

# GSX-R1000

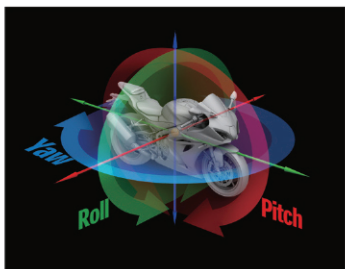
Well over three decades have passed since the GSX-R750 revolutionized the sportbike category, and more than 20 years since the GSX-R1000 transformed the open sportbike class. And more than a million GSX-R's have sold over the years. Introducing the latest Suzuki GSX-R1000: the most powerful, hardest-accelerating, cleanest-running GSX-R ever built.

## Own The Racetrack





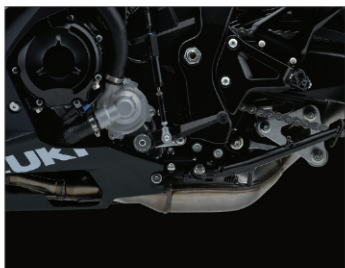
Compact Engine



IMU To Track Motorcycle Motion



Suzuki Intelligent Ride System (S.I.R.S.)



Bi-directional Quick Shift System

## Key Features

Its compact 999.8cm<sup>3</sup> DOHC inline-four engine produces great top-end power with strong low- to mid-range pull thanks in part to Suzuki's own Variable Valve Timing (VVT) system and the highly efficient 4-2-1 exhaust system.

The advanced electronic control systems of the Suzuki Intelligent Ride System (S.I.R.S.) help you optimize performance characteristics to match your changing riding needs and preferences, both on the street and the track. These include the Bi-directional Quick Shift System, Suzuki Drive Mode Selector (SDMS), Motion Track TCS (Traction Control System\*), Motion Track Brake System, and Ride-by-wire Electronic Throttle System.

Supporting S.I.R.S. is a compact 6-direction, 3-axis inertial measurement unit (IMU) that constantly monitors pitch, roll, and yaw movement to help provide more precise and effective traction, braking and cornering.

Its twin-spar aluminum frame is light and compact, providing nimble handling with a high level of grip when cornering.

Advanced SHOWA suspension combines with ABS-equipped Brembo T-drive front brake rotors and 4-piston calipers for extraordinary handling and stopping performance.

The aerodynamic fairing houses a bright LED headlight and Suzuki Ram Air Direct ducts that feed the engine to boost top end power.

\* The Traction Control System is not a substitute for the rider's throttle control, and traction

control cannot prevent loss of traction due to excessive speed when entering turns, or while braking, and it does not control front wheel traction.

## Engine Features

The compact 999.8cm<sup>3</sup> liquid-cooled, 4-stroke, DOHC, inline-four engine is designed with a high level of top-end performance plus strong low- to mid-range power.

The short-stroke engine features a 76.0mm bore versus a 55.1mm stroke, as well as a narrow profile thanks to effective design.

The exclusive Suzuki Racing Variable Valve Timing System (SR-VVT) uses a centrifugal actuated mechanism on the intake camshaft sprocket to increase high engine rpm power without losing low- to mid-range power.

Technology adopted directly from racing development, the Suzuki Racing Finger Follower valve train weighs less than a tappet-style valve train for reduced friction and increased valve response at higher engine speeds.

Four titanium valves – two 31.5mm intake and two 24mm exhaust valves – are used in each cylinder. The lighter valves respond well to the finger follower's arms and permit a 14,500 rpm redline that helps produce very high peak power output.

Suzuki Composite Electrochemical Material (SCEM)-coated cylinders are integrated into the upper crankcase to reduce friction and improve heat transfer and durability.

The high 13.2:1 compression ratio

helps produce high power output. The cylinder head's shallow combustion chamber minimizes heat produced during operation.

The electronic fuel injection system uses Suzuki's Ride-by-wire electronic throttle bodies, which use a servo motor to control the throttle valves for fast response to rider throttle grip input while delivering precise and smooth power.

Complementing the four primary fuel injectors in the throttle bodies are four Suzuki Top Feed Injectors (S-TFI) that spray fuel from the top of the airbox directly into the intake funnels. This results in higher peak power, more efficient combustion, and a higher level of fueling control.

A pair of Suzuki Ram Air Direct (SRAD) intake ducts are used to exponentially increase the volumetric flow of air amount coming in the airbox as road speed increases.

The digital ignition fires iridium-type spark plugs that increase spark strength and combustion efficiency.

The Suzuki Exhaust Tuning (SET) system valve in the mid-pipe helps control back pressure and flow to the muffler to widen power delivery and reduce exhaust sounds without needing a larger silencer.

Suzuki Exhaust Tuning-Alpha (SET-A) butterfly valves positioned in the balance tubes between the two outer and the two inner head pipes open at higher engine speeds and close at lower rpm to help the engine create high peak power without losing low- and mid-range power output.

The Suzuki Bi-directional Quick Shift System allows for clutchless upshifts and downshifts when the motorcycle is used in competition.

The cassette-style, 6-speed transmission lets riders precisely match the gear ratio to the riding condition. A cassette-style transmission can be easily removed from the crankcase as an assembly with the engine still in the frame, facilitating quicker race track gear changes and simplified service.

A programmable shift light on the main panel provides a visual alert to the rider to shift when a certain engine rpm is reached.

The GSX-R1000 is equipped with the Suzuki Clutch Assist System (SCAS) multi-plate, wet clutch. SCAS works like a slipper clutch during downshifts while increasing clamping pressure on the plates during acceleration. This smooths engine braking and lightens the clutch lever pull.

