a stressed element of the chassis and the admired aluminum Front Frame is directly connected to it. The chassis is completed by the lightweight magnesium front frame and the seat post made of shell cast aluminum, fixed at the top to the Front Frame and screwed below to the head of the rear bank.

The S version of the Panigale V4 adopts an Öhlins NPX 25/30 pressurised fork, which fits into the Öhlins Smart EC 2.0 event-based electronic control system. This latter currently represents the state-of-the-art for road sports bikes. It has an increased stroke of 5 mm with the respect to traditional forks (125 mm) and uses a pressurized system, with a 25 mm piston to manage the compression in the left leg and a 30 mm piston to manage the extension in the right leg.

This layout is SBK-derived and minimises the risk of oil cavitation during heavier use. The result? Better braking support and at the same time great absorption of road bumps. All this translates into a greater riding feeling, greater speed and increased ease in pushing to the limit.







Thanks to the increased travel of 5 mm, the new fork can adopt softer settings (the stiffness of the springs has increased from 10 to 9.5 N / mm) improving the ability to achieve smoother riding and better grip in critical conditions. This new fork is also able to offer an extra amount of stroke that increases the feeling in the most demanding braking sections.

The new fork, combined with the maintained Öhlins TTX36 shock absorber and with the electronic steering damper, also Öhlins, generate the Smart EC 2.0. second-generation system of the featuring OBTI (Objective Based Tuning Interface) logic. This system works "for objectives" and no more per click allows the rider a much more intuitive management than traditional systems.

On the new Panigale V4 the swingarm pivot is positioned 4 mm higher than that of the 2021 bike. This special technical choice increases the anti-squat effect, stabilising the bike in acceleration and helping the rider in all those throttle-open phases: changes of direction, out-of-corners acceleration. This new position of the pivot (which is fixed and non-adjustable) allows the biker to increase the opportunity of adjusting the suspension.

Panigale V4 standard version also features an absolutely outstanding chassis and is equipped with the 43 mm diameter fully-adjustable Showa Big Piston Fork, Sachs steering damper, fully-adjustable Sachs monoshock and cast aluminum rims with a 5-spoke design.





## ERGONOMICS

# Comfort and feeling

Ergonomics has been a core focus of in-depth development with the aim of improving the control of the bike during track sessions and to allow the rider to get the most out of the Panigale V4's performance, both on a single lap and heavy use on the track.

The main changes involve the seat and the tank, which have been redesigned. sempre un po' di margine senza arrivare al fondo corsa. Nel dettaglio, la rigidità delle molle è passata da 10 a 9,5 N/mm, migliorando così le capacità di "copiare" l'asfalto e il grip in condizioni critiche.

**Tank**

The fuel tank has a new shape that gives it more capacity (+1 litre) and offers a completely different fit area compared to the 2021 version, allowing riders of all sizes to better anchor under braking and to ride faster and longer. Thanks to the new tank shape, the rider is also better integrated into the bike and results therefore more comfortable in the best aerodynamic position. In addition, the contact area of the arms during hanging off phase is also improved.

**Saddle**

The saddle has now a flatter shape and an improved coating, which grants easier movement of the rider's body and reduces the rider's tendency to move forward when braking.

ELECTRONICS

# Electronics at the service of lap times

The Panigale V4 features a latest-generation electronics package based on a 6-axis inertial platform which instantly detects the bike's roll, yaw and pitch angles.

The electronic package includes controls that manage all the riding phases, whose operating parameters are connected by default to the 4 Riding Modes available (Race A, Race B, Sport, Street). All of the Panigale V4's functions are managed via a high resolution 5" full-TFT colour display.

The 2022 Panigale V4 boasts an updated Power Mode strategy involving four engine configurations, Full, High, Medium, and Low. Full and Low are newly developed, while the High and Medium Modes adopt a new strategy.

## Power Mode Full

The brand-new "Full" Power Mode is the most extreme ever adopted on the Panigale V4. A decidedly sports-oriented Power Mode, it allows the engine to express its full potential. In fact, every gear except first is characterised by a torque curve free from electronic filters. This Power Mode is not the default for any of the Riding Modes but can be selected by the user via the dashboard. It is recommended for use at racetracks with fast turns, long straights, and particularly high levels of grip.



