ALPHA-PA - GSM Interception
PASSIVE ■ MASSIVE ■ OFF THE AIR

APPLICATION FIELDS

- Passive GSM interception over the air
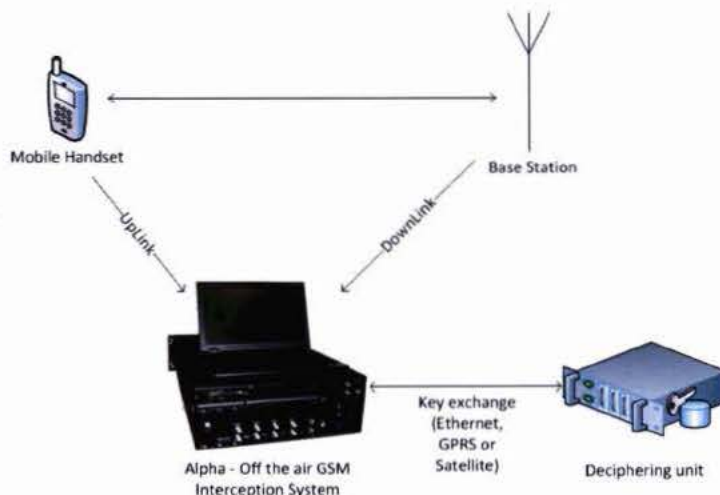
MAIN FEATURES

- 3U 19" rack device
- 2G and 2,5G
- SMS, data and MMS supported
- from 10 to 320 simultaneous voice interception
- Up to 60000 intercepted communications per hour
- Simple Ethernet interconnection to the deciphering box
- Can be used as a tactical equipment in vehicles

The ALPHA passive off the air GSM interception unit is able to intercept the communications between the handset and the BTS. It is a WIDE BAND (processing the whole GSM bands) and PASSIVE solution, meaning that absolutely nothing is sent to intercept. It makes this solution completely undetectable by the targets or the operators unlike active interception solutions in the markets.

Thanks to its dense FPGA architecture, this solution is able to intercept up to 60000 communications per hour, which enables this solution to be suited for MASSIVE application (border control for example), the ALPHA PA is able to demodulate and decipher in REAL TIME up to 320 duplex communication.

Two versions are available either in a 2U format for low cost application (up to 20 full duplex simultaneous communication) or in a 3U format to get the full power of the systems.
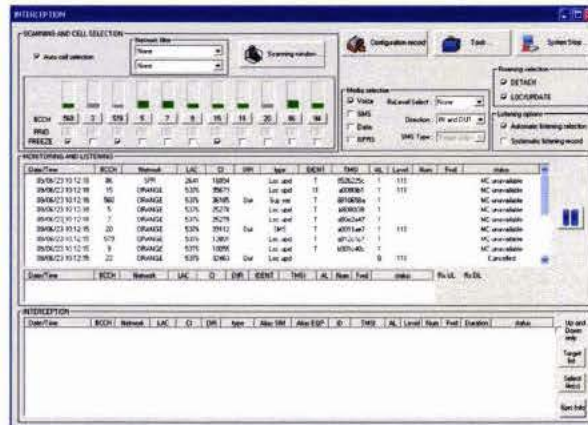
The front end can be connected to the deciphering box (Beta2) through Ethernet connection using either Vsat, 3G or cable links. In the case of a powerful deciphering box, multiple front ends can be connected.

Mobile Handset — UpLink — DownLink — Base Station

Alpha - Off the air GSM Interception System — Key exchange (Ethernet, GPRS or Satellite) — Deciphering unit

ADVANCED MIDDLE EAST SYSTEMS

Once the intercepted communications are stored in the data base, the user friendly GUI proposes many filtering abilities (operators, services, target…):

- Provider selection
- Cell selection: power & quality criteria
- Service selection: GSM, GPRS, SMS, In/Out call …
- Target selection: TMSI, IMSI, IMEI, MS-ISDN

MAIN FEATURES

Passive off the air GSM interception front end

- Passive and wide band solution
- All GSM bands (GSM450, GSM850, EGSM900, DCS1800, PCS1900)
- Full band analysis: Simultaneous acquisition of all channels
- No limit on frequency hopping and real time handover management
- Up to 64 cells can be under surveillance
- Automatic cell detection
- Store telephone conversations on the hard drive. Ability to listen to conversations in real time
- Optional speaker identification thanks to biometric voiceprint technique

Control and test

- Remote and local control
- Ethernet connection to the deciphering unit

OPERATIONAL / PHYSICAL / ELECTRICAL SPECIFICATIONS

	2U version	3U version
Connection to deciphering unit	Ethernet (RJ45)	Ethernet (RJ45)
Number of simultaneous calls	20	128, 256 or 320
AC Power	: 115/230 Vac ± 15 % 47-63 Hz	115/230 Vac ± 15 % 47-63 Hz
Consumption	300VA	400VA
Size	19" 2U	19" 3U
Weight	< 10Kg	< 27Kg
Operating temperature	0°C to +40°C	0°C to +40°C
Storage temperature	-40°C to +70°C	-40°C to +70°C

ADVANCED
MIDDLE EAST
SYSTEMS