



Crafted to Overcome,  
Crafted to Outperform.

#PureRacecraft

**Apache**  
**RTR**  
**310**  
RACING DNA UNLEASHED

## THE ULTIMATE TRACK WEAPON

The all-new 2020 TVS Apache RR310 takes Racecraft to the next level. The race machine features a 312 cc reverse inclined DOHC engine with throttle-by-wire and four unique ride modes, to overcome any condition. Its SmartXonnect enabled multi information race computer pairs with your smartphone to display essential notifications and race telemetry. The eternal need to outperform the competition is embodied by this power packed technological marvel, the most advanced TVS Apache RR310 yet.

### Control Cubes

The control cubes on the handlebar allow the rider to switch between any of the four rides at the touch of a button while on the go. The control cubes also help the racer navigate through the multi information race computer and provide access to essential riding data and personalised widgets.

## CRAFTED TO OVERCOME

### Track Mode

The track mode unleashes the full power of the race machine, and optimises the ABS response for late braking into corners with confidence and ease. The display clears up to show race telemetry and disables other notifications. The SmartXonnect app displays a detailed post-race analysis directly on your smartphone.

### Urban Mode

The urban mode allows for linear acceleration and deceleration, along with smooth and controlled movement. The multi information race computer displays essential information, navigation, and cellular notifications for your commute. The ABS is optimised for a quick response with minimal lever pulsation.





## Rain Mode

The rain mode primes the ABS to deliver the maximum response with a strong lever pulsation feel, to safely power you through the storm. The enhanced rear-wheel lift-off protection improves safety and stability on wet roads, providing ultimate control of the race machine.

## Sport Mode

The sport mode allows for maximum acceleration as well as optimised deceleration, engine braking, and ABS response. The multi information race computer displays relevant touring data including navigation, distance, and estimated time of arrival.



# CRAFTED TO OUTPERFORM

## Bluetooth Enabled System

SMART XCONNECT

The SmartXconnect links your smartphone to your race machine. The intelligent system displays in-depth post ride analysis and race telemetry including gear shifting points, G-force, best lap time, and more. This is all the data a racer needs to hone and perfect their craft.

**GTT+**  
GLIDE THROUGH TECHNOLOGY

## Throttle-by-Wire

The state-of-the-art electronic throttle control (ETC), replaces the conventional throttle cable with multiple electronic sensors. The system is tuned for each ride mode to keep the track weapon ahead in any race condition.



## Glide Through Technology+

Tuned for the urban and rain modes, GTT+ enables an extremely smooth and controlled ride. The bike is set in motion with a slow release of the clutch lever, without any throttle operation. This allows for quick launches off the line.





## Race Tuned Slipper Clutch

The Race Tuned Slipper Clutch allows for rapid downshifts while preventing rear wheel hop. The assist function tightly binds the clutch plates during acceleration, allowing for increased torque carrying capacity with reduced clutch engagement force.



## Liquid-Cooled-Oil-Coolant Technology

- Provides efficient thermal management
- Keeps the high-revving engine cool in long race distances

## Volumetric Efficiency

The cylinder head down draft port with button tappet arrangement provides an **8% increase in volumetric efficiency.**

# CRAFTED FOR POWER



## Compact Engine Design

The horizontally split crank case keeps the engine compact while providing blistering performance.

- Best-in-class power-to-weight ratio
- **0-60 in 2.93s**
- Top speed of **160 km/h**

## Unique Reverse Inclined DOHC Engine

The BS6 compliant, race-derived 312 cc power plant peaks at 11,000 RPM. The Lite KS cast piston with a Nanofriks coating reduces friction and provides blistering performance.

## Track Tuned 6-Speed Gearbox

The racing gearbox has negative back rack gears for precision shifts and quick launches.

## Mass Centralised Layout

The vehicle layout provides a low center of gravity for uncompromised handling.



### Racing Origin Trellis Frame

- The light weight trellis frame provides high dynamic stiffness
- The forged aluminium die-cast swing arm offers greater stability



## CRAFTED FOR AGILITY

### Race-Tuned KYB Suspension

- Honed and tuned by experts from KYB
- Monoshock with Monotube floating piston technology
- Hydraulic stopper with check valves provides better damping

### Superior **MICHELIN** Road 5 Tyres

Engineered with next-gen compounds and featuring Michelin's patented ACT+ technology, these tyres provide the ultimate grip for cornering and a superior ride feel.

The patented siped tyre treads expel maximum water, delivering best-in-class wet grip. The rigidity of the tyres offers superior road feedback, allowing the rider to respond to any road condition.

