

Report Documentation Page

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Smart Intrusion Sensor/Alarm

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Smart Intrusion Sensor/Alarm (SISA)

RF CIRCUITRY:

Frequency: 900 MHz
Base-to-alarm range: 500 meters
Modulation: On - Off Keying
Data rate: 9600 bits/s

SENSORS:

3 Micromechanical microphone and 1 commercial geophone

POWER:

High efficiency switching regulator, 4 L91 batteries
Nominal operating life: 2 weeks

DIGITAL ELECTRONICS:

Low power DSP processor, 12 bit A/D converter
MCM-L packaging

SIGNAL PROCESSING:

Report intrusion by foot traffic or vehicle traffic
Algorithms developed in consultation with Army Research Lab

SIZE: 2.3" X 2.1" X .9" (1.2" to the top of the microphones)

FEATURES:

Signal sampling, processing, and control can be changed *in the field* for mission tailoring

