

Innova is a technology based company that markets integrated interception systems for lawful activities and intelligence operations.

Innova solutions are designed to be effective, versatile, reliable and easy-to-use. Thanks to a deep expertise in telecommunication applied to security sector, Innova products support Public Prosecutor's Offices and Law Enforcement Agencies in any type of monitoring activity with advanced technology for:

- fixed and mobile telephone interception;
- wired and wireless internet communication decoding;
- mobile targets tracking;
- high quality audio monitoring;
- data analysis and information management.

Research&Development

Research&Development are Innova's main growth engines: our products are completely developed in our R&DLaboratories, where specialized research personnel is committed to identifying cutting edge technology and advanced solutions for the LI sector.

Customer Service

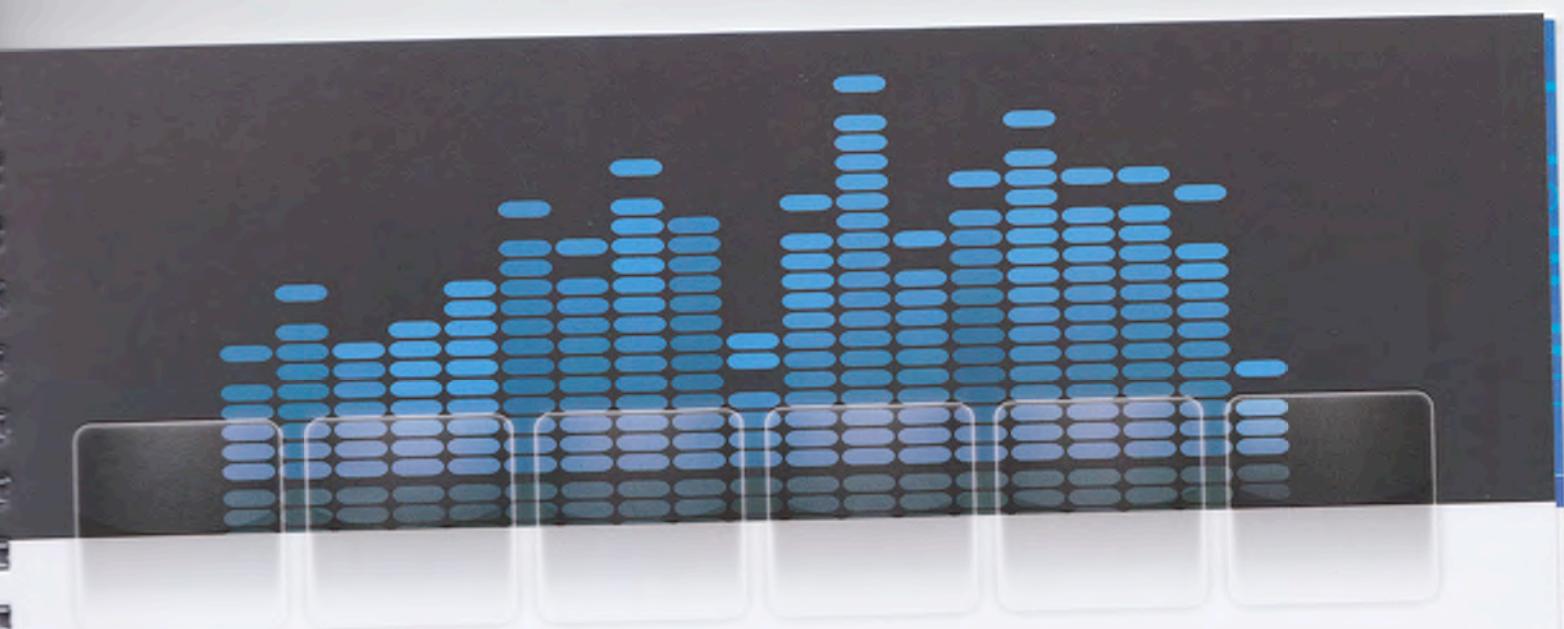
Innova's pre and post sales assistance service provides its customers with a direct communication channel, ensuring a constant, immediate, and effective technical support. A telephone help desk is available 24 hours a day, 7 days a week.

Quality

Quality standards and Research&Development processes are managed in compliance with the main international terms of reference, while all interception solutions are developed in accordance with ETSI guidelines.