**Power mode High e Medium**

The High and Medium Power Modes, paired with Riding Modes Race A, Race B and Sport, respond to the needs of both amateur and professional track riders. A new matrix-type torque management system has been developed for these Power Modes so that the engine ECU can independently control the turns gear by gear in each power mode and promptly select that which best suits the riding conditions. This makes for improved discretization of the jumps in torque when shifting, for heightened continuity and less compromise in terms of Power Mode definition..

**Power Mode Low**

The Power Mode Low has been conceived to make road riding even more enjoyable, limiting the maximum power of the bike to 150 hp and offering a particularly manageable throttle response.

The dashboard on the 2022 Panigale V4 has also undergone various modifications. The first regards the use of external LEDs, like those on the SBK bikes, to indicate a gear change, in place of the flashing rev counter, reducing response times and improve the quality of feedback provided to the rider. Ducati technicians introduce an additional Info Mode, developed keeping in mind the MotoGP riders suggestions and named "Track Evo", an option added to the existing Road and Track settings.

In the "Track Evo" screen, the tachometer moves on a horizontal scale positioned in the highest part of the instrument, which is the most visible, and the indication of the gear engaged is in the center of the screen. On the right area there are four sectors of different colours, each dedicated to an electronic control.



These sectors light up individually when the electronics are working on a certain parameter, remaining on for the time necessary for the rider to identify which indicator is activated. This signaling mode facilitates the user's task in understanding the control that has actually worked to allow him to intervene more precisely and punctually on the choice of the optimal level and to obtain better performance more quickly. The left sector completes the information with the stopwatch, the number of laps completed and the speed.

# Servicing and maintenance

## Safety as standard

Ducati's continuing commitment to design, research and development has the precise objective of guaranteeing state-of-the-art motorcycles characterised by the highest degree of active safety. It is with racing performance in mind and a view to increasing the level of control during the most difficult riding that we continue to develop systems that are always at the cutting edge.

On the Panigale V4, the ABS Cornering EVO system manages every braking phase, even with the bike leaned over, a situation in which the engine brake is controlled by Engine Brake Control EVO, which carefully regulates the braking torque. The acceleration phase is controlled by Ducati Traction Control EVO 3, Ducati Wheelie Control and Ducati Slide Control. Systems that allow for maximum performance, in total safety, aboard the most powerful production sports bike Ducati has ever built.

## More value to your passion

With Ever Red, the quality and reliability of the Ducati brand remain your inseparable travelling companions over time. Ever Red is the exclusive Ducati warranty extension programme. With its activation you can continue to feel protected for 12 or 24 months beyond the expiration of the Ducati Warranty (24 months). Ever Red includes roadside assistance for the entire coverage period and no mileage limits. In this way you can ride for all the kilometres you want, even abroad, enjoying your Ducati without any worries.

To find out if the Ever Red extension is available in your country and for further information contact your Ducati dealer or visit [ducati.com](http://ducati.com).

## Endless excitement

In designing each bike, Ducati constantly strives to ensure maximum reliability while reducing service costs. A commitment that has seen the intervals for the main Desmo Service, in which valve clearance is checked and adjusted if necessary, extended to 24,000 km (15,000 mi) for the Panigale V4. Even the simplest of checks, such as the Oil Service, are extended to 12,000 km (7,500 mi) or 12 months.

A considerable interval for such high-performance engines, which only confirms the high quality standards adopted in terms of material selection and R&D processes. Ducati continuously invests in the technical training of its dealers. The specific skills offered by the official Ducati Service network ensure that all those operations needed to keep every Ducati in perfect condition are thoroughly executed, while advanced equipment such as the Ducati Diagnosis System allows the software on each Ducati to be updated with the latest releases, ensuring that the electronics continue to perform at the maximum level.

