



Spacety

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WITH DATASHEETS

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as of 20 August 2026

Spacety

Spacety is a fast-growing commercial space company providing satellite manufacturing and satellite-based services globally. Founded in 2016 and headquartered at Changsha Spacety Co., Ltd. in Changsha, Hunan, China, the company established an international headquarters in Luxembourg in 2019 (Spacety Luxembourg S.A.) to support its global customer base. Spacety has strong in-house capabilities across designing, building, launching, and operating satellites, and has developed a series of cubesat and smallsat products characterized by low cost, high performance, high reliability, and mass-production readiness. As of its most recent missions, Spacety has sent satellites to orbit 21 times, cumulatively launching more than 30 satellites for earth observation, satellite communication, navigation, science, and technology-demonstration missions. Its Satellite-as-a-Service (SataaS) line offers commercial end-to-end services for in-orbit demonstration/verification (IOD/IOV) and satellite hosting on mature, reliable 6U and 12U satellite platforms, covering payload testing, integration, launch, in-orbit operations, and data delivery, with missions possible in as little as six months from contract signing to launch. Spacety is also one of the pioneers of the global commercialization of miniaturized SAR (Synthetic Aperture Radar) remote sensing satellites. It is developing and deploying a dual-band (C-band and X-band) SAR constellation intended to provide real-time, day-and-night, all-weather imagery of every point on Earth, alongside a Satellite Data-as-a-Service (DaaS) offering that distributes optical and SAR imagery for agriculture and forestry, oil and gas, environmental monitoring, water management, disaster response, marine surveillance, and infrastructure monitoring. Notable

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SERVICES

Services

End-to-end services (for SataaS)

Spacety provides a comprehensive package of testing, integration, launch, in-orbit operations, and data delivery for satellite missions.

In-Orbit Demonstration/Verification (IOD/IOV)

Spacety provides services for In-Orbit Demonstration/Verification, a critical step for new technologies to gain space heritage.

Satellite Data-as-a-Service (DaaS)

Spacety provides satellite image data for various applications, including agriculture, environment, and disaster management.

Satellite Hosting

Spacety offers satellite hosting services, allowing customers to share satellite resources and reduce mission costs and development time.

Satellite-as-a-Service (SataaS)

Spacety offers end-to-end services for In-Orbit Demonstration/Verification (IOD/IOV) and satellite hosting, providing shared satellite platforms and flight opportunities.

Product catalogue

SPACETY

Chaohu-1 SAR Satellite

Second-generation commercial C-band SAR satellite, launched February 2022, with improved resolution, swath, downlink, and onboard AI data processing.

SAR band	C-band
Generation	2nd-generation Spacety commercial SAR satellite (after Hisea-1)
Data delivery time	Within 6 hours of acquisition (emergency imaging)
Onboard processing	AI-based in-orbit data processing
Additional capabilities	Continuous multi-target imaging, precise orbit determination
Launch vehicle / site	Wenchang Satellite Launch Center
Mission number	14th Spacety space mission

price on request



SPACETY

Hisea-1 SAR Satellite

World's first commercial C-band smallsat SAR satellite with a phased-array antenna, a 185 kg flat-panel foldable design achieving 1 m resolution.

Mass	185 kg
Stowed thickness	7.5 cm (flat-panel foldable design)
SAR band	C-band
Antenna	Active phased-array antenna
Spotlight mode resolution	1 m
Strip mode resolution	3 m
Scanning mode resolution	20 m

price on request



SPACETY

Hongchu 50kg-Class Satellite Platform

50kg-class space science experiment satellite platform carrying integrated electronic and electric-propulsion payloads for in-orbit thruster verification.

Platform mass class	50 kg-class
Payloads	Integrated electronic payload; xenon-gas Hall effect thruster; krypton-gas Hall effect thr
Xingcheng II specific impulse	up to 1,500 s
In-orbit test scope	~3,000 hours of ignition experiments; 10,000 power-on/off lifetime cycles
Launch vehicle	Zhuque-2 Telemetry-3, Jiuquan Satellite Launch Center

price on request



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SAR Constellation

Spacety is developing and deploying a unique SAR constellation featuring both C-band and X-band radar for real-time, all-weather Earth imagery.

Radar bands	C-band and X-band (dual-band)
Coverage	Global, every point on Earth
Operating conditions	Day and night, all-weather (rain or shine)
Planned constellation size	56 small SAR satellites (TY-MINISAR family)

price on request

[datasheet](#)



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Satellite Data-as-a-Service (DaaS)

Spacety provides satellite image data for various applications, including agriculture, environmental monitoring, disaster management, and infrastructure monitoring.

Data sources	Spacety-owned optical EO satellites, Spacety SAR constellation, plus imagery distributed f
Application sectors	Agriculture & forestry, oil & gas, environment, water management, disaster management, mar

price on request



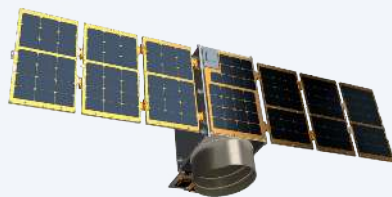
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Satellite-as-a-Service (SataaS)

Shared 6U and 12U smallsat platforms with end-to-end launch, hosting, and data-delivery services for in-orbit demonstration and verification (IOD/IOV).

