

# GSM196 Cellular Detector



## Features

- Pocket size detector with cadenced vibration alert for covert use
- Simple user interface for quick evaluation of 2G & 3G mobile phones
- One button control for operation of major functions
- Low and high sensitivity for near field and far field detection
- Bright LED display with discrimination algorithms for SMS & calls
- Simple user interface with LED signal strength display
- Directional antenna (optional) for accurate pinpoint direction finding
- Advanced signal filtering for fast, accurate detection
- 2G & 3G alarms shown separately
- Latched alarm for unattended monitoring

## Applications

- Defensive building search (where mobile phones are prohibited)
- Detection of mobile phones in prisons and detention centres
- TSCM (detection of surveillance devices using GSM based technology)
- For use by security personnel in government and military establishments
- Detection of unauthorised mobile phones
- Security companies who need to sweep boardrooms for GSM devices
- Nuclear sites & petrochemical facilities



The GSM196 monitors the (E)GSM900, GSM1800 and WCDMA/UMTS 2100(3G) bands. It is designed to detect the presence of unauthorised mobile phones and then help locate them.

In the Handheld mode, a 9-LED signal level display shows the strongest signal detected and helps to guide the operator to its source. This eases searching where several signals may be present. A cadenced vibrator (switchable) allows for covert use.

In the Static mode, alarms are latched so that the unit can be left unattended, for example overnight, allowing later analysis.

In both modes, the unit distinguishes between Network signals (text messages and registrations), GSM calls, and 3G calls, and indicates both current and past alarms separately for each type.

Two sensitivity ranges are provided. These are optimised for detection at a distance and location at closer ranges.

For situations where greater accuracy is required and / or specific monitoring is required in areas containing multiple phones, a specially designed directional antenna (SA918) can be used with the GSM196 & GSM196A.

The GSM196A is set-up to the USA, Mexican and South American networks. This device monitors the GSM850, GSM1900, and WCDMA2100 (3G) bands. ■

"Optional" directional antenna with handle & holder



## Technical Specifications

### Detection

(E)GSM900:	880–915MHz
GSM1800:	1710–1785MHz
Detection threshold:	-73dBm typical
WCDMA2100:	1920–1980MHz
Detection threshold:	-95dBm typical
Antenna:	external multi-band (via SMA connector)
Detection:	signature analysis with band-selective amplitude discrimination
Detection time:	500ms typical, 1.4 sec maximum

### Indicators

Level 9-LED bar-graph showing signal strength	
Range:	Low -48dBm sensitivity; 3dB steps High -65dBm sensitivity; 3dB steps
One is always on when the unit is active	
Type:	N – network signal detected, 2G or 3G 2 – GSM (2G) signal detected 3 – WCDMA (3G) signal detected
All indicators have automatic dimming to match the ambient light levels – 20:1 dimming range	

### Controls

Push-button turns unit on and off, sets range, and controls vibrator operation. Internal slide switch controls operating mode

### Power

Internal:	two AAA (LR03) cells, alkaline or NiMH
External:	4.5–16V DC at 50mA peak via 1.3mm co-ax power jack (tip +ve: reverse protected)
"Low batt" LED:	trips at 2.1V (1.05V per cell)
Static mode battery life:	180 hrs typ (1.2AH cells)
Handheld mode battery life:	100 hrs typical, depending on use of vibrator and display. In the handheld mode <i>only</i> , the unit turns off automatically after 12 hours

### Physical

Physical Size:	105 x 58 x 19mm
Weight:	90g with battery
Case:	ABS to UL94-HB; IP45

## Product Codes

### GSM196 Cellular Detector – Full Systems

3-299-995	GSM196 Cellular Detector can detect both 2G (GSM900/1800) and 3G (WCDMA/UMTS 2100) with cadenced vibration alert & latched alarm, omni-directional antenna & guidance manual
3-299-993	GSM196A Cellular Detector can detect both 2G (GSM850/1900) and 3G (WCDMA/UMTS 2100) with cadenced vibration alert & latched alarm, omni-directional antenna & guidance manual

### GSM196/A Cellular Detector – Accessories

3-299-996	GSM196 SA918 Directional Antenna with handle & holder Quad-band
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**The 196 and 196A only detects handset frequencies (uplink). In this way the unit does not react to nearby Base Station signals.**

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