## Always by your side

One of Ducati's main goals is to offer every Ducatista the chance to enjoy unlimited and safe travel all over the world. To achieve this aim, Ducati offers a "fast delivery" original spares service, with delivery in 24/48 hours across 85% of the areas in which it operates. With a distribution network that covers more than 96 countries, thanks to 821 (760 Sales & Service, 61 Service) official Dealers and Service Points\*, choosing a Ducati means you can travel worry free and in total freedom, wherever the road may take you, and count on support from our extensive Dealer network that ensures Ducati quality and professionalism is always close at hand.

**821** Authorised dealers and service points

**96** World countries

\*Information updated on 31/12/2022

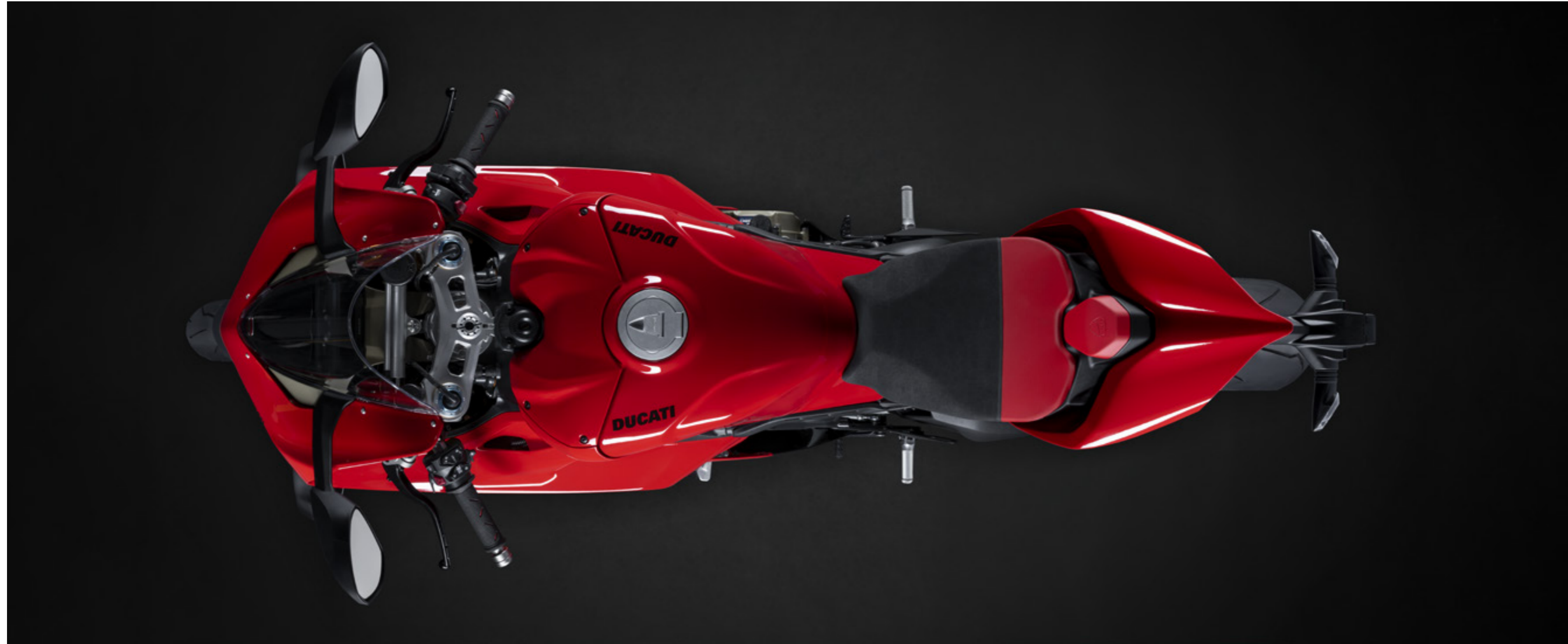


**Ever Red**  
Extended Warranty



\*Equal to 18,000 miles.



