ANELLO
The Creator Of The SiPhOG™

ANELLO GNSS/INS EVALUATION KIT

ANELLO GNSS/INS EVK

The ANELLO GNSS/INS EVALUATION KIT is an independent, reliable and accurate navigation solution for an autonomous world.

Powered by ANELLO's unique optical gyroscope technology, the ANELLO Global Navigation Satellite System (GNSS) / Inertial Navigation System (INS) Evaluation Kit (EVK) can maintain centimeter accuracy in conditions where far more expensive reference grade systems degrade, including extended full GNSS loss operation. In addition, the system is also accurate over wide temperature ranges and under extreme vibration.

The Evaluation Kit contains everything needed to get started including the ANELLO GNSS/INS, two dual-band GNSS antennae, and cables.

ANELLO PYTHON PROGRAM

ANELLO provides an open-source Python tool for configuration, logging, NTRIP relay, and plotting data.

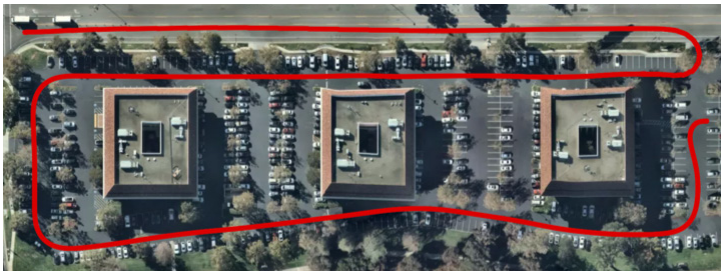
Fig. 1: ANELLO GNSS/INS EVK Data on Map

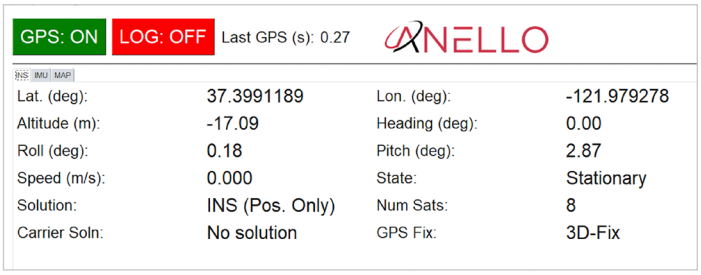

Fig. 2: Python Tool Monitor

FEATURES

Reference-grade 200Hz Position, Velocity, and Attitude	GPS, Glonass, Galileo, Beidou (Compass), QZSS
< 0.5°/Hr Un-aided Heading Drift	Reliable Autonomous Land Vehicles, Advanced ADAS Systems
Accurate in severe multipath and GNSS denied	Precise Heavy Equipment and Machine Control
Dual 184-channel five constellation dual-band GNSS receivers	Convenient and Fast Setup

ANELLO Photonics - 4699 Old Ironsides Drive, Ste 150, Santa Clara, CA 95054
For more information contact info@anellophotonics.com or visit www.anellophotonics.com

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TECHNICAL SPECIFICATIONS (COMMERCIAL)

Solution Accuracy[1]		
Horizontal Position Accuracy		
SPS	1.2 m cep	
RTK[2]	0.02 m cep	
60s GNSS Outage[3]	< 1.0 m rms	
Velocity Accuracy	0.01 m/s rms	
Heading Accuracy[4]	0.2° rms	
Attitude Accuracy (Roll/Pitch)	0.02° rms	
IMU Performance		
Optical Gyroscope (Heading/Z-Axis)		
Range	200°/s	
Bias Instability	< 0.5°/hr	
Angle Random Walk	< 0.05°/√hr	
MEMS IMU (6-Axis)	Accelerometer	Gyroscope
Range	8g	up to 400°/s
Bias Instability	20ug	1.5°/hr
Random Walk	0.03m/s/√hr	0.3°/√hr
GNSS & Timing		
Signal Bands	L1 C/A, L2C, L1OF, L2OF, B1I, B2I, E1, E5b and SBAS	
RTK Initialization Time	< 1 min, using RTCM3 corrections	
Output Data Rate	200 Hz	
Environment		
Operating Temperature	-40 to +70°C	
Vibration	IEC 60068-2-6 (5g)	
Shock Survival	MIL-STD-810G (40g)	
Electrical		
Input Voltage	8 to 30 VDC	
Power Consumption	4 W typical	
Digital Interface	Ethernet, USB/Serial	
Physical		
Size	4.2" x 1.5" x 5.0"	
Weight	1 lbs.	

Notes:

1. *After Initialization*
2. *< 20km Baseline from Base*
3. *Additional Drift Post NSS Loss, with Wheel Speed Aiding*
4. *Properly Installed Antennae*

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