

RacePro

RacePro is the newest telemetry system developed by Spilba to monitor real time any motorsport event. It is a bidirectional communications system that links tower race control with up to 100 vehicles in any race track.

Race authorities can monitor speed, acceleration, position gear and RPM in any circuit point. There is no need of any special installation in the race track or distance limitations. Any event in the track can be analyze in detail and supervision of the race becomes simpler.

The full color 5" display shows all info Race Control can provide: lap time, partial times, position, time difference, race flags, etc.

RacePro is of the utmost importance for any pilot to improve performance and define race strategies.



GNSS Specifications

Systems supported	GPS (L1) GLONASS (L1) Galileo (E1) Beidou (B1)
Data rate	10Hz
Accuracy (CEP50*)	<1.5m
Sensitivity	Acquisition -148 dbm Navigation -163 dbm tracking -165 dbm
Channels	99 searching 33 Simultaneous tracking

Note: *CEP = Probable error circle 50 indicates that a 50 % probability of an uncertainty is lower than specify.

Accelerometer specifications	
Axis	X,Y,Z
Maximum acquisition rate	1000Samples/sec
Range	±4G
Resolution	0.0001G

Gyro specifications	
Axis	X,Y,Z
Maximum acquisition rate	8000Samples/sec
Range	±250°/s
Resolution	0.01°/s

Memory modules specifications	
File system	FAT32
Approx. File size	3.2Mb/hour

Electric specifications	
Power supply	+ 9-24 VDC
Current consumption	130mA typ.
Protections	Over voltage, voltage inversion, overcurrent
Operating temperatures	-25°C+70°C

GNSS Antenna	
Frequency	1575MHz/1602MHz
Total Gain (including LNA)	26 ± 3dBic @ Zenith @ 1575.42MHz 27 ± 3dBic @ Zenith @ 1602MHz
Nominal Impedance	50 Ω 66.52+j3.85 Ω @ 1575MHz 46.77+j0.98 Ω @ 1602MH
VSWR	2.6 dB maximum
Mounting	Magnetic Base
Protection	IP67
Connector	SMA male
Operating temperatura	-40°C a + 85°C

Wireless Specifications

RF data Rate	10Kbps a 200Kbps
Frequency of operation	ISM band (868/900 MHz)
Range Indoor	600 m
Range Outdoor	15km
Sensitivity	-105dBm
Max number of vehicles	100