Platform sizes offered	6U, 12U
Missions completed	20 satellite missions in less than 5 years
Flight cadence	~4 flights per year
Minimum schedule (contract to launch)	as short as 6 months
Payload accommodation lead time	less than 3 months before launch

price on request



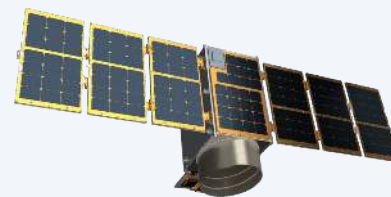
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Spacety Cubesat / Smallsat Platforms

Low-cost, high-performance cubesat and smallsat bus product line, flight-proven over 20+ missions.

Platform sizes offered	6U, 12U cubesat/smallsat buses
Flight heritage	20+ satellite missions flown
Typical mission types	Earth observation, satellite communication, navigation, science, technology demonstration

price on request



SPACETY

TY-33 50kg-Class Satellite Platform

50kg-class scientific research satellite platform with high-precision thermal control, radiation-hardened composite structure, and long-duration power supply.

Platform mass class	50 kg-class
Temperature control accuracy	better than 0.5°C (design value)
Temperature control energy reduction	more than 50%
Structure	Multi-layer high-performance composite for enhanced radiation protection
Power supply	High-power, long-duration supply for continuous high-current payload operation
Onboard software payload	RTOS real-time dual-kernel OS (Rust), BUPT research payload
Launch vehicle	Zhuque-2 Telemetry-3, Jiuquan Satellite Launch Center

price on request



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TY29 (DIZHI-1) Hyperspectral Remote Sensing Satellite

Hyperspectral geological remote sensing satellite (410-2480 nm) developed with China University of Geosciences for mineral, soil and water-pollution analysis.

Spectral range	410 nm - 2,480 nm (hyperspectral)
Detection technology	TDI (Time-Delay Integration) multi-spectral visible-light detection; infrared focal- plane
Lead institution	China University of Geosciences (Wuhan)
Applications	Mineral composition detection, rock type identification, alteration mapping, soil quality
Launch vehicle	Zhuque-2A (ZQ-2A), Dongfeng Commercial Aerospace Innovation Test Zone

price on request



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TY34 (SUSTech-1) Space Science Microsatellite

Microsatellite platform hosting a 12 m ultra-long electric-field antenna and aurora camera for magnetosphere and space-weather research.

Electric-field antenna length	up to 12 m (world-record length for a microsatellite)
Aurora observation duration	9 minutes of continuous observation per polar pass
Payloads	Electric-field measurement payload, aurora camera, Tiange gamma-ray burst detector, CXPD X
Lead institution	Southern University of Science and Technology (SUSTech)
Launch vehicle	Zhuque-2A (ZQ-2A), Dongfeng Commercial Aerospace Innovation Test Zone

price on request



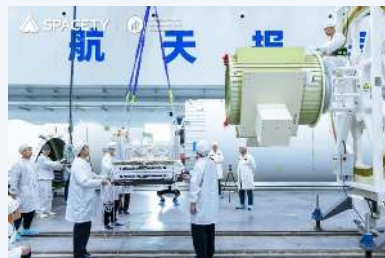
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TY35 (NCHU-1) Multispectral Ecological Monitoring Satellite

Intelligent multispectral ecological-environment monitoring satellite with an off-axis three-mirror camera and high-QE CMOS detector.

Optical system	Off-axis three-mirror optical system
Detector	High-quantum-efficiency, low- noise CMOS detector
Lead institution	Nanchang Hangkong University
Applications	Water pollution detection, water quality analysis, algal bloom monitoring, soil and vegeta
Launch vehicle	Zhuque-2A (ZQ-2A), Dongfeng Commercial Aerospace Innovation Test Zone

price on request



SPACETY

TY42 (Shenqi-2) C-band SAR Satellite

Next-generation lightweight, low-cost C-band SAR satellite with operational InSAR capability for millimeter-level surface deformation monitoring.

SAR band	C-band
Special capability	Operational InSAR (interferometric SAR) for millimeter-level deformation monitoring
Constellation revisit cycle	3-4 days (with Shenqi-1 and Fucheng-1)
Co-developer	Zhangye Constellation Space Technology Co., Ltd.
Launch vehicle	Zhuque-2A (ZQ-2A), Dongfeng Commercial Aerospace Innovation Test Zone

price on request



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TY45/TY46 (BUPT-2/3) Laser-Comm Testbed Satellites

Tiansuan Constellation testbed satellites carrying 200 Gbps laser communication payloads, onboard servers, and electric propulsion for 6G space-network trials.

Laser communication data rate	200 Gbps
Laser communication range	2,000 km
Propulsion	Kaufman electric propulsion; Xingcheng-II argon ion thruster (TY45)
Xingcheng-II specific impulse	1,600 s
Lead institution	Beijing University of Posts and Telecommunications (BUPT)
Constellation	Tiansuan Constellation (2nd batch)
Launch vehicle	Zhuque-2A (ZQ-2A), Dongfeng Commercial Aerospace Innovation Test Zone

price on request

Contact Spacety

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.

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