Innova is an UNI EN ISO 9001:2008 certified company.





MicrolP

High definition audio device

MicrolP is a new generation digital device based on IP technology that gathers extremely high performance quality together with advanced operative tools.

Thanks to modern mobile telephone protocols and the development of specific digital format, MicrolP audio signals are up to 8 times better in quality than GSM device standards.

MicrolP is an extremely versatile monitoring system: thanks to its audio reception in stereo mode together with sophisticated tracking instruments, it can be successfully used for:

- vehicles installations
- vehicles installations with no power drainage
- indoor installations
- signal transmission



HIGHLIGHTS

High performance audio tools

Traditional GSM devices usually undergo audio quality degradation during the transmission of the signal towards the interception system. This degradation is the main cause of low quality audio performances. MicrolP uses new generation mobile telephone protocols which can obtain remarkable audio files without any signal degradation and keep the same quality obtained during recording activity.

Detectability

Normal scanners or basic detection instruments easily identify the presence of GSM traditional devices. These detection instruments cannot detect MicrolP signals, thanks to UMTS or HSDPA networks, which are based on spread spectrum technology. Furthermore, specific timing tools can be set up to transmit the signal, avoiding thus detections.

All in one device

Innova R&D Laboratories have developed a complete monitoring system that combines high performance stereo audio tools with an advanced GPS system in an all-in-one device.

Internal memory

GSM devices often are subjected to signal interruptions, due to lack of network coverage or to geographical conditions. These interruptions cause recording break down with loss of part of the monitored conversation.

MicrolP has a huge internal memory, that continuously records conversations, even in case of no signal situation, and sends back all recorded information when the signal is available again.

MicrolP internal memory stores up to 264 hours of recorded communication.

TECHNICAL SHEET

Size

36mm wide x 55mm longx 20mm high

Connectivity

Network GSM/GPRS/UMTS/EGPRS/WCDMA/HSDPA/HSUPA

Max downloading speed: 80 KB/s

Power Source

From 7,5 a 32 Volt

Power consumption

120-240mA@12Volt in recording+transmission situations; 25mA@12 Volt only in recording situations;

0mA@12V no detecting situations;

15mA@12V GPS antenna.

Internal Battery

Up to 24 hours in recording situation

Memory

Buffer memory can record up to 264 hours in mono mode audio reception and 10 level quality.

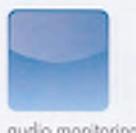
Memory internal files encoded with in-house developed algorithms

Audio

Stereo and mono mode audio reception (right channel and left channel); encoding 16bit

GPS

Sirf IV





Ego

Lawful interception system

Ego is an advanced intercepting system, which manages telephone, internet and audio targets on the same user-interface and can intercept up to 1000 targets simultaneously.

It is an immediate and easy-to-use interception instrument, which matches advanced solutions and innovative processes for capturing, managing and analysing any type of phone, wire and wireless communication.

Ego is a modular system with a client server architecture developed in compliance with ETSI guidelines. Thanks to its scalable architecture, it can be continuously updated and designed in order to satisfy any LEA's investigative need.



HIGHLIGHTS

Security and reliability

In order to ensure recorded communication integrity, Ego has been developed with different levels of security. Every acquired communication is signed with digital technology and specific in-house developed algorithms. Data are then preserved with software, hardware and architectural solutions, which maintain their conservation and integrity.

Thanks to its internal monitoring and control tools, Ego regularly detects any possible system failure and communicates it by SMS to authorized LEA operators.

Directory management tools

Targets telephone numbers and all information related to their interlocutors are stored and organized in an advanced directory.

A directory can be associated to a single target or to a group. Specific research tools can be used to query stored data and identify every possible relation between different targets or different groups of targets.

Advanced investigation tools

Ego has a range of efficient tools which help to streamline investigation procedure. Localization and positioning tools, track alarms, together with advanced data analysis tools support LEA operators in their daily activity.

Telematic interception

Ego enables to intercept, decode and restore on the same interface all types of IP communication, such as Video-communications, MMS, internet key, e-mail and webmail, etc.

Data analysis

A huge data base together with integrated advanced data analysis tools can be used to elaborate research activities, information matching operations (phone records, telephone calls, numbers etc), data cross comparisons and for immediate report creation.

