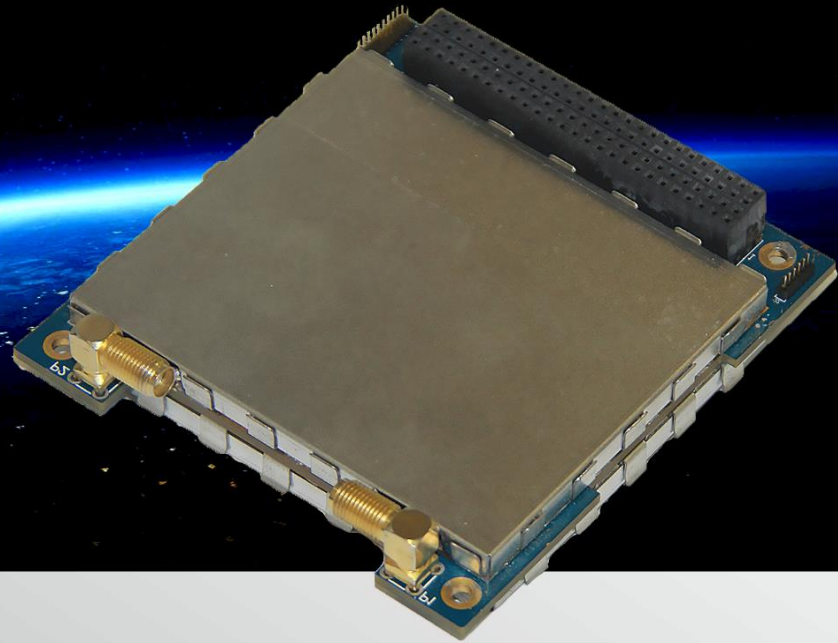


GNSS RECEIVER



DESCRIPTION

The Global Positioning System (GPS) is a navigation system using satellites, a receiver and algorithms to synchronize location, velocity and time data for air, sea and land travel. GPS is made up of three different components, called segments, that work together to provide location information:

- 1.Space (Satellites)
- 2.Ground control
- 3.User equipment

GPS works through a technique called trilateration. Used to calculate location, velocity and elevation, trilateration collects signals from satellites to output location information.

KEY HIGHLIGHT

- Dual Channel with two Receiving Antennas
- 24 joint Channels to receive GPS and GLONASS signals
- Small size and low mass
- Simple to interface
- Provides precise PPS output



PERFORMANCE

The GPS-24 functions with the selectable update rate of 1Hz to 50 Hz has acceleration tolerance of 45g

