

NEWSPACE MARKET · COMPANY PROFILE



SSTL (Surrey Satellite Technology)

United Kingdom · founded 1985 · sstl.co.uk

12

PRODUCTS

12

WITH DATASHEETS

newspacemarket.com/companies/sstl-surrey-satellite-technology/

as of 20 August 2026



SSTL (Surrey Satellite Technology)

Surrey Satellite Technology Ltd (SSTL) designs, builds, tests, and operates small satellites. The company was formed in 1985 as a spin-out from the University of Surrey, transferring research into a commercial enterprise. SSTL has built and launched approximately 70 satellites for 22 countries over three decades. The company pioneered the use of commercial off-the-shelf (COTS) components for satellites, demonstrating that relatively small and inexpensive "micro" satellites could be built rapidly for sophisticated missions. SSTL is a wholly owned subsidiary of Airbus since 2009, when Airbus acquired the majority shareholding from the University of Surrey. The company has received several awards, including the Queen's Award for Technological Achievement in 1998, the SSPI Industry Innovators Award in 2000, and an ESA Award for Outstanding Contribution to the Galileo programme in 2008. SSTL also supports the Armed Forces Community.

This profile is generated from the live NewSpace Market catalogue. Specifications are as published by the manufacturer; every product links to a page where a request for quotation reaches the company directly.

Product catalogue



SSTL (SURREY SATELLITE TECHNOLOGY)

Carbonite

Low-cost 1m GSD optical Earth observation satellite providing HD colour video from space.

GSD	1 m
Swath	5.5 km
Spectral bands	Optical (RGB Bayer)
Throughput	>200 images/day depending on GSN
Reference orbit	500 km SSO with 10:30 LTAN
Mission lifetime	5 years
Launch mass	107 kg

[price on request](#) [datasheet](#)



SSTL (SURREY SATELLITE TECHNOLOGY)

DarkCarb

High resolution mid-wave infrared (MWIR) imaging satellite for day and night Earth observation.

GSD	4 m
Swath	4 km
Spectral bands	MWIR (3.7-4.95 µm)
Throughput	~30 GB (SSTL GSN)
Reference orbit	500 km SSO with 10:30 LTAN
Mission lifetime	5 years
Launch mass	130 kg

[price on request](#) [datasheet](#)



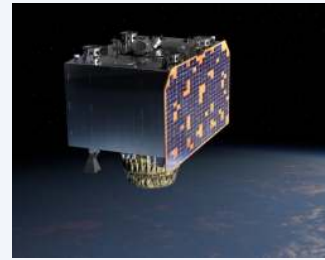
SSTL (SURREY SATELLITE TECHNOLOGY)

Lunar Pathfinder

Lunar communications and navigation relay spacecraft, part of ESA's Moonlight programme, launching 2027.

Orbit	Elliptical Lunar Frozen Orbit (ELFO)
Design life	8 years
Communication channels	2 simultaneous: S-band + UHF
Earth relay	X-band
Hosted payloads	ESA GNSS receiver, NASA laser retro-reflector, ESA radiation monitor
Programme	ESA Moonlight Phase A/B1, SSTL-led
Planned launch	2027

[price on request](#) [datasheet](#)



SSTL (SURREY SATELLITE TECHNOLOGY)

Precision

Very high resolution optical Earth observation satellite for mapping, surveillance and security applications.

GSD	Native 0.6 m PAN at reference orbit; 0.3 m effective pixel sampling (4 half-pixel shifted)
Swath	9.7 km at reference orbit
Spectral bands	PAN 450-700 nm; 6 multispectral bands 420-900 nm, up to 4 simultaneous
Throughput	Typically 60,000 km ² /day in strip-capture mode (~70 min downlink/day)
Imaging modes	Strip, Single Spot, Area, Along-Track Stereo, Across-Track Stereo
Downlink	X-band, 800 Mbps effective payload data rate
On-board storage	900 GB data recorder with full redundancy

[price on request](#) [datasheet](#)



SSTL (SURREY SATELLITE TECHNOLOGY)
SGR-Axio Space GNSS Receiver

Space GNSS receiver for small to larger satellites, successor to SGR-10, with multi-GNSS and dual-frequency options.

