Comprehensive solution for microsatellite
Introduction

Spacety is one of the earliest privately held commercial space companies in China. With the principle of “let space to be touchable”, Spacety designs and utilizes low cost small satellites in a wide range of commercial sectors.

Founded in 2016 and successfully launched 8 satellites with 10 satellites to be launched in 2018, Spacety provides short cycle, low cost and one-stop satellite solutions for clients including commercial companies, universities and research institutions such as the Chinese Academy of Sciences, China Aerospace Science and Technology Corporation and Tsinghua University.

Spacety is a full member of the International Astronautical Federation (IAF) and Spacety is a pioneer in the number of satellites launched, the amount of fund raised and R&D quality among its competitors in China.
Spacety Team

Yang Feng  
CEO

Ren Weijia  
CTO

Du Zhigui  
VP

Liu Jingyang  
VP

Chen Xianfeng  
VP

The members of our team in Spacety are experienced scientists and engineers in space engineering, having participated in tens of space missions, such as satellite, spacecraft and space station.
Development

2016 / 01
SPACETY FOUNDED

2016 / 10
TY1
First generation of satellite platform (6U)

2016 / 11
FIRST SPACE MISSION
XIAOXIANG-1
CCTV 1 NEWS

2017 / 02
THE SECOND SPACE MISSION
DIDO-2
worked with SpacePharma

2017 / 10
IAF FULL MEMBER

2018 / 01
THE THIRD SPACE MISSION
2 Satellites launched successfully
XIAOXIANG-2
QUANTUTONG-1

2018 / 07
SERIES B

2018 / 10
THE FOURTH SPACE MISSION
4 Satellites launched successfully
XIAOXIANG-1-02
CHANGSHAGAOXIN
XINGHE
TONGCHUAN-1

2016 - 2019
PLAN TO LAUNCH 10 SATELLITES
Comprehensive Solution for Microsatellite

Satellite design

Responsible for satellite and payload design; coordinate resources from different channels; clarify design requirements; help customers find the most suitable solutions.

Satellite manufacturing

Responsible for satellite platform and payload R&D; coordinate R&D resources with clients; complete satellite integration and testing.

Launch service

Responsible for coordination of satellite launch services; provide application services for satellite registration and approval, and use of frequency band; coordinate resources from different parties and ensure successfully launch of satellite.

On-orbit operation

Responsible for satellite on-orbit operation and maintenance; monitor to ensure satellite normal working condition; carry out on-orbit application data processing, modulation and transmission; receive satellite scientific research data and provide them to client.
Spacety devotes to...

**Short-cycle**
less than 1 year
From the demand to the launch, the guarantee is within a year.

**Low-cost**
start from $16000
Customization from a single PCB to a whole satellite.

**One-stop**
All inclusive services
Package price includes all the services (design, manufacture, launch and operation).
SPACETY currently has two generations of satellite platforms, which can provide for the payloads sufficient energy, good thermal environment, high attitude pointing accuracy, reliable communication link, and high speed data downlink.
TY I / 6U

- < 0.1° Pointing accuracy
- 4U Payload volume
- 10-20W Average available power for payloads
- 4-50Mbps X-band

TY II / 27U

- < 0.1° Pointing accuracy
- 20U Payload volume
- 10-50W Average available power for payloads
- 100Mbps X-band
RS Technical Specification

- **Satellite Mass**: <10kg
- **Operation Lifetime**: 3 years

### Orbit
- **Type of Orbit**: Circular sun-synchronous
- **Typical Altitude**: 500-600km

### Payload Subsystem

<table>
<thead>
<tr>
<th>Linear imager</th>
<th>COOK-TMA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Camera Type</strong></td>
<td><strong>Telescope Design</strong></td>
</tr>
<tr>
<td><strong>CMOS</strong></td>
<td><strong>350mm</strong></td>
</tr>
<tr>
<td><strong>Type of Sensor</strong></td>
<td><strong>Focal Distance</strong></td>
</tr>
<tr>
<td><strong>7.2m</strong></td>
<td><strong>3 (RGB)</strong></td>
</tr>
<tr>
<td><strong>Resolution at Nadir (color)</strong></td>
<td><strong>Spectral Channels</strong></td>
</tr>
<tr>
<td><strong>0.45– 0.78μm</strong></td>
<td><strong>5μm</strong></td>
</tr>
<tr>
<td><strong>Spectral Band</strong></td>
<td><strong>Size of Sensor Element</strong></td>
</tr>
<tr>
<td><strong>80km</strong></td>
<td><strong>12Bit</strong></td>
</tr>
<tr>
<td><strong>Swath</strong></td>
<td><strong>Data Quantization</strong></td>
</tr>
</tbody>
</table>
### Launched Mission

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
<th>Location</th>
<th>Mission Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016.11</td>
<td>First Space Mission</td>
<td>Jiuquan, China</td>
<td>XIAOXIANG-1</td>
</tr>
<tr>
<td>2017.02</td>
<td>Second Space Mission</td>
<td>Sriharikota, India</td>
<td>DIDO-2</td>
</tr>
<tr>
<td>2018.01</td>
<td>Third Space Mission</td>
<td>Jiuquan, China</td>
<td>XIAOXIANG-2</td>
</tr>
</tbody>
</table>

2018.01 QUANTUTONG-1
Launched Mission

THE FOURTH SPACE MISSION
Jiuquan, China

2018.10

XIAOXIANG-1-02

2018.10

CHANGSHAGAOXIN

2018.10

XINGHE

2018.10

TONGCHUAN-1
Laser Communication Aviation Internet Constellation

288 satellites with a height of 1000 km form a high-angle LEO orbit constellation. The constellation has 12 orbital surfaces, and each orbital surface has 24 satellite. It could achieve 100% global coverage, offering broadband access for any flight any location.
GRID is an astrophysics constellation with 24 satellites. GRID project is a cooperation between the Tsinghua Centre for Astrophysics (THCA) and SPACETY. The main scientific objective is to identify and locate the electromagnetic counterparts of gravitational wave bursts detected by LIGO.
Cooperation

Investors

Institutions

IAF
Member of The International Astronautical Federation

China Academy of Launch Vehicle Technology
Reached strategic cooperation agreement on satellite launch service

Crowd Entrepreneurship and Innovation Demonstration Base
Major project

Hunan Military and Civil Integration Development
Model enterprise

Tsinghua University Center for Astrophysics
Developed strategic cooperation relationship
Awards
bd@spacety.cn
010-82581988
0731-88712659

Huida Road No. 68, High-tech Development Zone, Changsha, China 410000
No.9 Dengzhuang South Road ,Haidian District, Beijing, China1 00089