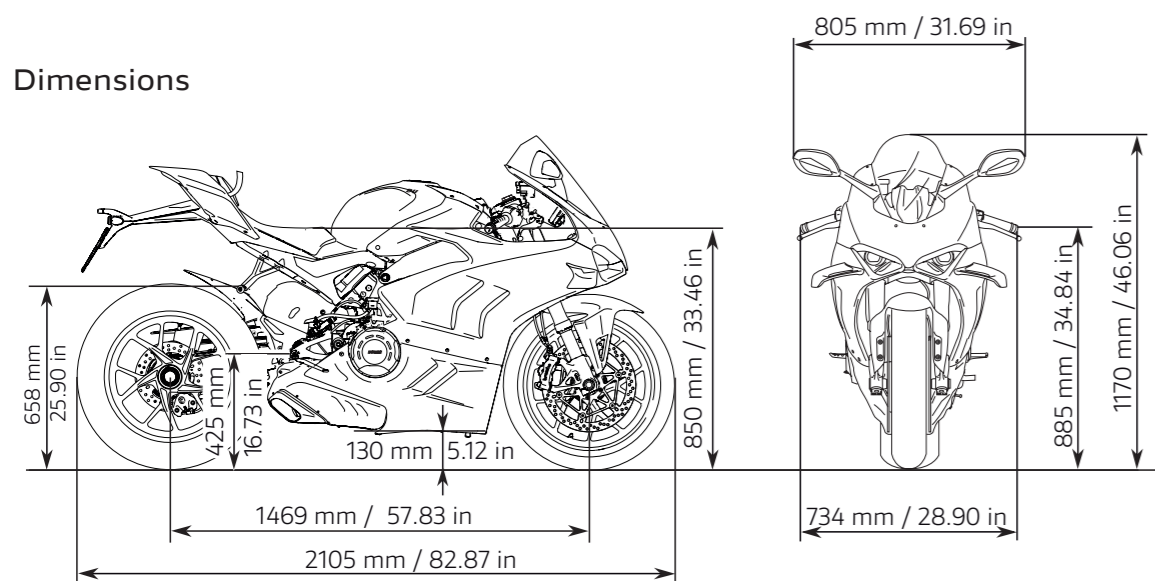


## Technical data and equipment

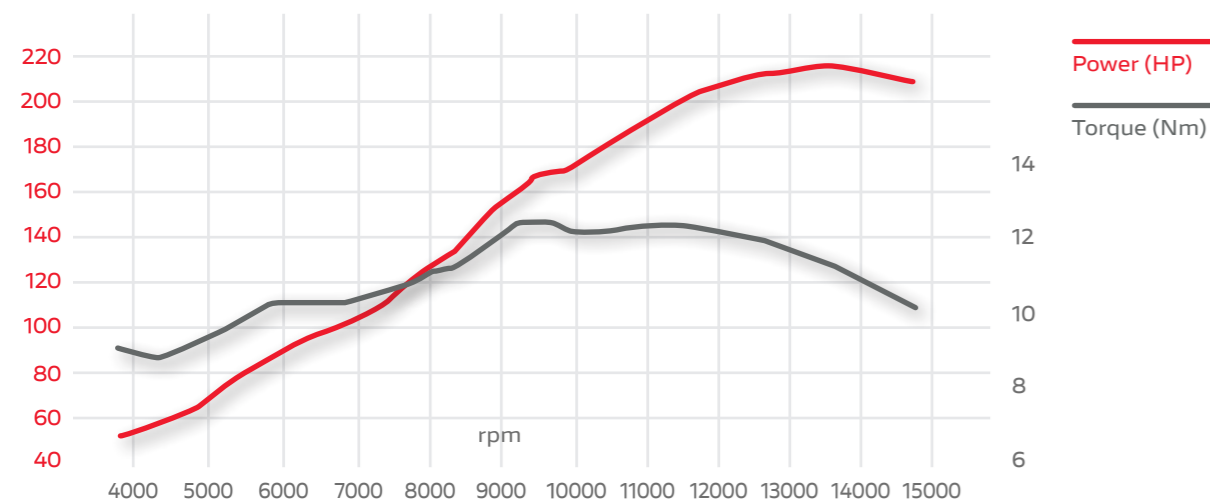


# PANIGALE V4

## Dimensions



## Power and torque



Engine	
<b>Engine</b>	Desmosedici Stradale 90° V4, counter-rotating crankshaft, 4 Desmodromic timing, 4 valves per cylinder, liquid-cooled
<b>Displacement</b>	1,103 cc
<b>Bore X stroke</b>	81 x 53.5 mm
<b>Compression ratio</b>	14.0:1
<b>Power</b>	158.5 kW (215.5 hp) @ 13,000 rpm
<b>Torque</b>	123.6 Nm (91.2 lb-ft) @ 9,500 rpm
<b>Fuel injection</b>	Electronic fuel injection system. Twin injectors per cylinder. Full ride-by-wire elliptical throttle bodies. Variable length intake system
<b>Exhaust</b>	4-2-1-2 system, with 2 catalytic converters and 4 lambda probes.
Transmission	
<b>Gearbox</b>	6-speed with Ducati Quick Shift (DQS) up/down EVO 2
<b>Primary drive</b>	Straight cut gears; ratio 1.80:1
<b>Ratios</b>	1=36/15 2=34/17 3=33/19 4=32/21 5=30/22 6=27/22
<b>Final drive</b>	Chain 525; Front sprocket 16; Rear sprocket 41
<b>Clutch</b>	Hydraulically controlled slipper and self-servo wet multiplate clutch. Self bleeding master cylinder.

Chassis	
<b>Frame</b>	Aluminum alloy "Front Frame" with optimized stiffness
<b>Front suspension</b>	Fully adjustable Showa BPF fork 43 mm chromed inner tubes
<b>Front wheel</b>	5-spoke light alloy, 3.50" x 17"
<b>Front tyre</b>	Pirelli Diablo Supercorsa SP 120/70 ZR17
<b>Rear suspension</b>	Fully adjustable Sachs unit. Aluminum single-sided swingarm
<b>Rear wheel</b>	5-spoke light alloy, 6.00" x 17"
<b>Rear tyre</b>	Pirelli Diablo Supercorsa SP 200/60 ZR17
<b>Wheel travel (front/ rear)</b>	120 mm (4.7 in) - 130 mm (5.1 in)
