

PSLV-C44 / Microsat-R & Kalamsat-V2 Mission

24 January, 2019

THE MISSION

PSLV-C44 carrying on-board the Microsat-R and Kalamsat-V2 Satellites lifted-off from the Satish Dhawan Space Centre (SDSC) SHAR, Sriharikota at 11:37 PM (IST) on January 24, 2019. About 13 minutes and 26 seconds after lift-off, the PSLV-C44 placed Microsat-R in the intended orbit of 274 km. The fourth stage (PS4) of the vehicle was moved to a higher circular orbit of 453 km after two restarts of the stage, to establish an orbital platform for carrying out experiments. Kalamsat-V2 was the first to use PS4 as an orbital platform. This mission was unique as it was for the first time ISRO used the last stage of the rocket as a platform to perform experiments in space.



PSLV - C 4 4

THE LAUNCH VEHICLE

PSLV-C44 was the 46th flight and PSLV was in 'DL' configuration with 2 strap-on motors. This mission was the 1st flight in 'PSLV-DL' and is a new variant of PSLV.

SPECIFICATIONS

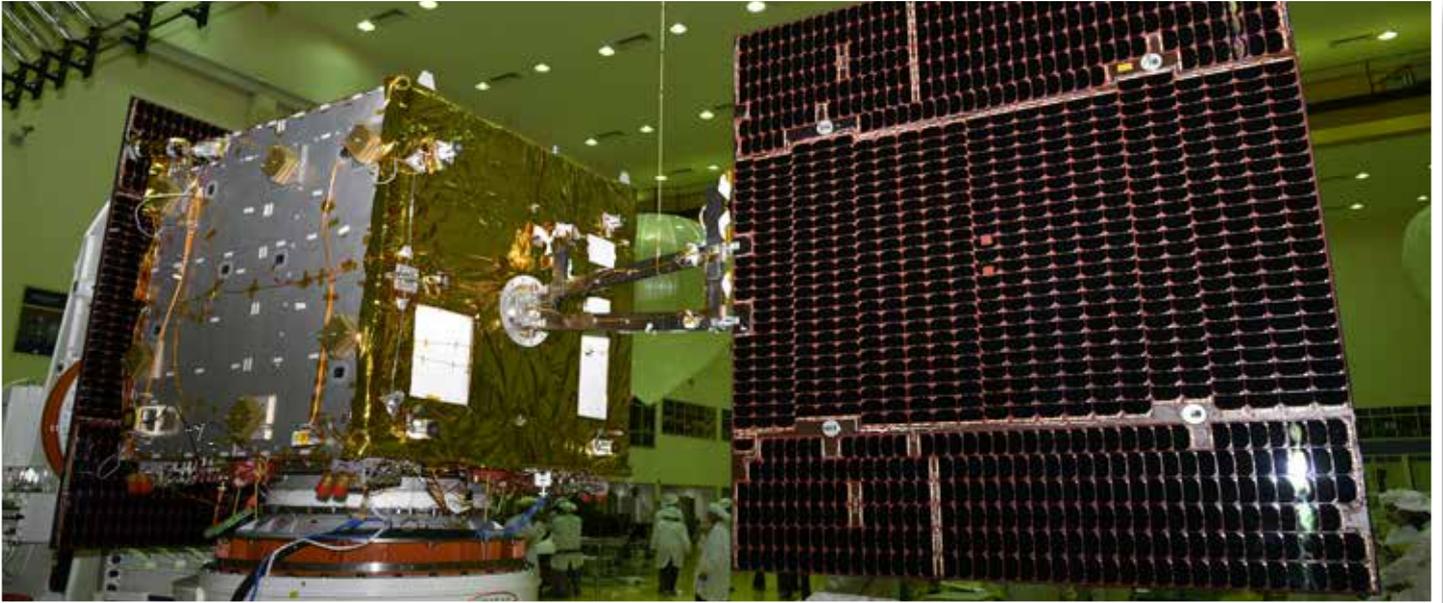
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|--------------------------|-------------------------------|------------------------------------|
| Height | 44.4 m | |
| Lift-Off Mass | 257 t | |
| No of Stages | 4 | |
| Payloads | Microsat-R | Kalamsat-V2 + PS4 Orbital Platform |
| Orbit Height | 274.12 km | 450 km |
| Inclination (deg) | 96.567 + 0.2 ⁰ | 98.767 + 0.2 ⁰ |
| Launch Azimuth | 140 ⁰ | |
| Launch Pad | First Launch Pad (SDSC, SHAR) | |



MICROSAT-R

THE SATELLITE

Microsat-R weighing 740 kg was successfully injected into the intended orbit of 274 km. Microsat-R served as target for Indian Anti-Satellite Test (ASAT) experiment on March 27, 2019.



KALAMSAT-V2

THE SATELLITE

Kalamsat-V2 is a 10 cm cube satellite weighing 1.26 kg. It is a student payload, first to use in the fourth stage (PS4) of the PSLV as an Orbital Platform. This was a distinctive mission as the new low cost technology would help students to conduct several inspiring experiments in space by attaching their instruments to the last stage of the rocket.

