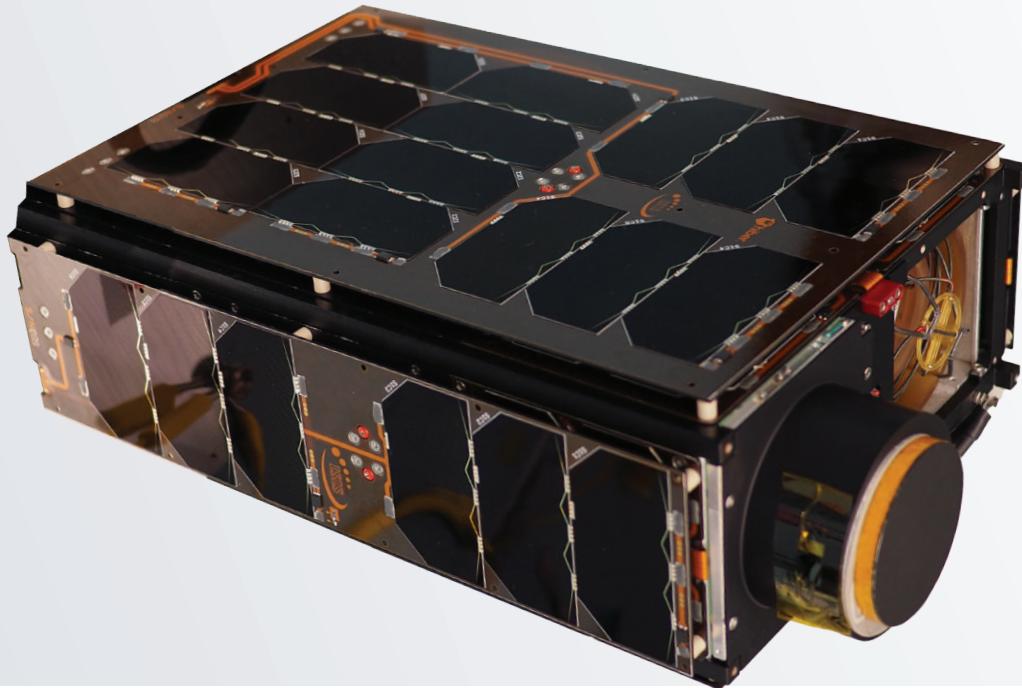


# ISIS 6U CubeSat

Modular platform for turn-key solutions

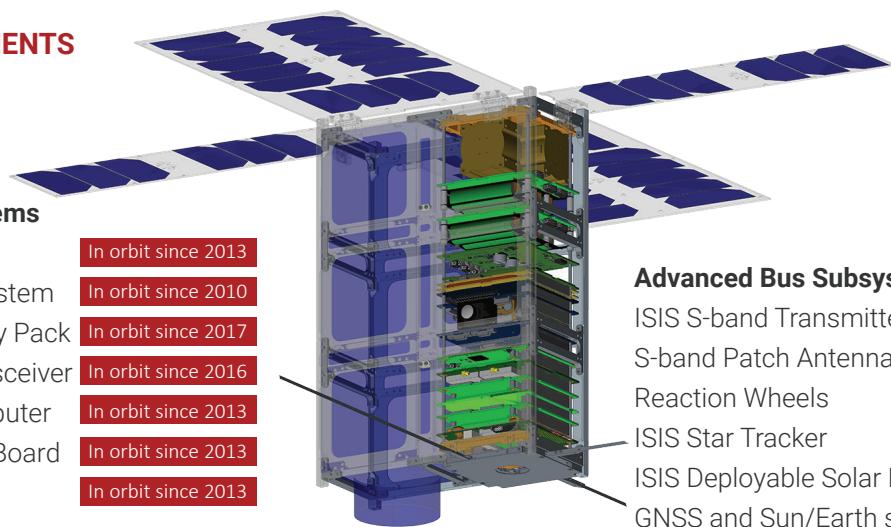


## DESCRIPTION

The ISIS 6U CubeSat bus is a flight proven, cost-effective modular platform that can be utilized for fast turn-around nanosatellite missions for a wide range of applications, from satellite based AIS, Earth Observation and astronomy to microgravity research missions.

