

COUNTERMEASURES

SURVEILLANCE

FORENSIC

GEM-CARD RF

Professional Quality Recorder and Transmitter together, concealed in a card shape device



GEM-CARD RF FEATURES

The GEM-CARD RF is Acustek NEW Generation audio recorder concealed into a credit card for covert surveillance operations provided with its own docking station for charging and file access. Below are the improvements from previous version and main features:

the GEM CARD RF has an internal 10mW Transmitter which works with our DS5 receiver, therefore the card can be used as a recorder as well as transmitter all simultaneously.



- Reduced thickness down to 1.3mm and now concealed in a complete laminated enclosure for a better finished product.
- Multiple activation modes:
 - Swipe or Triple Swipe on specific point of the card, configurable from the software
 - ON/OFF remote control Key FOB with two way communication with vibro alert
 - VOX Activation and weekly or event calendar schedule
- Much longer recording time with internal battery, up to 60h of continuous recording at 8Khz with one charge. The recording quality is now available up to 44Khz.
- SECURITY: 128 bit encryption, Digital Signature and Proprietary recording format.

Sample rate	None	μ –law	ADPCM
8kHz	40h	51h	60h
11kHz	37h	47h	58h
16kHz	33h	41h	56h
22kHz	22h	30h	48h
44kHz	16h	N.A.	N.A.

The following table illustrates battery life in different recording modes in continuous recording (the figures are in hours):

Mode	Operation time (hours)
8kHz transmitting only	4 h
8kHz transmitting and recording	3.5 h
16kHz transmitting only	4 h
16kHz transmitting and recording	2.8 h

Battery operation times in wireless audio streaming mode (in hours):



GEM-CARD RF TECHNICAL SPECIFICATIONS

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Dimensions:	Credit card shape, 1.3mm thickness	
Power Supply:	Integrated Li-pol battery	
Battery operation (recording mode):	16-60 hours (16 hours at 44kHz, 60 hours at 8kHz)	
Battery operation (DS5 transmission):	4 hours	
Battery stand-by:	50 days	
Activation modes:	Capacitive touch slider	
	RF remote control (with dedicated key FOB)	
	Time scheduler	
	Activation on undocking from reader	
Recorder scheduling:	Event calendar or week calendar	
Memory capacity:	16GB (up to 240 hours of audio recording)	
Audio input:	MEMS microphone, 24-bit ADPCM	
Storage format:	Uncompressed, ulaw, 4-bit ADPCM	
Voice Activated Recording:	Yes	
Data encryption:	128-bit AES encryption	
Digital Signature:	Yes, SHA-256 digital signature	
Time Stamp:	Precision timeline stored with each recorder	
Medium for storing data:	Integrated micro SD card	
Export records:	WAV format	
TECHNICAL DATA RF PART		
Frequency band:	860-880MHz (can be tuned very close to GSM band)	
Modulation type:	FHSS	
Type of compression:	LPC	
Audio format:	8kHz or 16kHz	
RF output power:	10mW	
Range:	150 meters (over 400 meters in open-air environment)	
Over the air functions:	Remote ON/OFF control	
TECHNICAL DATA REMOTE CONTROL		
Dimensions:	29x62x9mm	
Frequency band:	860-880MHz	
RF output power:	1mW	
Power supply:	23A type battery	
Communication type:	2-way with feedback confirmation from the card	
Feedback type:	Dual LED indication and integrated vibration alert	

GEM-CARD RF DELIVERY SET

GEM CARD RF PKG1

1 x GEM CARD RF RECORDER

1 x CARD READER

1 x Remote Control KEY FOB

1 x USB CABLE

1 x PLASTIC CARD HOLDER

GEM CARD RF PKG2

1 x GEM CARD RF RECORDER

1 x CARD READER

1 x DS5 Receiver

1 x Remote Control KEY FOB

1 x USB CABLE

1 x PLASTIC CARD HOLDER

1 x EARPHONES





