

## All eyes on ISRO's IRNSS satellite - a landmark launch today



Indian Space Research Organisation (ISRO) will launch its eighth navigation satellite today, this launch will augment India's own GPS NavIC constellation and also open up an era of Indian private sector in the quest of space exploration - a landmark launch indeed.

The 1425-kilogram Indian Regional Navigation Satellite System (IRNSS-1H) satellite is all set to begin its journey into the heights and depths of space as it is scheduled for launch at 7PM today from the second launch pad of Satish Dhawan Space Centre at Sriharikota - off the Bay of Bengal in Andhra Pradesh, about 80 km northeast of Chennai. This will be ISRO's eighth satellite from navigation series and IRNSS will sail into space riding on ISRO's trusted launch vehicle, PSLV-XL. IRNSS will bring together all the seven existing satellites and help India in building its very own GPS system called NavIC. There you go, see why the launch is so hyped and anticipated?

To make it even more intriguing, IRNSS-1H will open up new horizons for Indian private sector in space exploration because this is the first time ever in India that private firms have been actively involved in development of satellite. Till now, private sector's involvement in satellite launch was only limited to supplying components for satellites, but this time, firms have been participating in assembly, development as well as testing of IRNSS-1H. In fact, 25% of the development work of IRNSS is done by a Bengaluru-based private firm - Alpha Design Technologies.

IRNSS will be carried into a Sub-Geosynchronous Transfer Orbit (Sub-GTO) by the PSLV-C39 which is an XL version of PSLV - equipped with six strap-ons, each carrying 12 tonnes of propellant. IRNSS-1H will replace IRNSS-1A which is one of the seven satellites of Indian navigation constellation after failure of the satellite. The entire NavIC project will offer services like terrestrial and marine navigation, disaster management, vehicle tracking, fleet management, navigation for hikers and travellers, and visual, voice navigation for drivers. This will make India GPS independent which will boost its capabilities of geographical monitoring and take control over what it can use and what can be provided to citizens of India. Don't miss the launch event at 7PM today, it is one game-changer space satellite launch for India.