**Legend Blue** 



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### **TOP FEATURES**

#### 1. Retro Influence, Modern Style

The striking look of the next generation Yamaha XSR900 is apparent from every angle. With the tank design, exposed aluminum frame and side silhouette drawing clear inspiration from iconic Yamaha race bikes of the past, there is also an unmistakably modern design element underscoring the machine's high-performance capabilities. Full LED lighting, a new full-color 3.5-inch TFT display and a host of premium touches including drilled fork caps, machined headlight stays, forged brake pedal, hidden passenger pegs, blacked-out levers, darkened brake reservoirs, bar-end mirrors, embossed aluminum rear underplate and aluminum XSR logo all combine to reflect modernity and a high level of fit and finish.

2. New 890cc CP3 Engine: More Power, More Torque
The XSR900's larger capacity 890cc crossplane crankshaft threecylinder engine is more powerful with a stronger, more linear torque
curve for outstanding acceleration. Nearly every major component, from
pistons and connecting rods to the crankshaft, camshafts and
crankcase, are redesigned and lightened for reduced overall weight
lending a freer revving engine character.

#### 3. Tuned Triple Soundtrack

Enhancing the unique soundtrack of the crossplane triple-cylinder powerplant, Yamaha engineers carefully redesigned the intake system incorporating differing cross section and length air ducts tuned so induction noises resonate harmoniously at varying wavelengths. Two functional air intake vents located on either side of the fuel tank further boost the mid- and high-rpm induction sound traveling to the rider for a greater sense of acceleration.

#### 4. New Six-Axis IMU with Rider Aids

Taking the 2022 XSR900 to a new level of technological advancement is a state-of-the-art six-axis Inertial Measurement Unit (IMU) featuring two sensors that measure three-axis angular velocity and three-axis acceleration. Data is transmitted to the ECU which controls an expanded suite of rider aids, including a lean sensitive Traction Control System, Slide Control System (SCS), front Wheel Lift Control System (LIF) and Brake Control (BC) System with lean sensitive ABS. Each can be adjusted for different levels of intervention or turned off completely depending on rider preference.



2022

# **XSR900**

### **FEATURES & BENEFITS**

#### TOP FFATURES - CONT.

#### 5. New CF Die-Cast Aluminum Frame: Lighter, Stronger, Sharper

The all-new compact, lightweight aluminum frame is manufactured using Yamaha's Controlled Filling (CF) die-cast technology, making it possible to produce complex frame structures lighter and stronger than conventional casting methods. Featuring the thinnest sections ever for a Yamaha die-cast frame at just 1.7 mm, overall weight is reduced while the balance of longitudinal, lateral and torsional rigidity has been refined, enhancing straight-line stability and transmitting excellent feedback to the rider.

#### 6. Yamaha Exclusive Lightweight Spinforged Wheels

Through Yamaha's exclusive spinforging process, new, sporty 10-spoke aluminum wheels enhance looks while significantly reducing unsprung weight. The result is improved suspension action and decreased moment of inertia for a more responsive feel, especially during cornering and braking.

#### 7. Advanced Up & Down Quick Shift Now Standard

The XSR900's Quick Shift System (QSS) is now fitted as original equipment on the 2022 XSR900. By enabling quick, clutchless shifting both up and down the gear box, this system makes full-on acceleration more exciting, downshifting faster and smoother, with less chassis disruption when changing gears.

#### **ENGINE**

#### New 890cc Crossplane Crankshaft Triple

The new 890cc liquid-cooled three-cylinder, DOHC fuel-injected (YCC-T) engine features bore  $\times$  stroke of 78 mm  $\times$  62.1 mm and an 11.5:1 compression ratio for outstanding torque with strong power delivery characteristics. Almost all of the fundamental parts of the engine, from the pistons and connecting rods to the crankshaft, camshafts and crankcase, have all been redesigned with a reduction in weight.

#### Fracture-Split Connecting Rods

The forged connecting rods are made using the fracture-split method—where the big-end ring of the connecting rod is purposefully fractured and then reassembled—to ensure an unparalleled degree of manufacturing accuracy. This creates a pair of perfectly matching halves that produce a much more precise mating surface when the rods are bolted together again around the crankshaft.