TECHNICAL SHEET

ETSI guidelines

Technical specification TBR21
Cert. n. IST/4.2/2.4/2004-1
Italian Communication Ministry

EMC guidelines

Norm. EN 55022-EN 55022/A1 – EN 55022/A2
N° E 3901445S1904G1_01/01
Norm. EN 55024-EN 55024/A1 – EN 55024/A2
N° E 3901445S1904G1_27/01
Norm. EN 61000-3-2-EN 61000-3-3-
EN 61000-3-3/A1
N° E 3901445S1804G5_02/01

Lines in

POTS – Analogue Access
GSM – mobile network
ISDN BRA – basic rate access 128Kb/sec
ISDN PRA – primary rate access 2Mb/sec
x-DSL IP connection

Isolation CLASS I

Voltage 230V

Power 300W

Temperature 5-40°C

UPS Autonomy superior 1,00 hour

Recording time from 25.000 (conversation mode)



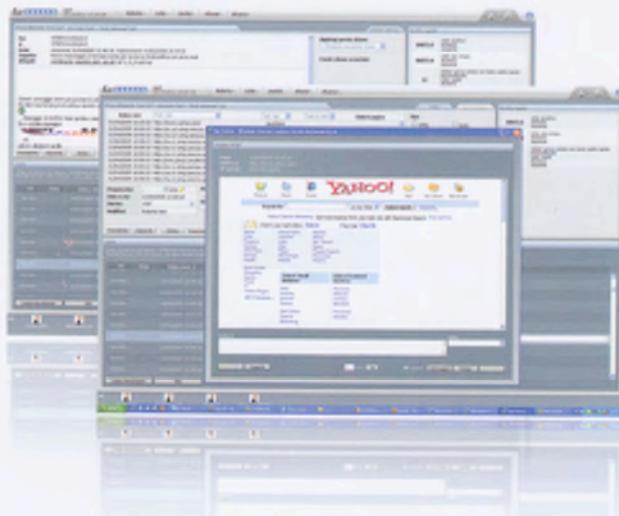
telecommunication interceptions



Internet Communication Interception and Probes

The development of IP network and the increasing use of internet-based services led Law Enforcement Agencies to new investigation needs and to the use of advanced products for IP communication interception. In order to satisfy these needs, Innova Research and Development Laboratories have developed a complete range of effective and reliable products and solutions for the interception of any kind of protocols and IP-based communication, such as web browsing, e-mails and web-mails, social networks, peer to peer communication, chat and videochat etc..

Moreover, a team of specialized researchers is committed to decoding new communication protocols, developing updated products for any IP communication interception and identifying effective solutions for any LEA investigation need.



HIGHLIGHTS

Probes For Data Capturing

Innova R&D Laboratories developed different kinds of probes for data capturing, which provide accurate capture at different speeds. Innova probes are designed to avoid any type of data loss, both in transmission and capture fases. They are developed with different technology, depending on their coupling point: from 100Mb/sec copper to 10 Gb/sec optic fiber.

Decoders For Data Decoding

Captured raw data need to be analyzed and translated using the appropriate decoding protocols, in order to obtain comprehensible information. Innova developed a specific decoding system which is continuously updated in order to follow Internet protocols and applications evolution.

Software For Data Visualization

Decoded data need to be proposed in a simple way to help Law Enforcements Officers during their monitoring activity. Ego interception system provides a hand-on and integrated interface for the visualization of every decoded information.

TECHNICAL SHEET

Target identification parameters

IP address, RADIUS Username, RADIUS NAS Port Id, RADIUS Acct Session Id

Capturing Ports

ETHERNET 10/100, GbE, 10GbE

Data Transfer

VPN SFTP

File Format

PCAP

File splitting

By time/by size/VoIP call closing





Gps Innova

Positioning control system

GPSInnova is a professional device for geographic real time monitoring of moving targets.

