

2017

YZF-R1M



Carbon Fiber Liquid Metal
\$22,499 MSRP

TOP FEATURES

1. Cutting-edge MotoGP®-Derived Crossplane Crankshaft Engine

The YZF-R1M® features a lightweight and compact crossplane crankshaft, inline-four-cylinder, 998cc high output engine. Featuring a first ever for a production motorcycle, titanium fracture split connecting rods delivering extremely high horsepower and a strong pulse of linear torque for outstanding performance.

2. Class-leading Electronics Package

The YZF-R1M features the most advanced MotoGP®-inspired electronics package ever offered on a supersport machine: a full suite of inter-related technologies, enabling the rider to enjoy the fullest range of performance with great comfort, control, and ease of operation.

3. The Ultimate MotoGP®-derived Supersport

The YZF-R1M features an Öhlins® Electronic Racing Suspension (ERS), carbon fiber bodywork, and a Communication Control Unit (CCU) with GPS that enables the rider to capture ride data (including GPS tracking) and then download it via WiFi to the Yamaha Y-TRAC smartphone and tablet app. Once the data is downloaded, the rider can analyze it overlaid with the track map. Setting changes can then be made via the YRC Setting app and uploaded back to the R1M.

4. MotoGP®-level Controllability

Featuring the first six-axis Inertial Measurement Unit (IMU) ever offered on a street-going motorcycle, the R1M represents the dawn of a new digital era where all riders can experience total 3D controllability.

5. Informed Systems

IMU consists of a gyro sensor that measures pitch, roll, and yaw, as well as an accelerometer, or G-sensor, that measures acceleration in the fore-aft, up-down, and right-left directions... all at a rate of 125 calculations per second. By calculating each signal, the IMU finds the precise vehicle position and movement, and communicates it to the ECU, enabling it to control the bike's systems.

6. Digital Rider Aids

The R1M is fully equipped with banking-sensitive Traction Control, as well as Slide Control, Wheel Lift Control, Quickshifter, Launch Control, ABS, a Unified Braking System, and much more. The all-new R1M gives street riders, track day participants, and full-on racers an unmatched and unprecedented level of rider-adaptive performance.



Manufacturer's Suggested Retail Price (MSRP) shown. Does not include tax, title, prep or destination charges. Actual prices set by dealer.

FEATURES & BENEFITS

TOP FEATURES - CONT.

7. Deltabox® Frame

Advanced aluminum Deltabox® frame uses the engine as a stressed member of the chassis and is designed to provide the optimum balance of longitudinal, lateral and torsional rigidity.

8. Titanium Exhaust System

A midship-layout exhaust system with titanium headers and muffler canister is positioned low and in the middle of the chassis for improved mass centralization.

9. MotoGP® Styling

The styling on the new R1M is inspired by the YZR-M1, purposely sculpted for maximum aerodynamic efficiency.

ENGINE:

Cutting-edge Crossplane Engine

The 998cc in-line 4-cylinder, crossplane crankshaft engine features titanium fracture-split connecting rods, which are an industry first for a production motorcycle. The specific titanium alloy used to manufacture the new connecting rods is around 60% lighter than steel, and this major reduction in weight gives the R1M engine a responsive and potent character at high rpm. This impressive engine delivers extremely high horsepower and a strong pulse of linear torque.

Compact Stacked Transmission

A 6-speed transmission has also been adopted to match the new engine. The transmission "stacks" the input/output shafts to centralize mass and to keep the overall engine size shorter front to back, which optimizes engine placement in the frame for outstanding weight balance.

Rocker-Arm Valvetrain

Advanced rocker-arm valve actuation uses the arm's lever ratio to allow for larger valve lift while using lower cam lobes and reduced spring pressure, further boosting power.

Lightweight Engine Components

Lightweight magnesium covers are used to further reduce engine weight.

