

# **INSAT-4B MISSION**

### 12 March, 2007

### THE MISSION

The Indian National Satellite (INSAT-4B) on-board the Ariane-5 lifted-off from Kourou, French Guiana at 03:33 AM (IST) on March 12, 2007. INSAT-4B is the second satellite in the INSAT-4 series. INSAT-4B will further augment the INSAT capacity for Direct-To-Home (DTH) television services and other communication and TV services. About 30 minutes after lift-off, INSAT-4B was placed in the Geosynchronous Transfer Orbit (GTO) in three axis stabilised mode with a perigee (nearest point to Earth) of 243 km and an apogee (farthest point to Earth) of 35,876 km and an inclination of 4.52° with respect to the Equator.

## INSAT-4B

#### THE SATELLITE

INSAT-4B is a high power communication satellite of size 2010 mm (E-W) x 3100 mm (EV-AEV) x 1770 mm (N-S), with the capacity of generating 5700 W of power. It is designed to meet Direct-to-Home (DTH) broadcast services. It is co-located with INSAT-3A at 93.5° East longitude in Geostationary Orbit.

It has 24 transponders, 12 each in C-band and Ku-band. Ku-band transponders cover the Indian mainland and the C-band Transponders encompass Indian geographical boundary beyond Southeast and Northwest regions.

#### SPECIFICATIONS

Weight	3025 kg
Power	Solar Array: 5700 W
	Batteries: Li-ion 100 Ah
Stabilization	3-axis body stabilized using
	Momentum / Reaction Wheels, Magnetic
	Torquers, Sensors and Thrusters
Type of Satellite	Communication
Payloads	• 12 Ku-band Transponders
	• 12 C-band Transponders
Mission Life	12 Years