It is an integrated tracking system that includes numerous tools for:

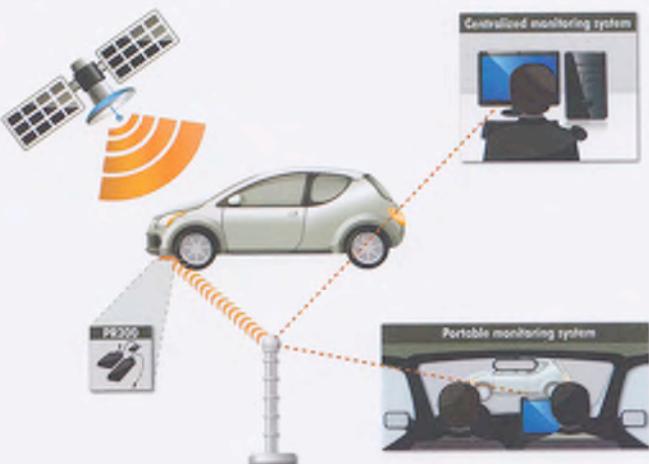
- real time targets monitoring
- data display, research and analysis
- data storage and display on any kind of devices.

GPSInnova, a complete tracking system developed by R&D Innova Laboratories, consists of a miniature satellite tracking device and a monitoring system with integrated hands-on software for device set up and programming, tracking visualization, data analysis (geographical, temporal and textual).

Targets can be monitored both from a centralized or a portable monitoring system.

The small size of the device and the enclosed magnet

enables an easy and immediate installation on the targeted vehicle, while the battery package avoids frequent replacements.



HIGHLIGHTS

Real time monitoring

GPSInnova can track target movements in real time, through the direct connection to the GPS device. The "pac-man" tool enables operators to visualize their position together with target's ones. It is possible to monitor up to 5 target at the same time, on the same map.

Reliability

GPS device has been planned for complete reliability, even in extreme weather conditions. It is equipped with a huge internal memory which stores all information, even in case of network failure, and sends them back to the monitoring system when the signal is available again.

Precision

GPS antenna has been developed for extreme tracing precision, even in presence of weak satellite signal. Regularly upgraded maps are provided in order to visualize positions with rigorous accuracy.

Internal battery

Gps device is developed for low power consuming and high performance battery. GPS battery has about two months working efficiency in standard use conditions.

Advanced Battery management

In-house developed algorithms are employed to verify in real time GPS battery power consuming and residual operating time.

TECHNICAL SHEET

PR300

GPS device easy to install, developed for extreme long duration, reliability and precision, even in case of weak satellite signal.

Electrical supply

input voltage between 6 and 32 Volt, to favour the connection to various sources

Battery

Li-Ion with more than 13Ah capacity, 14,4 Volt (available in several versions)

Power consumption

from 0,02 Wh to 0,4 Wh

Network

GSM/GPRS connection

Memory

more than 130.000 positions

GPS

siRF IV

Chassis

hermetic, waterproof with tearing-proof wires



vehicle tracking



RB 800

Innova monitoring and recording systems offer a wide range of advanced solutions and tools, effective and adaptable to every intelligence need.

RB800 is a new miniaturized device, designed and developed for those intelligence situations, where versatility, quick installation process and easy concealment are needed (i.e. undercover investigation).

RB800 is an audio monitoring system with low power consumption and high recording storage features.

The system consists of:

- a miniaturized device with double microphone and SD card for communication storage;
- a management software.



HIGHLIGHTS

Double Microphone - Line in

RB800 has a double microphone - Line in connector for mono and stereo audio recording mode.

Audio Quality

RB800 has specific audio algorithms which provide high quality performances.

Reliability

SD memory card is formatted with specific in-house developed algorithms. In this way, data stored inside cannot be read without the support of the related software.

Furthermore, audio files are marked with the references of the device which generated them.

Management software

The system has an easy-to-use management software which enables operators to:

- select the file list to be downloaded;
- verify device status through the control of internal memory parameters, data upload and download speed and battery power consumption;
- recording tools set up;
- program recording tools on a weekly basis;
- listen to the recorded audio communications through a specific data base displaying files duration and download status.

Synchronization

An internal clock marks audio files with date and time. The management software enables to synchronize the internal clock with the one in the pc.

Battery

RB800 has a rechargeable battery, which has 48 hours recording length.

TECHNICAL SHEET

Dimensions

55mm long x36mm wide x12 high

Supply

rechargeable battery

Memory

10 days recording, SD 8 GB in standard stereo quality
20 days recording, SD 8 GB in standard mono quality

Power Consumption

< 450mA

Audio

stereo and mono mode audio reception (right channel and left channel);

Line in

1Vpp 5Kohm

Microphone

10mV 2Kohm balanced



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