Titanium Exhaust System

The R1M is equipped with an exhaust system manufactured mainly from titanium. Plus, a compact midship muffler further contributes to mass centralization.

Advanced Clutch

Assist and slipper clutch is used to give the rider more confident downshifts when entering corners aggressively, while still handling the torque of the R1M's high-output inline-four motor.

ELECTRONICS PACKAGE:

MotoGP®-level Controllability

Inertial Measurement Unit (IMU) uses six axes of measurement: It consists of a gyro sensor that measures pitch, roll, and yaw, as well as an accelerometer, or G-sensor, that measures acceleration in the fore-aft, up-down, and right-left directions... all at a rate of 125 calculations per second. The IMU communicates with the ECU and Suspension Control Unit, which activates the technologies in Yamaha Ride Control (YRC). YRC includes Power Mode, Traction Control System, Slide Control System, Lift Control System, Launch Control System, Quick Shift System and the Öhlins® Electronic Racing Suspension. All these systems are adjustable and can be saved within four presets in the YRC system.

Factory Level Telemetry

Another feature exclusive to the R1M that takes electronic control to an all new level is Yamaha's unique Communication Control Unit. The CCU allows riders to communicate with the vehicle via Wi-Fi through Yamaha's exclusive Y-TRAC smartphone and tablet app.

GPS-equipped Y-TRAC System

The onboard system is comprised of the CCU and GPS antenna. Running data can be recorded via a data logger, with course mapping and automatic lap timing managed by GPS. This data can then be wirelessly downloaded to the Android® or Apple® iOS® app where it can be analyzed, and setting changes can be made within the app to later be uploaded to the R1M. This Yamaha exclusive Y-TRAC system gives an all new connection to the machine that has never been seen outside of the factory race pits, further blurring that line between production superbike and MotoGP® bike.

PWR Mode

Power Delivery Mode (PWR), similar to the earlier "D-Mode" system, lets the rider choose from four settings of throttle-valve opening rate in relation to the degree of throttle-grip opening to best match their riding conditions.

Lean Angle Sensitive TCS

Variable Traction Control System (TCS) reduces rear wheel spin when exiting corners, calculating differences in wheels speeds and in relation to lean angle. As lean angle increases, so does the amount of intervention... with ten separate settings (off and 1-9) enabling the rider to dial in the exact level of control needed.

MotoGP®-Developed SCS

Slide Control System (SCS), the first of its kind on a production motorcycle, comes directly from the YZR-M1. It works in tandem with the IMU, where, if a slide is detected while accelerating during hard leaning conditions, the ECU will step in and control engine power to reduce the slide. This too can be adjusted by the rider. Four settings (1-3 and off).

Lift Control System

Lift Control System (LIF) IMU detects the front to rear pitch rate and the ECU controls engine power to reduce the front wheel lift during acceleration. Four settings (1-3 and off).

Race Start Control

Launch Control System (LCS) limits engine rpms to 10,000 even with wide open throttle. It maintains optimum engine output in conjunction with input from the TCS and LIF systems to maximize acceleration from a standing start. Three setting levels regulate the effect (1-2 and off).

Adjustable Quickshifter

Quick Shift System (QSS) cuts engine output so riders can up-shift without using the clutch and closing the throttle for quicker lap times, also with three variable settings (1-2 and off).

Ride-by-Wire Throttle

The R1M uses YCC-T® (Yamaha Chip Controlled Throttle), fly-by-wire technology providing optimum power delivery. YCC-I® is Yamaha Chip Controlled Intake which is a variable intake system that broadens the spread of power in both low and high rpm.

Full Color Instruments

The R1M features a brilliant full-color, thin-film transistor LCD meter, including front brake pressure and fore/aft G-force readouts, giving the rider even more feedback from the machine. It features both street mode and a track mode that focuses on performance information, such as YRC settings, a zoomed-in view of the tachometer in the upper rpm range, a lap timer with best lap and last lap feature, gear position indicator and speed.

