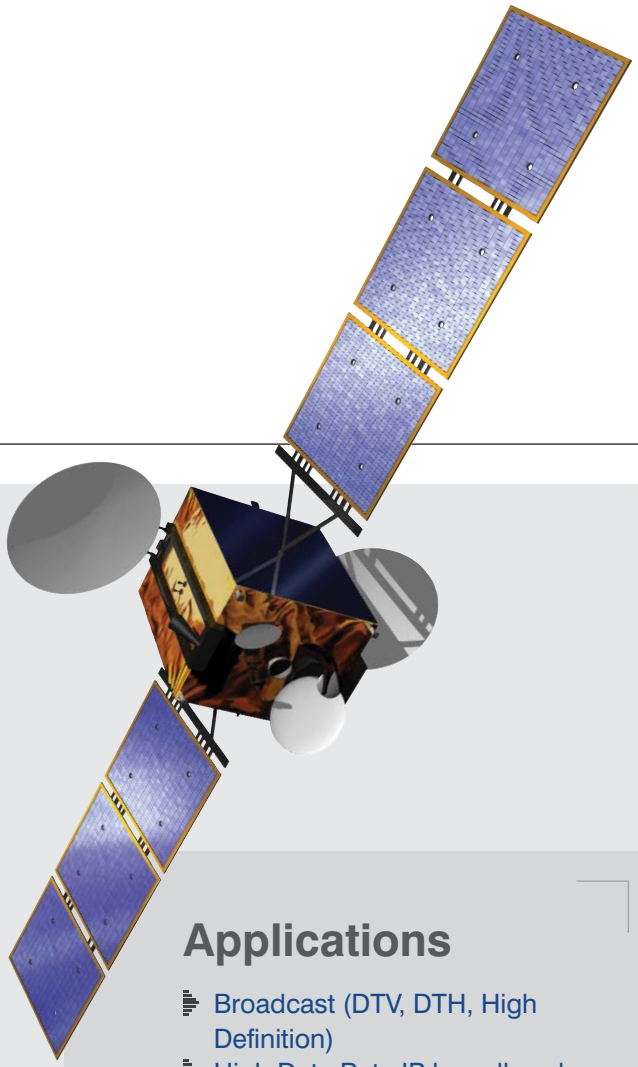
SURREY
SATELLITE TECHNOLOGY

GMP-T



Versatile low cost telecommunications, navigation and exploration

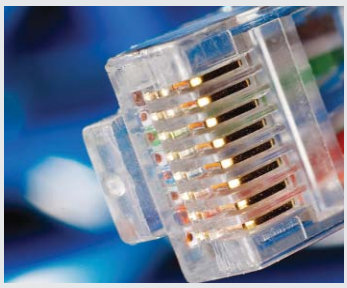
Our core geostationary platform, the GMP-T offers a highly cost-effective solution to your operational needs, combining SST's heritage reliability and rapid delivery with flexible payload capacity and launch opportunities.

The platform has been designed to maximise capacity and performance. It accommodates either industry-standard or custom-built payloads.

The GMP-T is the solution for customers needing a reliable, economical asset for their operational needs, including frequency filing and protection, service start-up, and phased capacity building through progressive deployment.

Applications

- Broadcast (DTV, DTH, High Definition)
- High Data Rate IP broadband
- Security and Defence
- Telemedicine
- Navigation
- Star and Mesh Networks