#### Offset & Direct-Plated Cylinders

The CP3 engine mounts its three cylinder bores forward, towards the exhaust side. This offset reduces the piston to cylinder wall friction, creating more power and improved fuel economy while the direct-plated ceramic-composite cylinder bores provide excellent heat dissipation and reduced friction.

#### Advanced Ride-by-Wire Throttle with APSG

Featuring the advanced Yamaha Chip Controlled Throttle (YCC-T), the new XSR900 takes the technology one step further with the addition of a YZF-R1-type Accelerator Position Sensor Grip (APSG). This is a full ride-by-wire system with a sensor in the twist grip to replicate varying degrees of resistance for a traditional throttle feel. The end result is a lively, torque-rich powerplant with the thrilling feel of direct connection between the throttle grip and the rear tire. Additionally, Yamaha's selectable D-MODE allows the riders to adjust engine character on the fly with four different power delivery options.

#### Updated Assist & Slipper (A&S) Clutch

The XSR900 includes an advanced Assist and Slipper (A&S) clutch minimizes rear-wheel hop under aggressive deceleration. To handle the increased torque levels of the new 890cc CP3 powerplant, the clutch has been updated with new friction plate material. At the same time, a modified cam angle reduces load on the clutch springs for a lighter feel at the lever.

#### New Intake & Exhaust System

Updated intake and exhaust systems enhance the unique soundtrack of the crossplane Triple powerplant while increasing efficiency. The low-slung exhaust design also centralizes mass and is significantly lighter than the previous generation.

#### **Compact Six-Speed Transmission**

The XSR900's six-speed transmission takes full advantage of the low-to-mid-range torque and excellent response of the inline triple while further enhancing the narrow three-cylinder design.

### CHASSIS/SUSPENSION

#### New Lightweight Aluminum Frame & Swingarm

The all-new compact, lightweight aluminum frame is manufactured using Yamaha's Controlled Filling (CF) die-cast technology, making it possible to produce complex frame structures lighter and stronger than conventional casting methods. A newly designed box-section aluminum swingarm is 55mm longer, slightly extending the wheelbase to augment straight-line stability.

#### Improved Ergonomics

Ergonomics of the new XSR900 are improved for a more aggressive profile and new emphasis on the rider. A lowered head pipe position, unique subframe with lower seat height and the lengthened swingarm improve straight-line performance while maintaining the XSR900's trademark sharp handling, situating the rider more within the bike for a greater sense of control and confidence.

#### Updated Suspension Including Fully Adjustable KYB® Fork

A new suspension features an upgraded fully adjustable 41mm KYB® inverted front fork, now shorter and lower profile due to the new head pipe position. It's paired with an updated adjustable KYB® rear shock, forward inclined and virtually hidden from sight, further enhancing the new model's clean, aggressive side profile.

#### **High-Spec Braking Components**

To support more spirited, sporty riding, the XSR900's high quality braking components include a new Brembo radial front master cylinder for the front brake. The piston in the master cylinder moves in a direction parallel to brake lever travel, contributing to a more linear supply of hydraulic pressure for excellent feel and control. Additionally, a new front brake lever eases adjustability and improves looks.

#### Yamaha Exclusive Lightweight Spinforged Wheels

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#### **ELECTRONICS**

#### New Six-Axis IMU with Rider Aids

Taking the 2022 XSR900 to a new level of technological advancement is a state-of-the-art six-axis Inertial Measurement Unit (IMU) featuring two sensors that measure three-axis angular velocity and three-axis acceleration. Data is transmitted to the ECU which controls an expanded suite of rider aids, including a lean sensitive Traction Control System, Slide Control System (SCS), front Wheel Lift Control System (LIF) and Brake Control (BC) System with lean sensitive ABS. Each can be adjusted for different levels of intervention or turned off completely depending on rider preference.

2022 XSR900

#### **Lean Sensitive Traction Control System**

Using the six-axis IMU data in conjunction with relative front and rear wheel speed data, the new lean sensitive Traction Control System adjusts the degree of intervention to correspond with the bike's lean angle. A total of three intervention levels are available.

