



PSLV-C50/CMS-01 MISSION

Indian Space Research Organisation

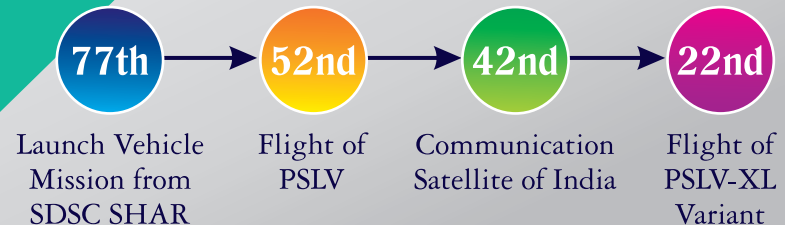
MISSION DESCRIPTION

- ◆ India's Polar Satellite Launch Vehicle (PSLV), in its 52nd mission (PSLV-C50), will launch CMS-01 from Second launch pad of Satish Dhawan Space Centre, SHAR, Sriharikota.
- ◆ PSLV-C50 will use 'XL' variant of PSLV equipped with six strap-ons.
- ◆ CMS-01 is a communication satellite envisaged for providing services in Extended-C Band of the frequency spectrum.

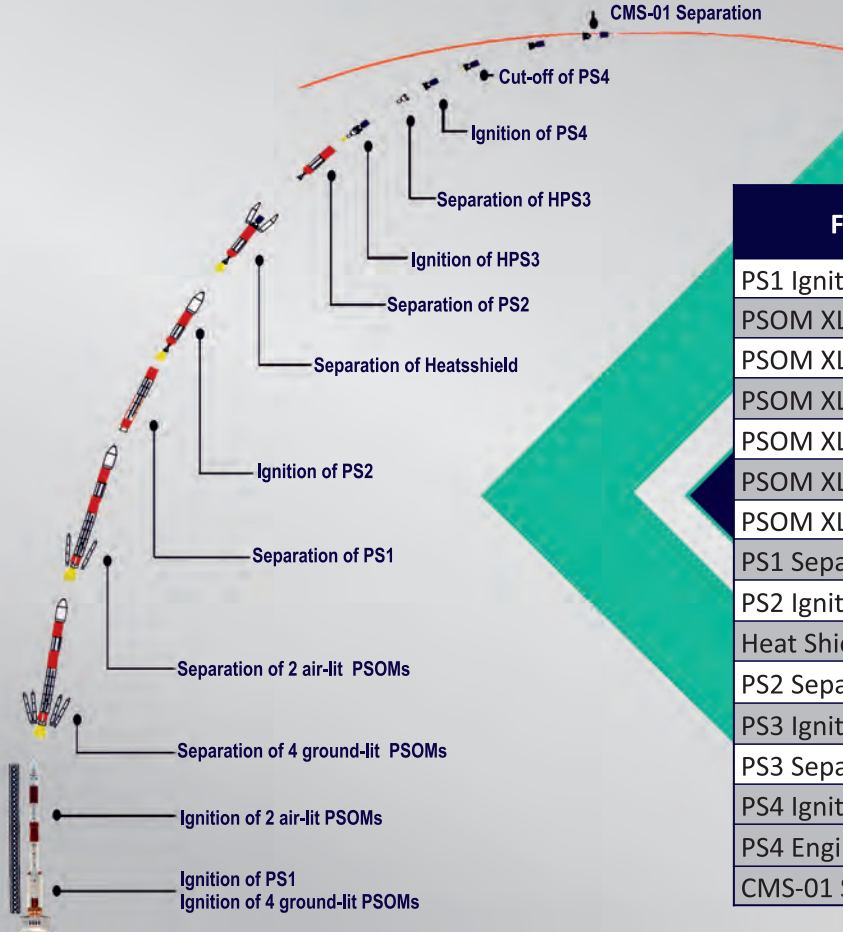
PSLV-C50 MISSION SPECIFICATIONS

Payload	-	CMS-01
Orbit	-	Geosynchronous Transfer Orbit
Launch Pad	-	Second Launch Pad

