2019 YZF-R1M

Carbon Fiber/Liquid Metal
$22,999 MSRP* $425 Destination Charge*

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

TOP FEATURES

1. Crossplane Crankshaft Superbike
The YZF-R1M® features a lightweight and compact crossplane crankshaft, inline-four-cylinder, 998cc high output engine. Featuring titanium fracture-split connecting rods, an offset cylinder block and magnesium covers, the motor delivers extremely high horsepower and a strong pulse of linear torque for outstanding performance, all wrapped in aerodynamic MotoGP®-style bodywork.

2. Class-Leading Electronics Package
The YZF-R1M features the most advanced electronics package ever offered on a supersport machine, with a full suite of interrelated technologies that enable the rider to enjoy the fullest range of performance with greater comfort, control, and ease of operation than ever before.

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 and then download it via WiFi to the Yamaha Y-TRAC smartphone and tablet app. Once the data is downloaded, the rider can analyze directly over the GPS track map. Setting changes can then be made via the YRC Setting app and uploaded back to the R1M.

4. MotoGP®-Level Controllability
The YZF-R1M pioneered the use of the first six-axis Inertial Measurement Unit (IMU) ever offered on a street-going motorcycle. The IMU consists of a gyro sensor that measures pitch, roll, and yaw, as well as an accelerometer 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.

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FEATURES & BENEFITS

TOP FEATURES - CONT.

5. Digital Rider Aids
The YZF-R1M is fully equipped with banking-sensitive Traction Control and unified ABS, as well as Slide Control, Launch Control, and more. The Quick Shift System provides both up and downshifting ability, automatically matching engine speed on downshifts for rapid clutchless shifts in either direction. The Wheel Lift Control system smoothly intervenes for maximum forward drive.

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6. Deltabox® Chassis
Advanced aluminum Deltabox® frame uses the engine as a stressed member of the chassis and is designed to provide optimum longitudinal, lateral and torsional rigidity balance. Fully adjustable suspension front and rear provides exceptional road-holding and tuneability.

ENGINE

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

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Compact Stacked Transmission
A 6-speed transmission features close-ratio gearing to best match the high-revving engine. The transmission also "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.

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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.

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Lightweight Engine Components
Lightweight magnesium covers and ultra-light aluminum fasteners are used across the engine to further reduce weight.

Titanium Exhaust System
The R1M is equipped with an exhaust system manufactured primarily from lightweight titanium. The compact midship muffler also centralizes mass low in the frame and as close to the center of the machine as possible, creating optimal handling.

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

ELECTRONICS

MotoGP®-Level Controllability
Yamaha's Inertial Measurement Unit (IMU) uses six axes of measurement: a gyro sensor that measures pitch, roll, and yaw, and an accelerometer 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, which activates the technologies in Yamaha Ride Control (YRC): Power Mode, Traction Control System, Slide Control System, Launch Control System, Lift Control System and Quick Shift System with rev-matching. All these systems are adjustable and can be saved within four presets in the YRC system.

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Factory Level GPS Telemetry
Another feature exclusive to the R1M that takes electronic control to the next level is Yamaha's unique Communication Control Unit. The onboard system is comprised of the CCU and a 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 to later be uploaded to the R1M. This Yamaha exclusive Y-TRAC system gives a 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.

Ride-by-Wire Fueling
The ride-by-wire Yamaha Chip Controlled Throttle (YCC-T®) system senses the slightest throttle input by the rider and instantaneously calculates the ideal throttle valve opening, and then actuates the throttle valves to actively control intake volume. The R1M also features YCC-I® (Yamaha Chip Controlled Intake), a variable intake system that broadens the spread of power in across the entire rpm range.

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PWR Mode
Power Delivery Mode (PWR) lets the rider choose from four settings of throttle-valve response to best match their preferences and riding conditions, adjusting both engine response and overall power.

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Lean Angle Sensitive TCS
The R1M's Traction Control System (TCS) reduces rear wheel spin when exiting corners, calculating differences in wheels speeds and inrelation 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.

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MotoGP®-Developed SCS
Yamaha's Slide Control System (SCS) is the first of its kind on a production motorcycle and comes directly from the YZR-M1 MotoGP® bike. It works in tandem with the IMU, so that 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, with four settings (1-3 and off).

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Lift Control System
The R1M's Lift Control System (LIF) features progressive mapping to improve forward drive when the system intervenes. As before, the IMU detects the rate of chassis pitch and the ECU controls engine power to reduce the front wheel lift during acceleration, with four settings (1-3 and off) for fine-tuning.

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Race Start Control
The R1M's 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).

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Up and Down Quick Shift System
The Quick Shift System (QSS) on the YZF-R1M features downshifting capability as well as allowing full-throttle clutchless upshifting. On downshifts, the ECU matches engine speed on each downshift for instantaneous gear changes with minimal chassis disruption. The QSS can be adjusted with three settings (1-2 and off), as well as turning the downshift function on and off.

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Full Color Instruments
The R1M features a brilliant full-color, thin-film transistor (TFT) 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 highly advanced Öhlins® Electronic Racing Suspension. The Suspension Control Unit receives data from the IMU such as vehicle speed, lean angle, acceleration and brake pressure, then rapidly adjusts the front and rear damping in real time for optimum suspension performance. The system comes with several modes for street and track: automatic T-1 and T-2 Track modes feature adjustment settings that focus on specific areas, such as braking, cornering and acceleration, for streamlined tuning. R-1 Road simplifies these settings for street-focused riding, and three manual modes remain for conventional suspension tuning with fixed damping.

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Deltabox® Frame
The slim aluminum Deltabox® frame, magnesium subframe and polished aluminum swingarm contribute to a light weight and compact chassis design, with overall geometry refined on racetracks around the world. The rigid motor mounts use the engine as a stressed member of the frame for optimal rigidity balance and great cornering performance on the race track.

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Aluminum Fuel Tank
The hand-polished aluminum fuel tank weighs in at a full 3.5 pounds less than a comparable steel tank, further reducing overall weight, and is sculpted to give riders a good lower body connection to the machine.

Powerful, Controllable Brakes
The track developed 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. 4-piston radial mounted front calipers ride on big 320mm rotors for excellent stopping power.

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Race-Ready Magnesium Wheels
10-spoke cast magnesium wheels significantly lower rotational mass compared to conventional aluminum alloy rims, reducing unsprung weight for quick direction changes and responsive handling.

ADDITIONAL FEATURES

MotoGP® Styling with Unique R1M Detailing
Dynamic YZR-M1 styling creates a more compact profile with improved aerodynamics, getting you closer to MotoGP® than any other production motorcycle available today. R1M riders are treated to even higher levels of fit and finish thanks to carbon-fiber bodywork matched to a hand-polished fuel tank and aluminum swingarm.

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All-LED Lighting
LED headlights are both lightweight and compact, allowing for a more streamlined design of the front face. LED front turn signals are integrated into the mirrors for improved aerodynamics, while an LED tail light is stylish and highly visible.

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SPECIFICATIONS:

Engine Type	998cc, liquid-cooled inline 4 cylinder DOHC; 16 valves
Bore x Sroke	79.0mm x 50.9mm
Compression Ratio	13.0:1
Fuel Delivery	Fuel injection with YCC-T and YCC-I
Transmission	6-speed; wet multiplate assist and slipper clutch
Final Drive	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; Unified Brake System and ABS
Brakes / Rear	220mm disc; United 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.