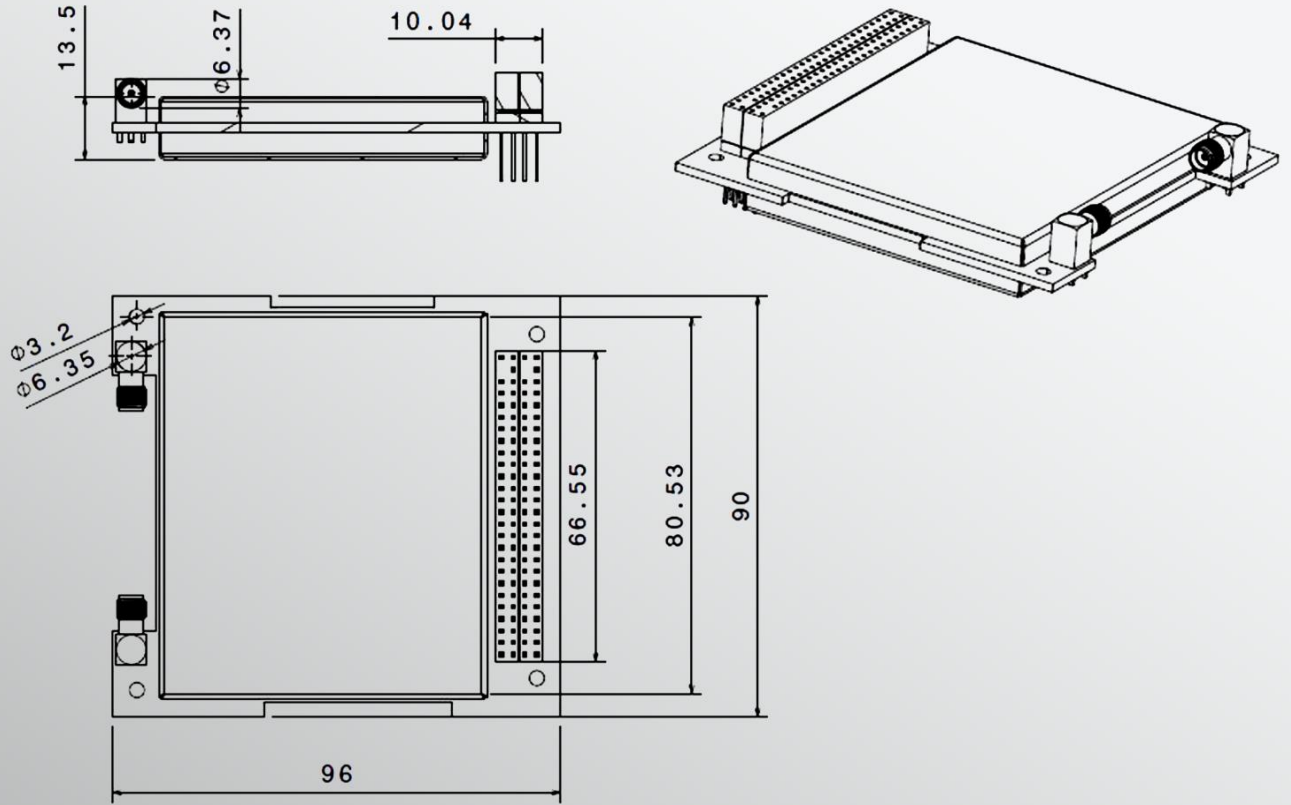


APPLICATIONS

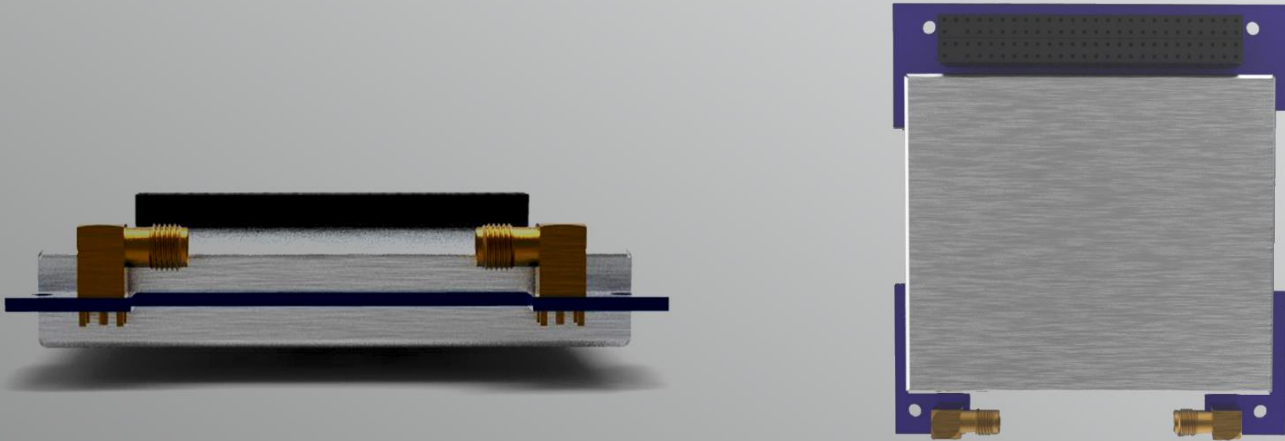
Accurate determination of orbital position and Accurate knowledge of time, Orbitmaneuvers Time and/or position stamping of payload data



DRAWING



MODEL



www.Easts-Space.com
info@easts-space

TECHNICAL SPECIFICATION

Functional and Performance Characteristics

Type	Qubesat GPS		
Tracking	24 joint Channels to receive GPS and GLONASS signals		
Active Antenna Support	✓		
Update Rate	10 Hz		
Launch Time	Cold Lock Time	< 80 sec	
Channels	Dual Channel with two Receiving Antennas		
Accuracy	Velocity Accuracy	<0.5 m/s	
	Position Accuracy	<10 m	
	Time Accuracy	<1 μ s	

Environmental and Mechanical Characteristics

Storage Temperature Range	-40 °C to +80°C		
Operating Temperature Range	-30 °C to +65°C		
Mass	<120gr		
Dimensions	95.9 mm x 90.1 mm x 23.3 mm		
Radiation Tolerance	>10 Krad		

Electrical Characteristics

Supply Voltage	8 v		
Power Consumption	2.5 W		
Consumption Current	280 mA		

TEST SPECIFICATION

Qualification and Acceptance Testing (ECSS-E10-03A)

Test Name	QT	AT
Functional	✓	✓
Random Vibration	✓	✓
Sinusoidal Vibration	✓	
Mechanical Shock	✓	
Thermal Cycling	✓	✓
Thermal Vacuum	✓	✓