CHASSIS/SUSPENSION:**Exclusive Öhlins® Electronic Racing Suspension**

The R1M features a highly advanced Öhlins® Electronic Racing Suspension. The Suspension Control Unit receives data from the Inertial Measurement Unit, which detects vehicle speed, lean angle, acceleration and brake pressure, then adjusts the front and rear compression as well as rebound damping for optimum suspension performance. The system comes with two modes: Automatic (A-1 and A-2) modes continuously adjust rebound and compression damping as you ride, providing ideal damping force for the track or the street that can be fine-tuned to the rider's needs. Manual mode allows riders to fine tune to the settings they choose, then holds these settings while riding.

Deltabox® Frame

Aluminum Deltabox® frame and magnesium subframe contribute to a light weight and compact chassis design. The aluminum frame is both strong and flexible, with rigid engine mounts, making the engine a stressed member of the frame for optimal rigidity balance and great cornering performance on the race track.

Compact Chassis Dimensions

The wheelbase is 10mm shorter than the 2014 YZF-R1 adding to cornering performance. However, the ratio of swing arm length to wheelbase is 40.5% for excellent handling.

Aluminum Fuel Tank

Also featured is an aluminum 4.5 gallon fuel tank, weighing in at a full 3.5 pounds less than a comparable steel tank.

Powerful, Controllable Brakes

The track developed and tested racing ABS and Unified Braking System provide maximum braking performance. UBS inhibits unwanted rear end motion during braking by activating the rear brake when the front brake is applied, with force distribution based on the bike's attitude and lean angle. ADVICS 4-piston radial mounted front calipers ride on big 320mm rotors for excellent stopping power.

Race-ready Magnesium Wheels

10-spoke cast magnesium wheels that reduce rotational mass by 1.9 pounds over the 2014 model reduce unsprung weight for quick direction changes and improved handling.

ADDITIONAL FEATURES:**MotoGP® Styling**

Dynamic "M1" inspired styling that creates a more compact profile with improved aerodynamics.

Compact LED Headlights

LED headlights are both lightweight and compact allowing for a more streamlined design and layout of the front face.

LED Lighting

LED front turn signals are integrated into the mirrors for improved aerodynamics, while an LED tail light is stylish and highly visible.

yamahamotorsports.com

For Accessories, visit shopyamaha.com

SPECIFICATIONS:

Engine Type	998cc, liquid-cooled inline 4 cylinder DOHC; 16 valves
Bore x Stroke	79.0mm x 50.9mm
Compression Ratio	13.0:1
Fuel Delivery	Fuel Injection with YCC-T and YCC-I
Ignition	TCI: Transistor Controlled Ignition
Transmission	6-speed w/multiplate slipper clutch
Final Drive	O-ring chain
Suspension / Front	43mm Öhlins® electronic suspension w/inverted fork; fully adjustable; 4.7-in travel
Suspension / Rear	Öhlins® electronic suspension w/single shock; fully adjustable; 4.7-in travel
Brakes / Front	Dual 320mm hydraulic disc; 4-piston caliper, Unified Brake System and ABS
Brakes / Rear	220mm disc; Unified Brake System and ABS
Tires / Front	120/70ZR17
Tires / Rear	200/55ZR17
L x W x H	80.9 in x 27.2 in x 45.3 in
Seat Height	33.9 in
Wheelbase	55.3 in
Rake (Caster Angle)	24.0°
Trail	4.0 in
Maximum Ground Clearance	5.1 in
Fuel Capacity	4.5 gal
Fuel Economy**	34 mpg
Wet Weight***	443 lb
Warranty	1 Year (Limited Factory Warranty)
Color	Carbon Fiber Liquid Metal

*** Wet weight includes the vehicle with all standard equipment and all fluids, including oil, coolant (as applicable) and a full tank of fuel. It does not include the weight of options or accessories. Wet weight is useful in making real-world comparisons with other models.