<b>Front brake</b>	2 x 330 mm semi-floating discs, radially mounted Brembo Monobloc Stylema® (M4.30) 4-piston callipers with Bosch Cornering ABS EVO. Self bleeding master cylinder.
<b>Rear brake</b>	245 mm disc, 2-piston calliper with Bosch Cornering ABS EVO
<b>Instrumentation</b>	Last generation digital unit with 5" TFT colour display

Dimensions and weights	
<b>Wet weight no fuel</b>	192 kg (423 lb)
<b>Seat height</b>	850 mm (33.5 in)
<b>Wheelbase</b>	1,469 mm (57,8 in)
<b>Rake</b>	24.5°
<b>Front wheel trail</b>	100 mm (3,94 in)
<b>Fuel tank capacity</b>	17 l - 4.49 gallon (US)
<b>Number of seats</b>	Dual seats
Safety equipment	
Riding Modes, Power Modes, Bosch Cornering ABS EVO, Ducati Traction Control (DTC) EVO 3, Ducati Wheelie Control (DWC) EVO, Ducati Slide Control (DSC), Engine Brake Control (EBC) EVO, Auto tyre calibration	
Standard equipment	
Ducati Power Launch (DPL), Ducati Quick Shift (DQS) up/down EVO 2, Full LED lighting with Daytime Running Light (DRL*), Sachs steering damper, Quick adjustment buttons, Auto-off indicators, Chain guard	
Additional equipment	
Passenger seat and footpegs kit	

Ready for	
Ducati Data Analyser+ (DDA+) with GPS module, Ducati Multimedia System (DMS), Anti-theft, Heated grips	
Warranty and maintenance	
<b>Warranty</b>	24 months unlimited mileage
<b>Maintenance intervals</b>	12,000 km (7,500 mi) / 12 months
<b>Valve clearance check</b>	24,000 km (15,000 mi)
Emissions and Consumption**	
<b>Standard</b>	Euro 5
<b>CO<sub>2</sub> Emissions</b>	175 g/km
<b>Consumption</b>	7,6 l/100km



\* equal to 18,000 miles.

Kilometres refer to the first Desmo Service, i.e. when the valve clearance is checked and adjusted if necessary.

