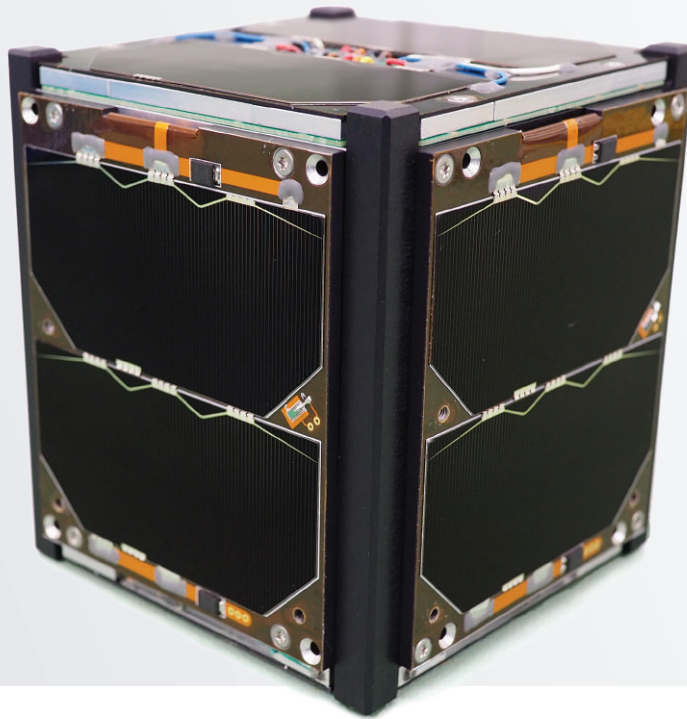


# ISIS 1U CubeSat

Standard platform for turn-key solutions



## DESCRIPTION

The ISIS 1U CubeSat has been designed to provide a complete solution to teams looking for affordable small satellite technologies. It is delivered together with its ground support equipments and a full software environment to program and operate the satellite.

Such solution can be used in the scope of educational programs and missions with light requirements.

## 1U COMPONENTS

### Basic Bus Subsystems

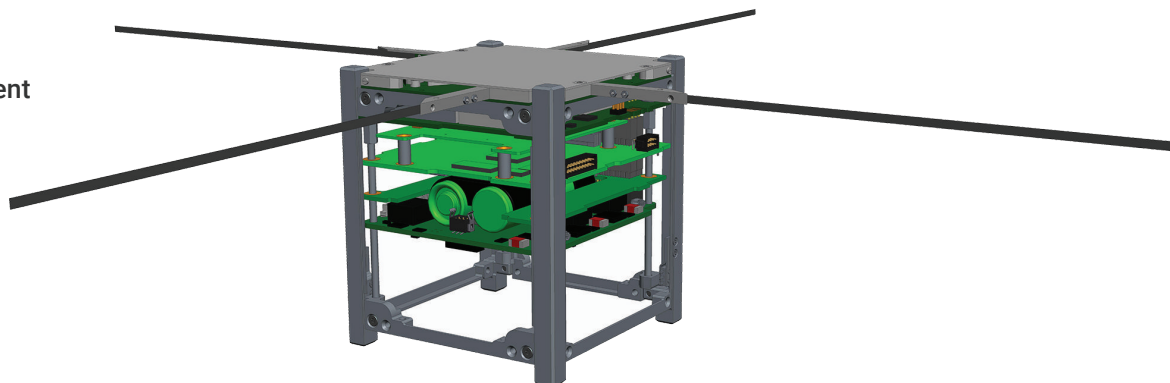
ISIS 1U Structure	In orbit since 2013
ISIS Antenna Subsystem	In orbit since 2010
ISIS EPS and Battery Pack	In orbit since 2017
ISIS VHF/UHF Transceiver	In orbit since 2016
ISIS On Board Computer	In orbit since 2013
ISIS Solar Panels	In orbit since 2017

### Software

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

### Ground Support Equipment

Mechanical GSE  
Electrical GSE  
Radio GSE



## APPLICATIONS

### CAPACITY BUILDING/EDUCATION

The ISIS 1U CubeSat offers by default a set of functionalities and sensors.

**Transponder** - Live re-transmission of voice messages

**Radio** - Receive, store and send data back to Earth

**Magnetometers** - Measure the magnetic environment in space

**Gyroscope/Photodiodes** - Measure the attitude of the satellite

**Termo-resistors** - Measure the temperature across the satellite

### PAYLOAD DEVELOPMENT

CubeSat developers can mechanically and electrically interface and test the platform with third-party or custom-made payloads such as a small camera or a radiation monitoring sensor.

## PAYLOAD AVAILABLE RESOURCES

### MECHANICAL

Volume available

0.4 U

Mass available

700 g

### ADCS

Capability

Detumbling

### CDHS

Data bus

I<sup>2</sup>C / RS-232

Storage

2 x 2 GB

### POWER

Average payload power

400 mW

Power bus

3.3 V / 5 V (2A max)

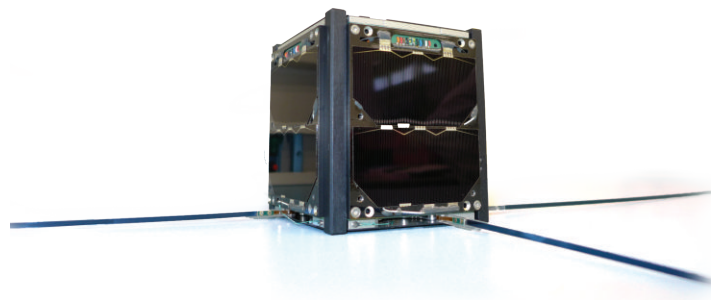
### COMMUNICATION

Uplink

9.6 kbps (VHF)

Downlink

9.6 kbps (UHF)



## ADDITIONAL SERVICES



### LAUNCH SERVICES

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



### GROUND STATIONS

Fully compatible with  
ISIS VHF/UHF Ground  
Segment



### OPERATIONS

Satellite commissioning  
and operations support



### TRAINING

CubeSat mission  
design, AIV and  
operations

This document is subject to change without notice. Latest information is on [www.isispace.nl](http://www.isispace.nl)



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