

# INSAT SYSTEM | SATELLITES IN SERVICE



## INSAT-2E

**Date of Launch** April 03, 1999  
**Launch Vehicle** Ariane 4  
**Launch Centre** Kourou(CSG), FrenchGuyana  
**Dry Mass** 1150 kg  
**Lift-off Mass** 2550 kg  
**Size** Cuboid of 1.93x1.77x2.37m  
**Length when fully deployed** 26 m  
**Power** 2050 W  
**Mission Life** 12 years  
**Payload** 12 C-band Transponders and 5 Extended C-band Transponders for Communications; A Very High Resolution Radiometer and a CCD Camera for Meteorological observation

## INSAT-3B

**Date of Launch** March 22, 2000  
**Launch Vehicle** Ariane 5  
**Launch Centre** Kourou(CSG), FrenchGuyana  
**Dry Mass** 970 kg  
**Lift-off Mass** 2070 kg  
**Size** Cuboid of 1.93x1.7x1.65 m  
**Length when fully deployed** 14.7 m  
**Power** 1700 W  
**Mission Life** 10 years  
**Payload** 12 Extended C-band Transponders, 3 Ku-band Transponders and a Mobile Satellite Service (MSS) Transponder

## INSAT-3C

**Date of Launch** January 24, 2002  
**Launch Vehicle** Ariane 4  
**Launch Centre** Kourou(CSG), FrenchGuyana  
**Dry Mass** 1218 kg  
**Lift-off Mass** 2750 kg  
**Size** Cuboid of 2.0x1.77x2.8 m  
**Length when fully deployed** 15.5 m  
**Power** 2750 W  
**Mission Life** 12 years  
**Payload** 24 C-band, 6 Extended C-band, 2 S-band (for Broadcast Satellite Service) and 1 Mobile Satellite Service (MSS) Transponders

## KALPANA-1

**Date of Launch** September 12, 2002  
**Launch Vehicle** PSLV-C4  
**Launch Centre** SatishDhawanSpace Centre, Sriharikota, India  
**Dry Mass** 500 kg  
**Lift-off Mass** 1060 kg  
**Size** Cuboid of 1.47x1.5x1.53 m  
**Length when fully deployed** 3.4 m  
**Power** 550 W  
**Mission Life** 7 years  
**Payload** A Very High Resolution Radiometer (VHRR) and Data Relay Transponder

## INSAT-3A

**Date of Launch** April 10, 2003  
**Launch Vehicle** Ariane 5  
**Launch Centre** Kourou(CSG), FrenchGuyana  
**Dry Mass** 1350 kg  
**Lift-off Mass** 2950 kg  
**Size** Cuboid of 2.0x1.77x 2.8 m  
**Length when fully deployed** 24.5 m  
**Power** 3100 W  
**Mission Life** 12 years  
**Payload** 12 C-band, 6 Extended C-band, 6 Ku-band Transponders for Communications; Very High Resolution Radiometer and CCD Camera for Meteorological observation; Data Relay Transponder and Search and Rescue Transponder

## GSAT-2

**Date of Launch** May 08, 2003  
**Launch Vehicle** GSLV-D2  
**Launch Centre** SatishDhawanSpace Centre, Sriharikota, India  
**Dry Mass** 840 kg  
**Lift-off Mass** 1800 kg  
**Size** Cuboid of 2.4x1.65x1.53 m  
**Length when fully deployed** 9.5 m  
**Power** 1380 W  
**Mission Life** 7 years  
**Payload** 4 C-band, 2 Ku-band and 1 Mobile Satellite Service (MSS) Transponders for Communications; 4 Scientific/ Experimental Payloads

## INSAT-3E

**Date of Launch** September 28, 2003  
**Launch Vehicle** Ariane 5  
**Launch Centre** Kourou(CSG), FrenchGuyana  
**Dry Mass** 1181 kg  
**Lift-off Mass** 2750 kg  
**Size** Cuboid of 2.0x1.77x2.8 m  
**Length when fully deployed** 15.5 m  
**Power** 2400 W  
**Mission Life** 12 years  
**Payload** 24 C-band, 12 Extended C-band Transponders

## EDUSAT

**Date of Launch** September 20, 2004  
**Launch Vehicle** GSLV-F01  
**Launch Centre** SatishDhawanSpace Centre, Sriharikota, India  
**Dry Mass** 820 kg  
**Lift-off Mass** 1950 kg  
**Size** Cuboid of 2.4x1.65x1.15 m  
**Length when fully deployed** 11 m  
**Power** 2050 W  
**Mission Life** 7 years  
**Payload** 5 Ku-band Transponders with Spot Beams, 1 Ku-band Transponder with National Beam and 6 Extended C-band Transponders with National Beam

## INSAT-4A

**Date of Launch** December 22, 2005  
**Launch Vehicle** Ariane 5  
**Launch Centre** Kourou(CSG), FrenchGuyana  
**Dry Mass** 1387 kg  
**Lift-off Mass** 3086 kg  
**Size** Cuboid of 2.0x1.77x2.8 m  
**Length when fully deployed** 15.16 m  
**Power** 5500 W  
**Mission Life** 12 years  
**Payload** 12 High Power Ku-band Transponders with footprint covering Indian mainland, 12 C-band Transponders with expanded coverage

## INSAT-4B

**Date of Launch** March 12, 2007  
**Launch Vehicle** Ariane 5  
**Launch Centre** Kourou(CSG), FrenchGuyana  
**Dry Mass** 1337 kg  
**Lift-off Mass** 3025 kg  
**Size** Cuboid of 2.0x1.77x3.1 m  
**Length when fully deployed** 15.4 m  
**Power** 5860 W  
**Mission Life** 12 years  
**Payload** 12 High Power Ku-band Transponders with footprint covering Indian mainland, 12 C-band Transponders with expanded coverage

## INSAT-4CR

**Date of Launch** September 02, 2007  
**Launch Vehicle** GSLV-F04  
**Launch Centre** SatishDhawanSpace Centre, Sriharikota, India  
**Dry Mass** 941 kg  
**Lift-off Mass** 2130 kg  
**Size** Cuboid of 1.650x1.530x2.400 m  
**Length when fully deployed** 9.45 m  
**Power** 2870 W  
**Mission Life** 10 years  
**Payload** 12 High Power Ku-band Transponders designed to provide communication services such as DTH television, Video Picture Transmission (VPT) and Digital Satellite News Gathering (DSNG)