



Smartdec is a perimeter intrusion detecting system (PIDS) that is designed and developed for use in remote areas. The Smartdec System consists of 4 parts: Detector, Bridge, Handheld, and Command center software.

The Bridge is an autonomous communication device equipped with a battery, a Long Range Radio (GSM/CDMA) module and a Short Range Radio (2,4 GHz) module.

One Bridge supports up to 8 Detectors under average conditions (GPRS/EDGE/3G/3.5G/LTE/CDMA)

BRIDGE

TYPES OF ALARM

- Theft alarm
- Battery low alarm
- Routine check message
- Connection lost (if Routine check has not been received)

COMMUNICATION

- Short Range Radio (Detector to Bridge) range: **500 m** line of sight
- Radio: IEEE **802.15.4 (2,4 GHz)**
- Bandwidth: **2 MHz**
- Data rate: **250 kbps**
- Modulation: **QPSK**
- Antenna: omnidirectional
- EIRP: configurable up to **12 dBm**
- Security: Elliptic Curve Cryptography (**secp160r1**)
- Message authentication & encryption (**AES 128**)
- Long-range communication (Bridge to Server)
- Radio: **GSM/GPRS/EDGE/UMTS/CDMA/LTE. 850/950/1850/1900/2100 MHz .**
- GPS support.**
- Secure end to end encryption.**

DIMENSIONS AND DURABILITY

- Battery lifetime: **1 year** or **10,000** pictures
- Batteries: **4 x Li-Ion 3.7V 10400 mAh**
- Operating temperature range: **-40°C to +55°C**
- Enclosure: weather proof (**IP 67**)
- Bridge weight: **1.5 kg** (with **4 batteries** and mounting supports)
- Bridge size: **9.5x7.5x24.5 cm**

The system is active only when Movement or Theft alarm is registered or when it sends a Routine check message; otherwise it is in sleep mode.

The perimeter monitoring system has anti-theft functionality. Damage to one unit will not shut down the whole system.

