

P12
GPS
DEVICE









Sviluppo Progettazione Elettroniche Internazionali

APPLICATIONS:

Environmental Monitoring (Voice), Position Tracking (GPS, Data Call)

FEATURES:

I LAI OIILO.	
Connectivity	GSM 3-band. GPRS.
Positioning	GPS (also mobile cell information available)
Microphones	N° 2. Ø 2.5 mm. Cable len: 1,5 m (more on request).
	9 selectable volume levels
	7 selectable pre-amplification levels
Movement sensor	9 selectable sensitivity levels
Digital Input	N° 2. For external device.
	Can work combined with movement sensor.
Digital Output	N° 1. For external contact
Audio Output	N° 1. For redirect input audio on an external device
Internal memory size	2 Mbit. Up to 113500 log positions.
Dimensions and weight	67(W) x 46(P) x 16(H) [mm], 120 g (4.2 Oz.) approx.
Supply Voltage	3,6Vdc with battery pack and 8 Vdc - 40 Vdc from with external adaptor from car harnes
Supply Current	Full mode 50,0 mA avg
(at 12 Vdc)	Full mode and connect 100,0 mA avg
	Sleep mode 1,7 mA
	Anti detection mode 1,7 mA
Firmware Remote Upgrade	Available
Operating temperature	-20°C to 60°C
Enclosure	Aluminium, passivated.

Tracking GPS mod. P-10 is a highly integrated device dedicated to the environmental silent monitoring and GPS tracking. Fed to batteries it can catch up an autonomy of beyond three months maintaining a degree of reliability to the maximum levels. Planned taking advantage itself of the last technologies, the mod. does not fear comparison with similar equipment, thanks to its smart dimensions and high sensibility. The voice section has two separate fully programmable audio path in terms of volume using SMS or simply by a DTMF keypad (for example you may use the same telephone making the call). It may be battery operated or directly connected to the same vehicle supply.

The P-10 operations may be triggered by the operator (SMS/DTMF) or automatically when any movement has been detected. The device is designed to operate with two external microphones (Ø 2.5 mm) connected by a very resistant cable (len: 1.5 m or more on request). The GSM and GPS antennas are connected via SMA RF connectors.

The P-10 can store up to 113500 GPS log positions in internal memory.

It's possible to download all the stored position with a GSM data call starting from a specified date/hour.

Digital input and output make possible to integrate the mod. P-10 with external devices.

Audio Output offers the possibility to command an external device with DTMF command.

Finally, the enclosure – made in aluminium, passivated – offers adequate protection against dust, water and withstands to most of other environmental conditions.

GSM Specification:

GSW Specification:	
Features:	The GSM section performs a set of telecom services (TS) according to GSM standard
	phase 2+, ETSI and ITU-T. it is compliant with GSM phase 2/2+
	The functions of the module are implemented by issuing Hayes AT commands as detailed
	in GSM specs level 07.05/07.07
	SMS are sent and received accordingly to MO/MT, GSM07.05, PDU and text mode.
	Data is transferred at 9600 bps (CSD)
	GPRS is a multislot Class 10, mobile station protocol class B.
	Automatic hand-over between GSM 900 and GSM 1900
Frequency Range:	GSM 900, E-GSM 900 and GSM 1800
Receiver Sensivity:	> -105dB
Output Power	Class 4: 2W per GSM 900
(at the antenna connector):	Class 2: 1W per GSM 1800
GSM antenna	1/4λ 3-band 2db/l coaxial cable RG174 with SMA/m
GPS Specification:	
GPS receiver	SiRFstarIII™ Supports 20-channel GPS -159 dBm
GPS precision	Position < 10 m, 2D RMS, 3D < 5m
Speed precision	Better than 0,06m/s
GPS position elaboration	Every second, with at least 3 satellites
Start time	Without satellite map in memory 45 sec.
	With satellite map in memory < 10 sec.
	With satellite map in memory and GPS in stand-by < 5 sec.
	Reacquiring of satellite map < 0.5 sec.
Working temperature	-20°C to 65°C
GPS antenna	SAW filter active frequency, 1.575 GHz, Bandwidth: 10 MHz
Impedance	50Ω Gain coverage: λ -4 dBic at -90°£ q £ 90°, 75% volume
Polarization	RHCP Amplifier Gain: 27 dB Typical Noise Figure: 1.2 dB
Filtering	-25 dB (±100MHz) DC Voltage: DC 3.V DC Current: 22 mA
	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \