

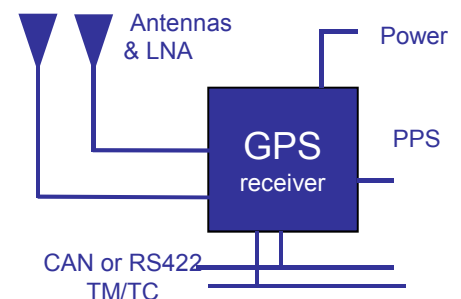
Space GNSS Receivers

Parametric Comparison

Parameter \ Model	SGR-05U ¹	SGR-05P	SGR-Ligo	SGR-07	SGR-10 ¹	SGR-Axio
Channels (GPS L1)	12	12	24+	12	24	24
Antennas	1	1	1 or 2	1	2	1 to 4
Pos, Vel, Time	✓	✓	✓	✓	✓	✓
OEM Card / Boxed	OEM	OEM	OEM	Boxed	Boxed	Boxed
Other Signal Opts ²	-	-	Gl/Ga	-	-	Gl/Ga/DF
Power Supply	5V Reg	3.3V Reg	3.3 or 5V	18-38V	18-38V	18-38V
Approx Power	0.8 W	1 W	0.5 W	1.6 W	5 W	4 W
Latch-up switch	-	-	✓	✓	✓	✓
TMR Memory	-	✓	✓	✓	-	✓
NVRAM Initialisation	-	✓	✓	✓	-	✓
Size (mm)	70 x 45 x 10	105 x 65 x 12	92 x 87 x 12 ⁴	144 x 76 x 47	195 x 162 x 48	195 x 162 x 48
Mass (g)	45	55	90	450	950	1000
UART (TTL / RS422)	TTL	TTL	TTL/I ² C	422	422	422
CAN	-	✓ (TTL)	✓	✓	✓	✓
Custom EVT & PA ³	Reduced	✓	✓	✓	✓	✓
Radiation (krad Si)	11	11	>5	~5	10	>5
First flight	2007	2009	2019	2009	1998	2014, 2018 ⁵

APPLICATIONS

- Position, Velocity, Time for Orbital Missions
- Accurate Timing and Synchronisation
- Multi-antenna for visibility & attitude
- Boxed units for easy integration
- OEM models for efficient integration
- University- and Professional-grade units



¹ No new production of units beyond current batch

² Optional signals: Gl = Glonass, Ga = Galileo, DF = Dual freq (L1, L2C)

³ Typical test levels: Vibration 12 g rms, Thermal -20 to +50 degrees; test plan can be customised

⁴ SGR-Ligo form factor Cubesat compatible

⁵ First flown as SGR-ReSI on TDS-1 and NASA CYGNSS, repacked for platforms as SGR-Axio

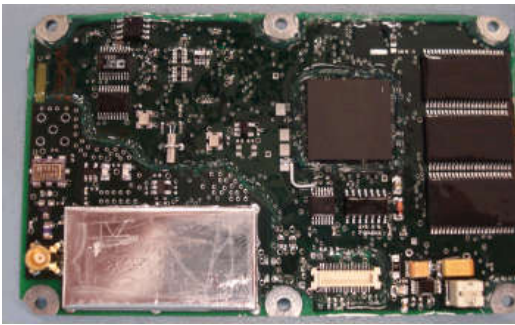
Space GNSS Receiver



SGR-05U



SGR-07



SGR-05P



SGR-10



SGR-Ligo



SGR-Axio

See Datasheets for more details
SSTL is ISO9001/14001:2015 certified
All work overseen by ESA-certified assembly staff

Standard Delivery Service Includes

- Acceptance Testing
- Vibration Test
- Thermal Cycling
- User Manual
- Test Results
- Export License and Shipping
- Thermal Vacuum Testing available
- Units can be supplied prior to environmental testing