



## Receivers

Receivers are the communication link between the wireless network and a security panel or an integrated application. Our family of receivers offer the ultimate flexibility for managing and monitoring the EchoStream wireless network. Choose between add-on receivers, providing wireless to virtually any control panel or a serial receiver which fully integrates Inovonics wireless to industry leading control panels and integrator developed, or PC based applications. All receivers feature Inovonics EchoStream technology with diversity reception and advanced signal processing to minimize “nulls” or dead spots, and provide superior performance in RF noisy environments.

## Why Inovonics Wireless is Best

The Inovonics Commercial Mesh Network has been specifically developed for commercial applications to provide the most cost-effective solution for a wide range of applications, while setting new standards for performance and reliability in a wireless sensor network.

### Reliability

Inovonics EchoStream 900MHz radio utilizes a unique frequency hopping, spread spectrum technology to meet the demands of an increasingly cluttered wireless world.

### Flexibility

The flexibility of wireless is a necessity in today’s dynamic commercial environments. The self-configuring EchoStream Commercial Mesh Network allows you to adapt to changing floor plans and requirements in a matter of minutes. New sensors can be added to the network as fast as they can be mounted.

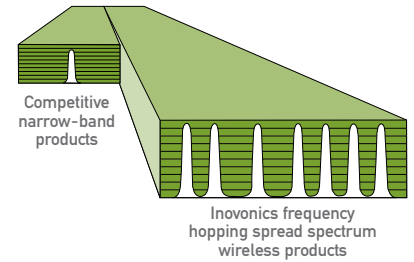
### Scalability

The EchoStream Commercial Mesh Network’s backbone of intelligent repeaters can extend coverage to thousands of sensors across entire commercial campuses.

## Why Do You Need EchoStream Radio?

To help ensure reliability. The airwaves are getting more crowded as the world goes wireless. Inovonics EchoStream utilizes a unique spread spectrum technology to maximize range and reliability. Virtually all competitive wireless systems send information on one very narrow band channel. Any in-band interference can result in missed signals.


Inovonics EchoStream technology sends completely redundant messages on multiple different channels across the entire approved band, creating the most reliable wireless system available.



## Receiver Features

- Add-on receivers support multi condition transmitters (EN4216MR and EN4232MR only)
- Receivers have on-board Type C relays for N/O or N/C operation.
- Jam detection monitors all channels for presence of interference.
- A reset terminal is provided in the receiver to allow for externalized receiver resets.
- A tamper terminal is provided in the receiver to allow for externalized tampers.

### Add-On Receiver Specifications

Receiver	Frequency	Dimensions	Power requirements	Max current	# of transmitters	Relay outputs
EN4232MR 	900MHz	8.75x7x1.5"	10-14VDC	600mA	32	11 alarm / 1 fault
EN4216MR 	900MHz	6.5x3.5x1.0"	10-14VDC	400mA	16	5 alarm / 1 fault
EN4204R	900MHz	6.5x3.5x1.0"	10-14VDC	400mA	4	4 alarm / 1 fault

## Serial Receiver Features

- Wireless gateway between EchoStream one-way transmitters and a head-end application using an RS-232 serial interface.
- EN4000 enables the integration of security, temperature and analog transmitters.
- EN4200 enables the integration of one-way security transmitters and an head end application using an RS-232 serial interface.
- Jam detection monitors all channels for presence of interference.

### Serial Receiver Specifications

Receiver	Frequency	Dimensions	Power requirements	Max current
EN4200	900MHz	6.5x3.5x1.0"	10-14VDC	100mA
EN4000	900MHz	6.5x3.5x1.0"	10-14VDC	100mA

- Serial receivers require integration with the control panel, PC application or other control device.
- Operating environment: 32° to 140°F, up to 90% relative humidity (non-condensing).
- The range and performance of any wireless product depends on the structure and environment in which it operates.
- Continual enhancements to our products may cause specifications to change without notice.
- Visit [www.inovonics.com](http://www.inovonics.com) for updated UL information.