ACUSTEK

| COUNTERMEASURES | SURVEILLANCE | FORENSIC |

GEM-CELL A/V

Concealed, Long term,
Store & Forward Audio&Video Recording,
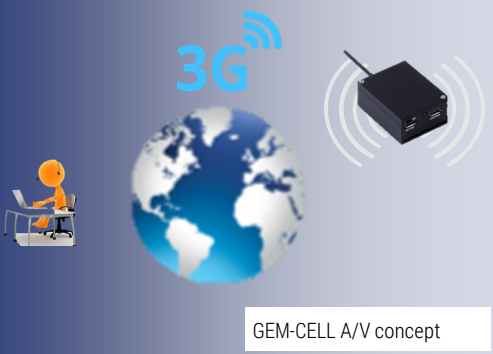## Live Streaming via mobile data networks

"The new unique concept in covert quality audio and video recording, limitless!"

GEM-CELL A/V FEATURES

- DESIGNED FOR COVERT USE THE GEM-CELL A/V is a small device integrating a small powerful audio-video recorder with an integrated cellular modem for remote download and LIVE audio and video streaming over mobile network. The GEM-CELL allows an unlimited operational range from anywhere in the world. It can be set up to record with multiple advanced timers or by voice activation mode by using the **dedicated Wireless Control Software** included in the package.

- PROFESSIONAL QUALITY combination of industry leading high sensitivity Knowles type microphones with high sampling rates of up-to 22kHz/16kHz/8kHz-bit delivers perfect sound and high speech intelligibility.

- HIGH AUTONOMY AND CAPACITY All audio and video records are stored to microSD memory (up-to 128GB) and can be downloaded at any time, or access to "Live". The improved power consumption design allows up to 200 hours (8 days) of continuous Audio recording on its internal battery. GEM-CELL A/V can also be powered externally via USB connector. Full recharge of the battery takes only 2 hours.

- ULTRA FAST DOWNLOAD SPEED Downloading in the latest mobile networks is very fast and takes approx. 15-30 minutes for every 24 hours stored audio record. The audio and video can also be transmitted "Live".

- DEDICATED FOR CONCEALED OPERATION All records are exported or reviewed securely via the included software. The cellular modem can be scheduled to operate only at a specific period, which makes the device undetectable by any RF scanners detecting 3G/GSM devices.

- SECURITY The audio and video data transfer is encrypted, each record has a precision timeline and can only be reviewed using the supplied software, and the records may also be password protected. If the recorder is intercepted then the micro SD card is unusable.

APPLICATIONS

- Concealed and encrypted channel allows for ideal covert use by Police, Law enforcement agencies and security professionals.

- Particularly suitable for covert audio and video recording for TSU-units on a long term operations, where there is no direct or limited access to the recording device.

- Extremely stable system.

- Ease of use, ability to access.

GEM-CELL A/V concept

ACUSTEK

GEM-CELL A/V TECHNICAL SPECIFICATIONS

General	
Dimensions:	45x33x17mm
Battery:	Integrated Li-pol battery
Voltage input:	5.0 V, powered via micro USB
Scheduled recording:	selectable periods for each day of a week
Battery life in record mode:	Up-to 200 hours including data transfer
Memory capacity:	300 hours at 8kHz sample rate
Data storage:	Internal micro SD card 16GB
Export audio format:	AVI or WAV format

Audio	
Audio bit width:	16bit
Sample rate:	22kHz, 16kHz or 8kHz
Signal to noise ratio (SNR):	75 dB
Sensitivity of built-in microphone	approx. 8-10 m
Voice activated recording:	yes
Automatic gain control (AGC)	yes
Audio input:	Internal / External (optional) microphone

Video	
Video bit rate:	Selectable 48Kbit – 1280kbit
Resolution:	854x480, 800x600, 640x480, 320x240
Compression format:	MJPEG, 1-5fps
Camera sensitivity:	<0.02 lux with night mode enabled
Current consumption in rec. mode:	15mA-45mA (depending on frame rate)
Memory storage capacity:	1fps, 8kHz lowest quality – 428 hours 5fps, 16kHz audio best quality – 38 hours
VAS mode	Supported to activate video only when audio is detected
Camera:	5 Mpix CMOS, Lens: Fixed Focus, 70 degree pinhole, Optional fish eye or any M7 size lenses Dimensions: 9mmx9mmx4mm (H,L,W)

3G Connection	
Data transfer rate:	Up to 5.75 Mbps uplink
Supported Bands	I, II, IV, V, VI, VIII, GSM/GPRS/EDGE quad band
Antenna:	Integrated or external U.FL connector
3G data modes:	HSUPA 5,76Mbit, HSDPA 7,2Mbit

CE Conformity Information	
Directive 1999/5/EC	ETSI EN300328 V1.7.1: 2006, ETSI EN 389-1 V1.8.1:2008 ETSI EN 301489-17 V2.1.1:2009, EN 61000-3-2:2006+A1:2009+_A12:2011
Directive 2006/95/EC	EN60950-1:2006+A11; 2009+A1; 2010+A12:2011
Directive (ErP) 2009/125/EC	Environment EN62075:2008

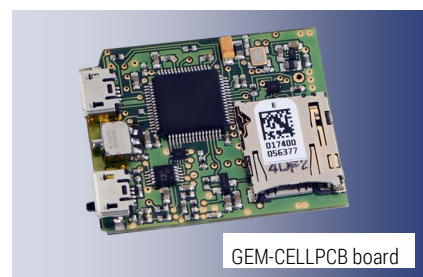| Security Encryption	optional WPA2/PSK, WEP-128, WEP-64

DELIVERY ITEMS

- GEM-CELL RECORDER
- MICRO CAMERA MODULE
- CABLES
- USB Adapter
- SOFTWARE SET
- OPTIONAL: PCB BOARD, DELIVERY OPTION

Everything in a small hard carry case.

OPTIONS

- PCB BOARD DELIVERY SET

GEM-CELLPCB board

- FG-23 EXTERNAL MICRO-PHONE

FG-23 External Microphone

- LAPTOP with the control software pre-installed and tested READY TO GO.