MILESTONES



PSLV-C50 FLIGHT SEQUENCE



Flight Events	Time	Inertial Velocity (m/s)
PS1 Ignition	0	451.9
PSOM XL 1 & 2 Ignition	0.42 s	451.9
PSOM XL 3 & 4 Ignition	0.62 s	451.9
PSOM XL 5 & 6 Ignition	25 s	619.7
PSOM XL 1 & 2 Separation	1 min 9 s	1475.2
PSOM XL 3 & 4 Separation	1 min 10 s	1480.1
PSOM XL 5 & 6 Separation	1 min 32 s	2084.2
PS1 Separation	1 min 49 s	2401.5
PS2 Ignition	1 min 50 s	2401.0
Heat Shield Separation	3 min 23 s	3705.4
PS2 Separation	4 min 23 s	5393.2
PS3 Ignition	4 min 24 s	5392.9
PS3 Separation	10 min 38 s	7722.7
PS4 Ignition	10 min 49 s	7720.4
PS4 Engine Cut-off	19 min 24 s	9661.5
CMS-01 Separation	20 min 11 s	9610.9

PSLV-C50/CMS-01 MISSION

PSLV-C50

CMS-01

Third Stage (HPS3)

Height: 3.6m
Diameter: 2m
Propellant: HTPB
Propellant Mass: 7.65t

First Stage

PS1 + PSOM-XL

Payload Fairing

Fourth Stage (PS4)

Height: 3.0m
Diameter: 1.34m
Propellant: MMH & MON_3
Propellant Mass: 2.5t

Second Stage (PS2)

Height: 12.8m
Diameter: 2.8m
Propellant: UH_25 & N_2O_4
Propellant Mass: 41t

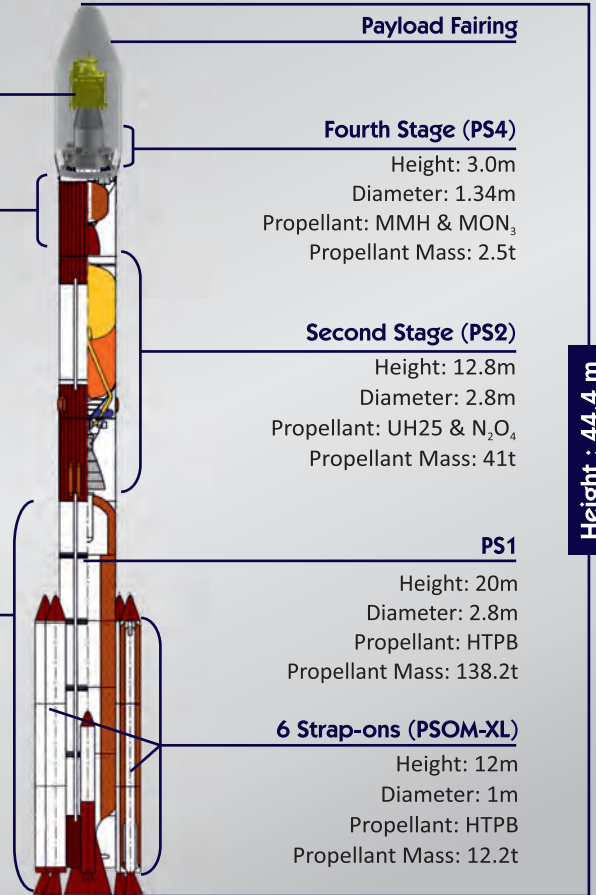
PS1

Height: 20m
Diameter: 2.8m
Propellant: HTPB
Propellant Mass: 138.2t

6 Strap-ons (PSOM-XL)

Height: 12m
Diameter: 1m
Propellant: HTPB
Propellant Mass: 12.2t

Height : 44.4 m



CMS-01

- ◆ CMS-01 is a communication satellite envisaged for providing services in Extended-C Band of the frequency spectrum.
- ◆ The Extended-C band coverage will include Indian mainland, Andaman-Nicobar & Lakshadweep Islands.



CMS-01

Salient Features

Power Generation	1500W
Mission Life	>7 years

GLIMPSES



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