To reduce moving mass, a 525-size drive chain is used with a 45/17 final sprocket ratio that complements the large rear tire dimensions.

## Advanced Electronics Features

Using racing know-how, Suzuki has equipped the GSX-R1000 with an IMU (Inertial Measurement Unit). The IMU provides 6-axis motion and position information to the ECM so instantaneous adjustments can be made electronically to the engine and chassis components that influence performance.

The Ride-by-wire electronic throttle bodies are precisely opened by the ECM to match the

throttle grip rotation of the rider's hand and electronic systems that use input from the IMU. The result is strong, seamless engine power delivery from idle to redline.

The 3-mode Suzuki Drive Mode Selector (SDMS) system lets the rider set the engine's power delivery characteristics to match riding ability and conditions.

The exclusive 10-mode Motion Track TCS (Traction Control System)\*, which uses input from the IMU, increases rider confidence by allowing adjustments to the amount of intervention to match riding ability and surface conditions

Exclusive to Suzuki, the Motion Track Brake System brings additional control to antilock braking. Like a conventional ABS\*\* system, the Motion Track Brake System provides the appropriate amount of braking force for the available traction. When the IMU detects the rear wheel lifting up from extreme braking forces, the ABS control module will adjust the front brake pressure to reduce rear wheel lift.

The Suzuki Easy Start System simplifies startup for the GSX-R1000 rider as the ECM automatically cranks the engine for 1.5 seconds (or until it starts) with a momentary press of the starter button.

Suzuki's innovative Low RPM Assist function smooths standing starts and reduces the chance of the rider stalling the motorcycle.

The Suzuki Bi-directional Quick Shift System lets racers shift faster than ever before. The system adjusts ignition timing on upshifts and electronic throttle body action on downshifts to

enable clutchless shifting that helps deliver faster and more consistent lap times.

\* The Traction Control System is not a substitute for the rider's throttle control, and traction control cannot prevent loss of traction due to excessive speed when entering turns, or while braking, and it does not control front wheel traction.

\*\* ABS is not designed to shorten the braking distance. ABS cannot prevent wheel skidding caused by braking while cornering. Please ride carefully and do not overly rely on ABS.

## Chassis Features

Using chassis development technology from Suzuki's racing experience, the engine angle of the GSX-R1000 was rotated backward six degrees. This produced the joint effect of reducing the distance of the forks to the center of the chassis by 20mm and lengthening the swingarm length by 40mm, which in turn increases chassis stability and improves aerodynamics.

Racetrack-developed links connect the single SHOWA Remote Reservoir Shock Absorber to the braced swingarm. With spring preload, rebound damping, plus high- and low-speed compression damping force adjustment, the rider can tune the motorcycle to respond to riding style and weight.

Superb suspension action is delivered by the fully adjustable SHOWA Big Piston Forks (BPF), which are renowned for damping force control that maintains front tire contact with the surface so the rider gets good sensory feedback while riding at a variety of speeds.

Brembo radial mount brake calipers provide the rider with strong braking performance combined with superb feel.

Brembo T-drive Brake Rotors feature two methods of attaching the 320mm floating disc to the carrier. There are five conventional floating rotor spools that maintain the rotor's relationship to the caliper and five new-design T-drive fasteners. This combined attachment technique allows the rotor to absorb more energy, so a high degree of braking force is available to the GSX-R1000 rider.

Exclusive to Suzuki, the lightweight 6-spoke cast aluminum wheels reduce unsprung mass and have been designed to handle the braking and drive forces that a GSX-R1000 can create.

The wheel rims have pinstripes punctuated by "R" logos that highlight the bike's identity.

The aerodynamic bodywork was created by Suzuki styling designers and engineers using numerous wind tunnel tests to achieve a slippery shape and compelling appearance. The GSX-R1000's narrow physique directly aids performance by improved handling and top speed on the racetrack.

The dual SRAD intake ducts are positioned close to the center of the fairing nose, where air pressure is highest.

The passenger seat can be removed and replaced with an optional color-matched solo tail cowl (available from your Suzuki dealer).

The shifter and rear brake pedal are adjustable in relationship to the footpegs, and the hand

controls are adjustable in relation to the grips. The front brake lever has a hole machined into the end to prevent wind pressure from applying the front brake.

## Electrical Features

The LCD multifunction instrument panel has an adjustable intensity, white color backlight for great nighttime visibility, and is flanked by LED indicators that include the turn signals, high beam, traction control, and shift light, plus coolant temperature and oil pressure alerts.

The LED headlight is lightweight, bright, and distinctive. This low-electric draw light has a narrow, stacked shape to make more room for the large SRAD ducts.

The LED combination tail and brake light assembly has a very low electrical draw, and the vertically stacked shape permits the tail section to be narrow for better air flow at the back of the motorcycle. The license plate is also illuminated by an LED light.

## Additional Features

A variety of Genuine Suzuki Accessories are available, plus a large selection of GSX-R logo apparel.

# The King of Sportsbikes

Own the Racetrack is more than just a slogan for the GSX-R1000. It is a phrase earned by sustained success in the FIM Endurance World Championship (EWC) besting all other participating manufactures with 20 titles in the fabled series. The controllability, reliability, and durability of Suzuki's King of Sportsbikes truly demonstrates total performance integrated at the highest level.

Team  
**SUZUKI**



**1<sup>st</sup>**  
**PLACE**  
24 Heures Motos  
2024 FIM EWC Rd.1 Le Mans

**SEIWA SERT**  
YOSHIMURA SERT MOTUL

## Colors



Metallic Mat Sword Silver (QKA)



Candy Daring Red / Glass Sparkle Black (AV4)

