

U R Rao Satellite Centre Indian Space Research Organisation



12-Channel GPS Receiver (Satellite Positioning System)

U R Rao Satellite Centre (URSC) of Indian Space Research Organisation (ISRO) has developed GPS-L1 band receiver to provide an accurate orbit determination of low earth orbit satellites. The system is based on an anti-fuse FPGA and a 32-bit floating point processor platform.



Salient Features

- + Built-in storage memory, to record, store and playback 3.5 hours of measurement data.
- ★ Self-recovery capability to recover from an upset as well as integrity assured navigation solution.
- Reliable communication/control interface based on MIL-STD-1553B protocol.

Major Specifications

Parameter	Specification
System	GPS Receiver
Frequency band	GPS-L1
No. of Channels	12
Dynamics	8Km/s
Position Accuracy	10m
Velocity Accuracy	10cm/s
Operating Voltage	5V
System Interface	MIL-STD-1553B
Size	190 X 209x 43 mm ³
Mass	1.0 kg
Power	10.0W

Technology Transfer

URSC/ISRO offers to transfer this technology of 12-Channel GPS Receiver to industries in India with adequate experience and facilities. Industries interested in obtaining knowhow may write giving details of their present activities, infrastructure and facilities.



13