

# ORIGINAL EQUIPMENT MANUFACTURERS BOARD





- DUAL FREQUENCY, GPS + GLONASS CAPABILITY
- PRECISE DYNAMIC POSITIONING
- Up to 100Hz update rate
- SCALABLE SOLUTION VIA SOFTWARE OPTION AUTHORIZATION (OAF)
- LOW 1.5 WATT POWER DRAW

Topcon positioning technology allows integrators to take full advantage of state-of-the-art GPS and GPS+GLONASS signal processing. With update rates of up to 100hz and centimeter level accuracy, the GRS-1 is the solution for many challenging, high dynamic tracking and positioning problems.

Tracking Features	
Channel	72
Signal	L1/L2/L2C C/A P(Y) GPS+GLONASS, SBAS
Cold Start	< 60sec
Warm Start	< 10 sec
Reacquisition	< 1sec
Physical	
Core	Paradigm G3
CPU	MPC5200
ASIC Clock Speed	50MHz
Board Size	72.6 x 62.51 x 9 mm
Accuracy	
Code phase precision	10cm
Carrier phase precision	0.1mm
Update Rate	100MHz
Memory	
Memory	None
I/O	
Serial Port	4 port
Serial Speed (Max)	460800bps
PPS	1 Port
Event	1 Port
Power	
Input Power	3.3 VDC (+5%-3%)
Power consumption	1.5W typical, 2.0W max
Environment	
Operating Temp	-40°C to +75°C
Storage Temp	-40°C to +75°C
Other	
RAM size	8192KB
Antenna output voltage	5.0 VDC
Back up battery	External Battery



### **GRS-1 Board**

Powered by our Paradigm G3 GPS chip, the economical GRS-1 board provides 72 channel GPS L1/L2/L2C + GLONASS dual frequency technology with up to 100Hz data and position update capability. And with Topcon's exclusive software option authorization capability (OAF), you only pay for the capability you need today...easily upgrade as your requirements change in the future.

## **Other OEM Boards**

#### Euro 160T

Standard 160mm Eurocard format delivers GPS L1/L2, and GLONASS tracking and all of Topcon's exclusive and advanced GPS+ features.

#### Euro 112T

Small Eurocard format (112mm), provides GPS L1/L2, and GLONASS tracking, reduced power consumption, and many of Topcon's exclusive and advanced GPS+ features.

#### G3-160T

Standard 160mm Eurocard format is the world's first to track signals from all three satellite positioning system -- GPS-GLONASS-Galileo. GPS signal tracking includes L2C and L5.



Topcon Positioning Systems, Inc. 925.245.8300 www.topconsolutions.com

\* With proper 50 ohm antenna

\*\* For Technical Drawings and additional Technical Specifications go to: www.topconsolutions.com