

# GSLV MK III

June 24, 2019

- GSLV Mk III is a three-stage heavy lift launch vehicle developed by ISRO. The vehicle has **two solid strap-ons, a core liquid booster and a cryogenic upper stage.**
- GSLV Mk III is designed to carry 4 ton class of satellites into Geosynchronous Transfer Orbit (GTO) or about **10 tons to Low Earth Orbit (LEO)**, which is about twice the capability of GSLV Mk II.
- The two strap-on motors of GSLV Mk III are located on either side of its core liquid booster. Designated as 'S200', each carries 205 tons of composite solid propellant and their ignition results in vehicle lift-off. During **strap-ons functioning phase, the two clustered Vikas liquid Engines of L110 liquid core booster** augment the thrust of the vehicle. These two engines continue to function after the separation of the strap-ons at about 140 seconds after lift-off.
- The **first experimental flight** of LVM3, the LVM3-X/CARE mission lifted off from Sriharikota on **December 18, 2014** and successfully tested the atmospheric phase of flight. Crew module Atmospheric Reentry Experiment was also carried out in this flight. The module reentered, deployed its parachutes as planned and splashed down in the Bay of Bengal.
- The **first developmental flight** of GSLV Mk III, the GSLV-Mk III-D1 successfully placed GSAT-19 satellite to a Geosynchronous Transfer Orbit (GTO) on **June 05, 2017** from SDSC SHAR, Sriharikota.

[GSLV MkIII-D2](#), the **second developmental flight** of GSLV MkIII successfully launched GSAT-29, a high throughput communication satellite on **November 14, 2018** from Satish Dhawan Space Centre SHAR, Sriharikota.