Dimensions	160 x 180 x 50 mm
Power at 5V	4 W in baseline mode
Mass	1 kg
Radiation	>=5 kRad (Si), core components tested to 10 krad
Operating temperature	-20 to +50 degC
Non-operating temperature	-30 to +80 degC
Number of channels	24

[price on request](#) [datasheet](#)

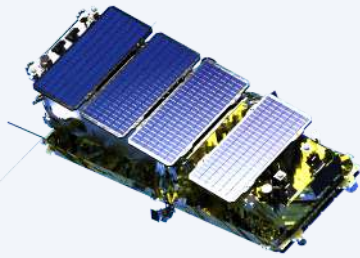


SSTL (SURREY SATELLITE TECHNOLOGY)
Space GNSS Receivers and GNSS Reflectometry Instruments

SSTL offers highly regarded Space GNSS receivers for satellite navigation and position, velocity, and time information, alongside pioneering GNSS Reflectometry instruments for Earth

Dimensions	92 x 87 x 12 mm
Power at 5V	<0.5 W
Mass	90 g
Radiation	>5 kRad (Si), core components tested to 10 krad
Operating temperature	-20 to +50 degC
Non-operating temperature	-30 to +85 degC
Number of channels	24

[price on request](#) [datasheet](#)



SSTL (SURREY SATELLITE TECHNOLOGY)
SSTL Core

The SSTL Core is a centralized and compact avionics solution that integrates SSTL's flight-proven avionics into a single module.

[price on request](#) [datasheet](#)



SSTL (SURREY SATELLITE TECHNOLOGY)
SSTL Earth Observation Spacecraft Series

This product page describes a series of Earth observation spacecraft from SSTL, including Carbonite, DarkCarb, CarbSAR, TrueColour, Precision, and NovaSAR, each designed for differ

Spacecraft	Carbonite
Payload	High Resolution Optical
Spacecraft	DarkCarb
Payload	Medium Wave Infra Red
Spacecraft	CarbSAR
Payload	X-band Radar
Spacecraft	TrueColour

[price on request](#) [datasheet](#)



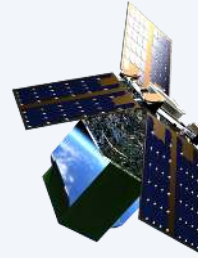
SSTL (SURREY SATELLITE TECHNOLOGY)

SSTL-CUBE

Entry-level 12U cubesat platform designed for satellite build training missions.

Form factor	12U (Cube-Vista E0) / 8U (Cube-Signal comms)
Payload compatibility	Earth imaging, software defined radio, small LEO telecoms, technology demonstration, radia
Programme	Training Satellite Build Programme

[price on request](#) [datasheet](#)



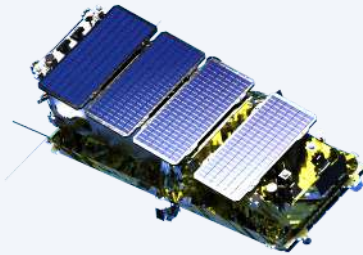
SSTL (SURREY SATELLITE TECHNOLOGY)

SSTL-MICRO

Highly capable microsatellite platform offering strong payload power, mass capacity and redundancy.

Platform mass	From ~30 kg
Payload mass	Up to 65 kg for payload chain
Payload envelope	Max W 45 x L 34 x H 34 cm
Payload power	Up to 63 W OAP at 100% duty cycle, up to 200 W peak
Design life	7 years
Reference design orbit	500-800 km Sun Synchronous
Attitude control	3-axis stabilised; sun sensors knowledge/control <2.5 deg, star tracker knowledge <0.05 de

[price on request](#) [datasheet](#)



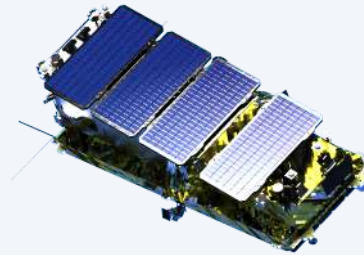
SSTL (SURREY SATELLITE TECHNOLOGY)

SSTL-MINI

Customisable minisatellite platform built on strong flight heritage, supporting very high resolution imagers and SAR payloads.

Payload mass	Up to 200 kg
Payload peak power	Up to 2000 W
Design life	7 years
Orbit	Low Earth Orbit
Payload data input rate	>20 Gbps
X-band downlink	Up to 1 Gbps
Data storage	Up to 3 TByte

[price on request](#) [datasheet](#)



SSTL (SURREY SATELLITE TECHNOLOGY)

SSW-110

The SSW-110 is a reaction wheel specifically designed for Low Earth Orbit (LEO) flight, providing attitude control for satellites.

Product Name	SSW-110
Application	Low Earth Orbit flight wheel

[price on request](#) [datasheet](#)

Contact SSTL (Surrey Satellite Technology)

Open the company profile on NewSpace Market to see full specifications and datasheets, and to send a request for quotation that reaches the manufacturer directly.

<https://newspacemarket.com/companies/sstl-surrey-satellite-technology/>

<https://www.sstl.co.uk>

© 2026 SSTL (Surrey Satellite Technology) — product data. Document compiled by NewSpace Market from the live catalogue on 20 August 2026.
May be shared freely.