### Dual Channel ABS

The dual channel ABS prevents wheel lock, and rear wheel liftoff protection keeps the racer's wheels on the track, even when braking late into corners.



## Now in TITANIUM BLACK

The 2020 TVS Apache RR310 is now available in Titanium Black – gloss black shrouded in matte grey, for a dual tone finish that'll turn heads as you overtake the competition.

## Multi Information Race Computer

Assert your race machine's technological superiority with the new SmartXonnect enabled 5 inch TFT display. The display features dedicated interfaces and graphics for the four unique ride modes.



# CRAFTED TO IMPOSE



## Bi-LED Twin Projector Headlamps

A first in its class, the headlamps provide clear visibility even in harsh racing conditions.

## Aggressive Stance

Inspired by the shark, the TVS Apache RR310 is designed with a raked-high tail and a forward weight bias, to make it streamlined.

## Racing Ergonomics

- Honed using static and dynamic ergonomic testing
- Gives the racer ultimate control on the track







## CRAFTED BY THE WIND

### Ram-Air Intake

Provides thermal management by channelling air towards the engine.

### Gill Vents

- Channel hot air away from the engine
- Patented deflector cowl diverts hot air away from the racer

### Advanced Aerodynamics

Extensive designing and testing in a state-of-the-art wind tunnel has yielded the best-in-class coefficient of drag. The TVS Apache RR310 achieves maximum downforce, minimum wind blast and a higher top speed. The shape and contours of the bike and aerodynamically designed windshield make it slice through the air and the competition.



# SPECIFICATIONS

## #PureRacecraft

### Engine

Type	SI, 4 stroke, 4 valve, Single cylinder, Liquid cooled, Reverse inclined
Engine Capacity	312.2 cc
Maximum Power	Sport and Track mode - 25 kW @ 9700 engine rpm (34 PS @ 9700 engine rpm) Urban and rain mode - 19 kW @ 7600 engine rpm (25.8 PS @ 7600 engine rpm)
Maximum Torque	Sport and Track mode - 27.3 Nm @ 7700 engine rpm Urban and rain mode - 25 Nm @ 6700 engine rpm
Bore	80 mm
Stroke	62.1 mm
Fuel Injection	Bosch - Closed loop EFI
Bore to Stroke Ratio	1.29
Throttle control	Electronic throttle control with multiple ride modes
Starting	Electric start
Idle speed	1700 ± 200rpm
Ignition	Dynamically controlled integrated high energy ignition system
Power to Weight Ratio	0.144 kW/kg
Compression Ratio	10.9 : 1
Air Filter	Dry Paper filter
Cooling System	Liquid cooled
Muffler	Single pipe and single body design
Clutch	Wet multi plate - 7 plate design, RT slipper clutch
Gear Box	6 speed

### Chassis and Suspension

Frame	Trellis frame, split chassis
Front Suspension	Inverted cartridge telescopic fork
Rear Suspension	Two arm Aluminium die-cast swingarm Mono tube floating piston gas assisted shock absorber

### Fuel Tank Capacity

Full	11 l
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### Dimension

Height	1135 mm
Length	2001 mm
Width	786 mm
Wheelbase	1365 mm
Ground Clearance	180 mm
Saddle Height	810 mm

### Electrical

Battery	12V, 8Ah
Headlamp	Bi-LED projector, 30W @ 13 V
Tail Lamp	LED 4 W
Instrument cluster	5" TFT screen connected cluster

### Wheel and Tyre

Rim Size (front)	MT 3.0 x 17
Rim Size (rear)	MT 4.0 x 17
Tyre Size (front)	110/70-ZR17 M/C 54W Tubeless - Michelin ROAD 5
Tyre Size (rear)	150/60-ZR17 M/C 66W Tubeless - Michelin ROAD 5

### Brake

Front	Disc 300mm Petal type with ABS
Rear	Disc 240mm Petal type with ABS
ABS	With 3 ride modes
Brake Fluid	DOT 4

### Weights

Kerb Weight	174 kg
Max Payload	130 kg

### Performance

Max speed	160 km/h - Sport and Track mode 125 km/h - Urban and Rain mode
Acceleration 0-2sec (speed in km/h)	46.77 km/h
0-60km/h (time in sec)	2.93 s
0-100km/h (time in sec)	7.17 s



Also available in Racing Red.

[www.tvsapache.com](http://www.tvsapache.com)

**TVS**

TVS MOTOR COMPANY LIMITED. P.B. No.4, Harita, Hosur, 635109, Tamil Nadu, India.  
Telephone: +91 (4344) 276780. Fax: +91 (4344) 276878 / 277311 [www.tvsapache.com](http://www.tvsapache.com)

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