

McQ RANGER® DESIGN

RANGER sensors use state of the art electronics and algorithms to achieve an elite level of performance while maintaining a minimal size, power consumption, and cost. RANGER sensors have RF wireless networked communications. These include terrestrial and satellite networks. Custom network protocols ensure message delivery with minimal latency. RANGER has seismic, magnetic, and acoustic sensors that detect and classify people and vehicles. Each RANGER sensor has built in GPS to locate the sensor. RANGER brings new Cloud based user interface features to large area monitoring including the SatCom options to eliminate typical terrestrial comms networks that are expensive to install and maintain. There are a stand set of target detection and classification capabilities that include people, vehicles, and aircraft. McQ can provide tailored detection and classification capabilities.

McQ RANGER® Surveillance Sensor

Miles of Surveillance in Palm of Your Hand

McQ RANGER® is a low cost, very small surveillance sensor with state of the art technologies to accurately detect and classify personnel and vehicles to extended ranges with minimal false alarms. RANGER is designed to be easily deployed by hand or by air dropping for threat detection along roads, in large remote areas, along borders, around facilities, or in wilderness areas.

McQ RANGER®

SURVEILLANCE SENSOR



Iridium RANGER®

Military RANGER®

Standard McQ RANGER®

The RANGER sensor provides a very low cost solution for monitoring of large areas by minimizing the sensor cost and, importantly, the communications infrastructure costs. The RANGER sensor requires no maintenance and can communicate via built in Bluetooth or SubGHz radio to a handheld display or tactical repeater. The Iridium RANGER communicates through the Satellite needing no terrestrial infrastructure. Local target activity immediately triggers a detection message. Because the RANGER uses network based communications, detection information is delivered simultaneously to distributed operators and for cueing other sensors such as video cameras and radars.



McQ RANGER® PERFORMANCE

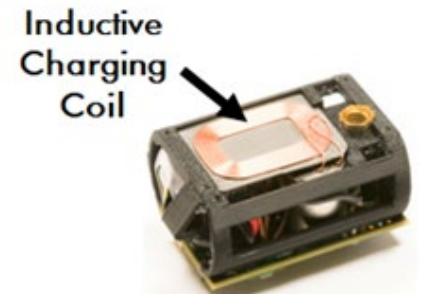
The small size and weight of RANGER are ideal for replacing a lot of sensors in remote areas. The low cost of the RANGER sensor contributes to it being a good match for covering large areas. The sensor outperforms competitors, yet costs less. RANGER has superior target detection capabilities. The sensor detection range and the high probability of detection make RANGER a world leader in security sensors. The extremely low probability of false alarm performance means weather and nuisance activity do not distract the user. RANGER uses the latest digital signal processing to discriminate seismic, magnetic, and acoustic features associated with targets. The RF wireless connectivity provides total mobility so sensors can go anywhere and report to users anywhere. RANGER has GPS position location built into the sensor. Power consumption is extremely low and inductive recharging eliminates changing batteries. Security is easier and more effective with these sensors.

McQ RANGER® Surveillance Sensor

Features and Specifications

RANGER was developed by McQ to provide sensor performance and features needed for security monitoring. The RANGER sensor can be reused through inductively charging the battery (just like a smartphone), eliminating the need to change batteries or otherwise maintain the sensor. The reduced cost is based upon a design for large quantity production to meet large remote area surveillance. The RANGER sensor has the capability to remotely monitor areas of interest and immediately alert the user when any activity is occurring. The sensor uses wireless networking connectivity with a built in modem and antenna to connect the sensor to the user. Sensor information can be distributed via Cloud based connectivity, greatly reducing the cost of communications infrastructure to connect the user. The sensor information can be integrated with surveillance information from other sources as part of the Cloud database. RANGER is ideal for monitoring:

National Border Areas
Oil or Gas Pipelines
Electric Distribution Networks
Parks and Recreational Areas
Government Limited Access Areas
Private Property
Military and Law Enforcement Applications



Specifications

- Built in Seismic, Acoustic, Magnetic, and Tamper Sensors
- Detection Modes: Seismic People (Urban and Rural); Seismic Vehicle; Acoustic Human Speech, and Aircraft; and Magnetic Target Direction of Travel
- GNSS Receiver (GPS, Galileo, GLONASS)
- Bluetooth™ Transceiver and Internal Antenna
- IP67 Rugged Sealed Waterproof Enclosure
- XTend® Compliant 902-928MHz Spread Spectrum Transceiver and Antenna/ Standard Model
- Iridium Antenna and Modem/ Iridium Model
- AES 128 bit or 256 bit Encryption Available
- Internal Lithium Battery (30 Days Life / Inductively Charged)
- Size: 70 x 51 x 33 mm (2.76 x 2.0 x 1.3 in),
- Mass: 134.5g (4.5 oz)/Standard Model