The power/torque values indicated were measured on a static testing bench according to type-approval standards and match the data read during the type-approval tests as listed on the vehicle's log book. Max power @ 12,500 rpm for US market only

\*Bike specifications and equipment may vary from market to market. Please refer to your local dealer for further information

\*\*Only for countries where Euro 5 standard applies.

# PANIGALE V4 S



Panigale V4

Panigale V4 S

	Panigale V4	Panigale V4 S
Öhlins Smart EC 2.0 system	-	✓
Front suspension	43 mm Showa BPF fork	Öhlins 43 mm NPX25/30 pressurised fork
Rear suspension	Sachs shock absorber	Öhlins TTX36 shock absorber
Steering damper	Sachs	Öhlins
Racing style hand grips	-	✓
Lithium ion battery	-	✓
Wheels	In lightweight alloy	Marchesini in forged aluminium alloy



1 Öhlins 43 mm NPX25/30 pressurised fork



2 Öhlins TTX36 event based rear shock



3 Two-tone seat in technical fabric

**PANIGALE V4**



**PANIGALE V4S**



Ducati Red

# Apparel



Check out the Apparel collection dedicated to this bike

The configurator that allows you to customise your suit, in terms of graphics and on your specific physique, is available on [www.ducatisumisura.com](http://www.ducatisumisura.com)



## ACCESSORIES

# Configure the Ducati of your dreams.

Sporty and elegant, various accessories have been created to further heighten the riding pleasure.

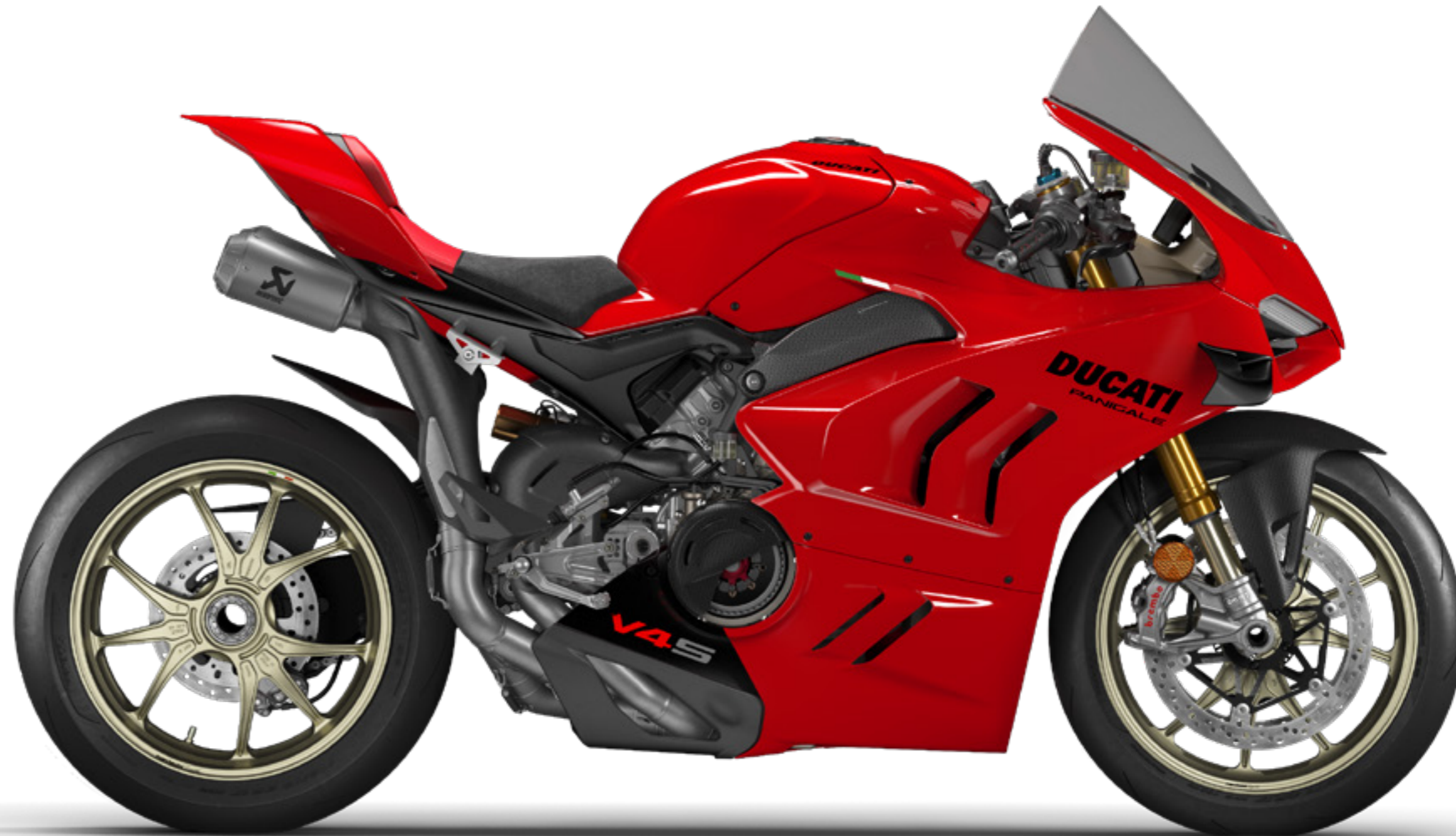
Extremely high-quality materials to ensure durability and high performance. An elegant design that perfectly marries with the lines of the bike, for an even more unmistakable style. The perfect combination of accessories for a look that is sheer adrenaline.