At ISIS - Innovative Solutions In Space we fully understand that your mission is one-of-a-kind with specific and unique needs and requirements. Therefore, based on our experience with various unique missions, we have developed a 6U CubeSat platform with the right balance between performance, flexibility, payload compatibility and of course reliability and cost. With our team building the platform you need, your team can focus on the payload and mission preparation, reducing your overall time-to-orbit significantly.

## 6U BUS COMPONENTS



### Basic Bus Subsystems

ISIS 6U Structure	In orbit since 2013
ISIS Antenna Subsystem	In orbit since 2010
ISIS EPS and Battery Pack	In orbit since 2017
ISIS VHF/UHF Transceiver	In orbit since 2016
ISIS On Board Computer	In orbit since 2013
ISIS Magnetorquer Board	In orbit since 2013
ISIS Solar Panels	In orbit since 2013

### Advanced Bus Subsystems

ISIS S-band Transmitter	In orbit since 2017
S-band Patch Antenna	In orbit since 2017
Reaction Wheels	In orbit since 2014
ISIS Star Tracker	In orbit since 2018
ISIS Deployable Solar Panels	In orbit since 2013
GNSS and Sun/Earth sensors	In orbit since 2014

### Software

ISIS Subsystems Interface Library	In orbit since 2013
ISIS Mission Support Library	In orbit since 2013
Flight software upon request	

## PAYOUT AVAILABLE RESOURCES

	Basic bus	Advanced bus
<b>MECHANICAL</b>		
Volume available:	3U	2.5U
Mass available:	6kg	5.5kg
<b>ADCS</b>		
Pointing accuracy:	3°	0.1°
<b>CDHS</b>		
Data bus:	I <sup>2</sup> C / SPI / USART / UART	I <sup>2</sup> C / CAN / SPI / USART / UART
Storage:	Up to 64GB	Up to 64GB
<b>POWER</b>		
Average payload power:	10 W	from 20 W
Power bus:	3V3 / 5V / 16V (2A max)	3V3 / 5V / 16V (2A max)
<b>COMMUNICATION</b>		
TT&C (VHF/UHF)	9.6 kbps	9.6 kbps
Payload data downlink (S-band)	-	3.4 Mbps

## TURN-KEY SOLUTIONS

Are you rather looking for a fully integrated turn-key satellite solution? Innovative Solutions In Space can offer you such a solution based on a 6U CubeSat platform for satellite-based AIS ship tracking, Earth observation or IoT/M2M applications.

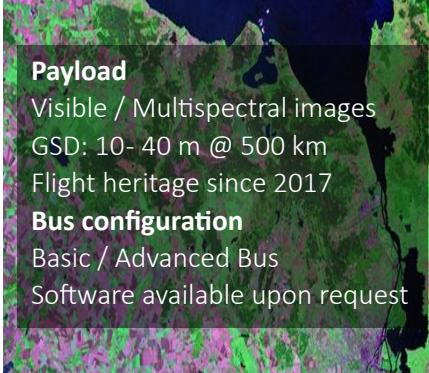
**Ship tracking**  **TRITON**



**Payload**  
ISIS AIS Receiver  
Low power consumption < 2W  
Flight heritage since 2013

**Bus configuration**  
Basic Bus  
Software available upon request

**Earth observation**  **GAIA**



**Payload**  
Visible / Multispectral images  
GSD: 10- 40 m @ 500 km  
Flight heritage since 2017

**Bus configuration**  
Basic / Advanced Bus  
Software available upon request

**IoT / M2M**  **HERMES**



**Payload**  
Configurable receiver  
High power capabilities  
Enabling on-board processing

**Bus configuration**  
Basic Bus / Advanced Bus  
Software available upon request

## ADDITIONAL SERVICES



### LAUNCH SERVICES

Fully compatible with  
ISIS Deployers.  
[www.isilaunch.com](http://www.isilaunch.com)



### GROUND STATIONS

Fully compatible with  
ISIS VHF/UHF/S-Band  
Ground Segment



### OPERATIONS

Satellite commissioning  
and operations support



### TRAINING

CubeSat mission  
design, AIV and  
operations



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