#### Slide Control System (SCS)

When IMU sensors detect the rear wheel is beginning to slide sideways, the ECU intervenes by reducing drive to the rear wheel until the chassis is stabilized. A total of three intervention levels are available.

#### LIFT Control System (LIF)

To prevent front wheel lift during quick starts or hard acceleration, when IMU sensors detect front wheel lift the ECU adjusts drive power until the motorcycle is stabilized.

#### Brake Control System (BC)

The Brake Control (BC) System independently controls and moderates front and rear brake pressure to prevent accidental wheel lock ups. The rider can select one of two ABS braking modes: BC1 Mode is a standard ABS-active mode for straight-line braking conditions which does not incorporate lean angle. BC2 Mode uses IMU data to determine lean angle and changes the ABS sensitivity as lean angle increases.

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#### Full-Color 3.5-inch TFT Instrument Display

The new XSR900 now utilizes a full-color 3.5-inch TFT display that features a bar-type tachometer that changes colors as rpm rises or falls, a clock and displays for remaining fuel, average mileage, water temperature, air temperature and a gearshift indicator (color reversed for gear in use). Easily switch between displays and information with the handlebar switches.

#### Advanced Up & Down Quick Shift Now Standard

The XSR900's Quick Shift System (QSS) is now fitted as original equipment on the 2022 XSR900. By enabling quick, clutchless shifting both up and down the gear box, this system makes full-on acceleration more exciting, downshifting faster and smoother, with less chassis disruption when changing gears.

#### **Cruise Control Now Standard**

Another feature now fitted as original equipment on the new XSR900 is Cruise Control. The easily programmable system reduces rider fatigue, making longer journeys and highway riding more enjoyable.

#### ADDITIONAL FEATURES

#### Unique XSR900 Detailing

Every aspect of the new XSR900 shows Yamaha's meticulous attention to detail reflected through a host of premium touches, including drilled fork caps, machined headlight stays, forged brake pedal, hidden passenger pegs, blacked-out levers, darkened brake reservoirs, bar-end mirrors, embossed aluminum rear underplate and aluminum XSR logo. An additional nod to the XSR900's sporting heritage, one available colorway is a modern take on the classic French Sonauto Yamaha race colors—the stunning blue, cyan and yellow combination famously campaigned by legendary French Grand Prix champion Christian Sarron, an important page from Yamaha's rich racing history.

#### Neo-Retro Full LED Lighting

Newly developed round LED headlight is not only bright but also projects its beam in a wide horizontal arc for improved coverage when the machine is leaned over. LED turn signals and tail light enhance the stripped back, minimalist styling.

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2022 XSR900

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For Accessories, visit shopyamaha.com

## **SPECIFICATIONS:**

Engine Type 890cc liquid-cooled DOHC inline 3-cylinder 4-

stroke; 12 valves

Bore x Stroke 78.0mm x 62.1mm

Compression Ratio 11.5:1

**Fuel Delivery** Yamaha Fuel Injection with YCC-T

**Ignition** TCI: Transistor Controlled Ignition

**Transmission** 6-speed; multiplate assist-and-slipper wet clutch

Final Drive Chain

Suspension / Front 41mm inverted fork, adjustable preload,

compression and rebound; 5.1-in travel

Suspension / Rear Single shock, adjustable preload and rebound

damping: 5.4-in travel

**Brakes / Front** 298mm dual hydraulic discs; ABS

**Brakes / Rear** 245mm single hydraulic disc; ABS

Tires / Front 120/70ZR17 Bridgestone® Battlax Hypersport S22

Tires / Rear 180/55ZR17 Bridgestone® Battlax Hypersport S22

**L x W x H** 84.8 in x 33.9 in x 45.5 in

Seat Height 31.9 in Wheelbase 58.9 in

Rake (Caster Angle) 25.0° Trail 4.3 in

Maximum Ground 5.5 in

Clearance

Fuel Capacity 3.7 gal
Wet Weight\*\*\* 425 lb

Fuel Economy\*\* 49 mpg

Warranty 1 Year (Limited Factory Warranty)

Color Legend Blue; Raven

<sup>\*\*\*</sup> 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.

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