**Configure.** Choose the ideal Panigale V4 for you and have fun configuring it to suit your riding style! Share it with friends and send it to your Ducati dealer who will contact you for an online consultation to discuss the current offers that best suit your needs.

Save your configuration to return to it at any time.

### Calculate your payment

Ducati Financial Services offers favourable solutions for the financing of every model in the Ducati range. Personalise your financing and calculate the monthly instalments. You can then contact your dealer and discuss the best way to see your dream come true!



Go to configurator

For more information about the Ducati Performance range, tech specs and instructions, refer to a Ducati dealer or visit the Accessories section of [ducati.com](https://www.ducati.com)

# Ducati Digital Experience

A mission for every channel. Continuous updating on the innovation and passion for which our work stands out. We transform emotions into exclusive content. Just a click away.

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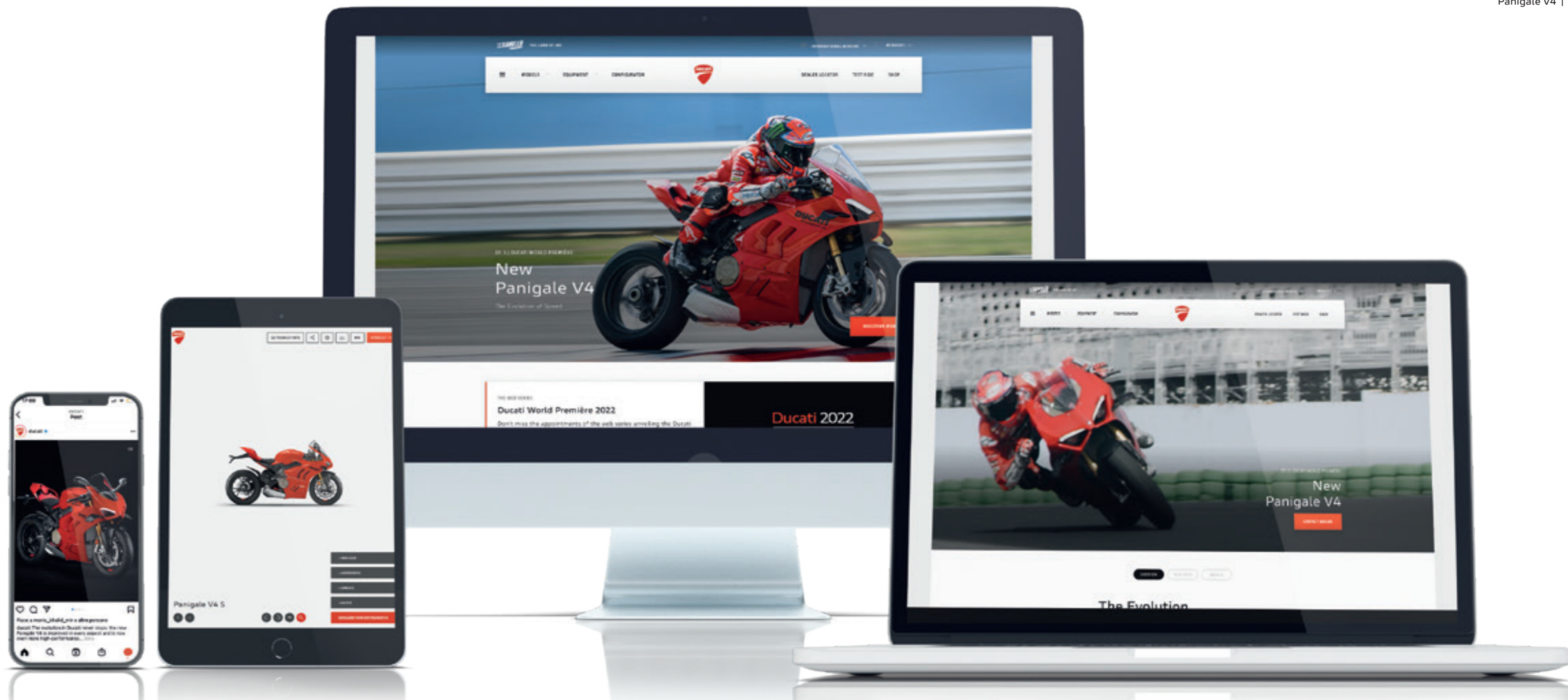
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## MyDucati App

