





# Media Relay System -

The mobile security & media streaming solution

Media Relay System (MRS) is a complete solution for mobile security and media streaming from the field. It allows users in the security and surveillance market to stream video/audio/location live and monitoring anywhere upon alarm/request. The MRS unit supports cellular network (built-in) and other wireless networks. The unit can stream up to 4 video channels concurrently to the control center and to smart phones / PDAs. MRS was design for mobile vehicles, to provide public transportation safety, and personal use.

The system can work in a very low bit rate (from 50kbs and up)

The unit has built-in rechargeable lithium battery for super mobile applications as Special Forces and others. The system can operate in open areas without infrastructure, supporting strategic antennas, oil rigs, electric/water sites and safe city. MRS support live media streaming form the field directly to web using flash media client. The unit is small form factor, low power and work with 5v power input or rechargeable battery.

- Complete Mobile Videa/Audio/GPS solution
- Up to 4 channels
- Unit needs only SIM card
- LCD for very simple setup and operation
- SMS alert to cell phones
- Local recording on flash media
- Multi-unit control center software









#### MRS features:

- Live video streaming (low latency):
  - On user request
  - On GPIO input event
  - On VMD event
- Video clip transmission
- Audio streaming (in/out)
- PTZ control
- Video recording with the following options:
  - Per input event
  - Per VMD event
  - Per user request
- Audio recording
- Automatic bandwidth streaming control
- Built-in VMD
- SMS alerts to cell phone
  - Per VMD
  - Per i/o
- Upgrade version on the fly

### MRS features:

- Units are control from control center software
- Combined Map and video over map
- Multi unit to multi client real time streaming
- Bit rate/ Frame rate user control - Local recording and clip viewing
- Server Permission

#### **MRS Hardware:**

- 1-4 Analog Video Input(s) PAL / NTSC
- DSP based video CODEC (H.264)
- Audio (in/out)
- 1-4 Video out over IP
- Built-In Cellular
- (HSPA/3G/EDGE/GPRS)
- Built-In GPS
- Local recording on flash (micro SD)
- Built-in RS-485 for PTZ control
- Built-in 8 GPIO (4 input/4 output)
- Built-In LCD screen for status and video
- Lightweight small size (x1 x3) cm
- 5v power input
- 12v to 5v adapter
- Built-in lithium battery power (rechargeable - 3 hours)
- Low power

#### **Phone/PDA Clients:**

- Live streaming viewer

#### **Internet Client**

- Adobe flash media client





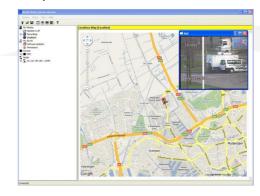




# **Architecture**

- M2M- Multi unit to multi client architecture (using server with IP address)
- P2P MRS unit to phone/PDA or laptop client

MRS architecture is based on MRS server which can be resides either on Internet IP, VPN or inside the unit. MRS supports different clients as MRS application, PDA client and Internet Adobe flash media client. MRS architecture was design especially for real distributed long distance environment and packet failure as cellular network environment. MRS unit has real time bandwidth control capability.



# **Location and Video over MAP:**

The system has built-in GPS which monitor all devices location in one map. Each icon on the map allows the user to open floating windows for live streaming. In case of alarm the system opens the map with the alarm device and live video stream accordingly. The system support Google map and can integrate with other map systems.

## MRS with other control software:

MRS supports standard protocols for live streaming as RTP/SDP as well as ActiveX and SDK for integration with other control software.

