



Coyote UGS™ Repeater Node

FAK4100001-P1

Distinctive Features and Functionality

- Mesh network: IWT multiband (300, 400, 900 MHz) ad hoc mesh
- Two radio options: extended life or long range (currently 900MHz only)
- Operating Life: 2 yrs at 250 detections per day*
- Batteries: Standard military BA5390 (1 or 2 packs / node) or commercial Lithium option
- Power scavenging: interfaces for external solar or other power source
- Security: 128 bit AES, anti-tamper, anti-spoof, anti-jam, remote re-key, zeroize
- Over The Air Programmable (OTAP)
- Direct bury package



The Next Generation Unattended Ground Sensor Repeater

The Coyote UGS™ Repeater is a mesh networked radio relay to extend range between the Coyote UGS™ Sensors and the Coyote UGS™ Gateway in the Coyote Unattended Sensor System**. A camouflaged communications antenna is located above ground. The Repeater has essentially the same hardware architecture as the UGS Sensor except that the sensor module is not populated and there is a second transceiver/antenna module. This common design reduces overall system cost and simplifies logistics. Each repeater supports up to 100 Coyote UGS™ nodes and can support an optional sensor package.

Benefits

- Simple method for extending network range between sensor fields and gateway
- Redundant design for maximum network availability
- Easy to deploy and manage
- Cost effective system solution
- Reliably scales from small focused targets to nationwide network
- Minimal field time required to maintain network
- Resistant to security attacks

*** Operating life for UGS is subjective. IWT has based its expected operating life on 250 detections per day. Many competitors only predict operating life on 100 detections per day.**

**** The Coyote UGS™ Repeater is not required in the system architecture and is only used to connect remote UGS fields with other UGS fields and/or the gateway. A Coyote UGS™ node can communicate directly with a Gateway.**



Specifications

- Size: 5.9" x 6.7" x 9.4"
- Weight 6.5lbs including batteries
- Rx sensitivity: -88dBm
- Waterproof to 1m depth
- Range between nodes:
 - Repeater to UGS Sensor Node: 100-300m ground to ground, up to 3km LOS
 - Repeater to Gateway: 3km (extended life) or 9.3km (long range)
- Temperature -40 to +85 C

Coyote UGS Information

The Coyote UGS™ Repeater node is part of IWT's turnkey Coyote Unattended Sensor System and which incorporates our world leading wireless mesh communications solution. For more information on the Coyote system and wireless mesh, contact IWT at www.iwtwireless.com.



Innovative Wireless Technologies, Inc. was founded in 1997. The company is located in Forest, Virginia. IWT is privately held.

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For more information, visit iwtwireless.com

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