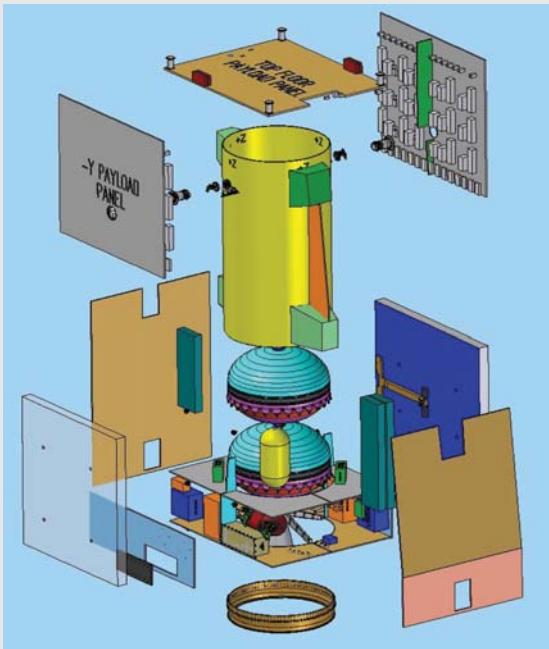


The GMP-T concept:

- Multi-mission system for medium sized payloads
- Access to GEO orbit at a low procurement cost
- Use of proven subsystems / equipment
- Centralised system architecture
- Flexible payload accommodation
- Heritage design from our highly successful GIOVE-A mission

GMP-T Performance

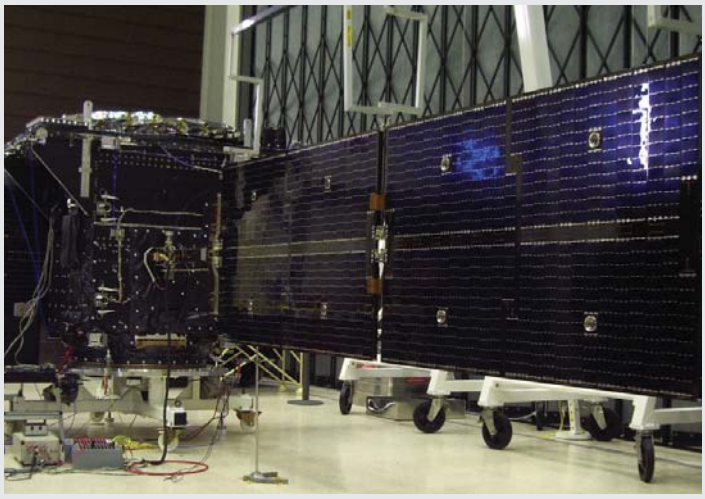
Mission	
Mission lifetime	Up to 15 years
Payload Power	Up to 4.5 kW
Payload Mass	Up to 450 kg
Payload frequency	UHF, L, S, C, X, Ku, Ka
Antennas	Flexible Antenna Configuration (e.g. 2 x 2.6 m side reflectors)
Typical payload capacity	Up to 42 transponders
Pointing Accuracy	0.1 Degree (3σ) all axis
Delivery schedule	24-36 months
Spacecraft characteristics	
Dimensions	■ Stowed: 2.8 x 2.6 x 3.2 m ■ Deployed: 7.7 x 21.6 x 2.6 m
Propulsion	MMH/NTO bi-propellant system
Power	■ Regulated 50 V Payload bus ■ Semi-regulated 28V Platform bus
TTC	■ Ranging ability ■ Encryption capability
Platform Bus	CAN Bus
Availability	99.9% payload availability over mission lifetime
Reliability	■ Fully redundant subsystems ■ Fail operational FDIR ■ On-board autonomy
Spacecraft wet mass	Up to 3400 kg
Launcher compatibility	Zenit 3 SLB, Soyuz 2, Ariane 5, Falcon 9



Complete Capability

SST has built its reputation on an ability to deliver a complete solution to customer requirements through our wide range of subsystems and services:

- Mission design
- Platform manufacture
- Payload integration
- An exclusive hands-on and academic training programme
- Ground segment installation and support
- Mission and spacecraft operations
- Launch procurement & insurance
- Warranty and support services
- Consultancy and case studies



Surrey Satellite Technology Limited

SSTL has launched 34 satellites, accumulating 200 years in-orbit experience. SSTL draws on its world-class expertise in both small satellite platform technology and high and medium resolution imagers. SST provides complete turnkey system solutions: spacecraft, ground station, launch, operations and image data processing.

SST is unique in the space industry; able to design, manufacture and integrate multiple satellites in-house.

Changing the economics of space

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