MyDucati is the personal area for every Ducatista, offering a wide range of services accessible with a single login from both the web and the app. Explore all the features of the MyDucati world and enjoy a multi-channel, customised experience wherever you are.



Riding a motorcycle is the most exciting way to enjoy the road, and offering the utmost safety to the motorcyclist is Ducati's commitment. Ducati bikes are increasingly easy to handle, reliable and better equipped to guarantee maximum safety and enhance riding pleasure. Technical clothing is made with more and more advanced materials for adequate protection and increased visibility. The safety of motorcyclists is Ducati's commitment. For more information visit the safety section of the Ducati site ([www.ducati.com](http://www.ducati.com)).

**WARNING:** The photos and technical information in this catalogue may refer to prototypes subject to modifications during production and are purely for illustration and reference purposes, and are therefore not binding on Ducati Motor Holding S.p.A. Sole Shareholder Company – Company subject to the direction and coordination of AUDI AG ("Ducati"). Ducati cannot be held responsible for any print and/or translation errors. This catalogue is transnational and therefore some products may not be available and/or their features may vary in accordance with local laws. Not all colours and versions are available in each country. Ducati reserves the right to make changes and improvements to any product without obligation of prior notice or to make such changes to products already sold. Further characteristics of the products are contained in the pertinent owner's manuals.

The products represented are not definitive versions and are therefore subject to significant changes at Ducati's discretion without prior notice. The photographs published in this catalogue show only professional riders under controlled street conditions. Do not attempt to imitate such riding behaviour as it could be dangerous for you or other people on the road. This catalogue, including but not limited to the trademarks, logos, texts, images, graphics and table of contents herein, constitute Ducati intellectual property, or in any event Ducati has the right to reproduce it; any reproduction, modification or other whole or partial use of the catalogue or its contents, including publication on the Internet without the prior written consent of Ducati, is prohibited.

Actual fuel consumption may vary based on many factors, including but not limited to riding style, maintenance performed, weather conditions, surface characteristics, tyre pressure, load, weight of the rider and the passenger, accessories.

Ducati indicates the dry weight of the motorcycle excluding battery, lubricants and coolants for liquid-cooled models. The weights in running order are considered with all operating fluids and the fuel tank filled to 100% of its useful capacity (Regulation (EU) no. 168/2013). For more information visit [www.ducati.com](http://www.ducati.com).

February 2024



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# WDW2024

**WORLD DUCATI WEEK**  
26<sup>th</sup> - 28<sup>th</sup> July / Misano, Italy  
[wdw.ducati.com](http://wdw.ducati.com)