lumenradio
Connectivity for a Better World

MIRA™

The complete solution for your Internet of Things

YOUR WIRELESS PARTNER

At LumenRadio we have many years of experience in creating world leading wireless technologies. Our products are being used in everything from big Hollywood movie productions to heavy industry installations - areas where reliability is crucial.

Our vast expertise and patented technologies will provide your products with safe, secure and reliable connectivity, enabling your operations to become smarter and ultimately more effective.

As your wireless partner, our team of experts will guide you from idea to industrialized product, allowing your organization to benefit from new and increased streams of revenue.

Enabling connectivity for the Internet of Things (IoT) is a huge and growing business opportunity. But it is also an opportunity to make the world a better place through smarter products with less energy consumption and improved resource utilization. Connectivity - For a Better World.

WHY LUMENRADIO?

The Internet of Things is the next step in the Internet Evolution, and connectivity is the pathway to prosperity. With a proven track record and references all over the world, we have the skills and experience necessary to make IoT work through four key success criteria:

RELIABLE

Our patented Cognitive Coexistence technology makes our products extremely reliable and secure. By always getting our signal through and at the same time staying away from interfering with other wireless products, we can deliver high reliability, security and quality to your company.

SCALABLE

Regardless if you need a point-to-point wireless data transfer or a city-wide network with thousands of interconnected nodes, our unique mesh network technology will scale according to the needs of your product while our high volume manufacturing plants will allow you to grow unhindered by supply concerns.

COST EFFECTIVE

Using radio technology from LumenRadio lets you focus on what you do best, while we focus on what we do best. You do not have to spend valuable resources on research, development and expensive certification procedures - we have already taken care of that for you.

UPGRADEABLE

The Internet of Things is the future and at LumenRadio we always have the future in sight. With unique technology for performing large-scale system updates without downtime, new services and functionality can be added when needed, giving you and your clients the knowledge that you are prepared for what the future has to offer.
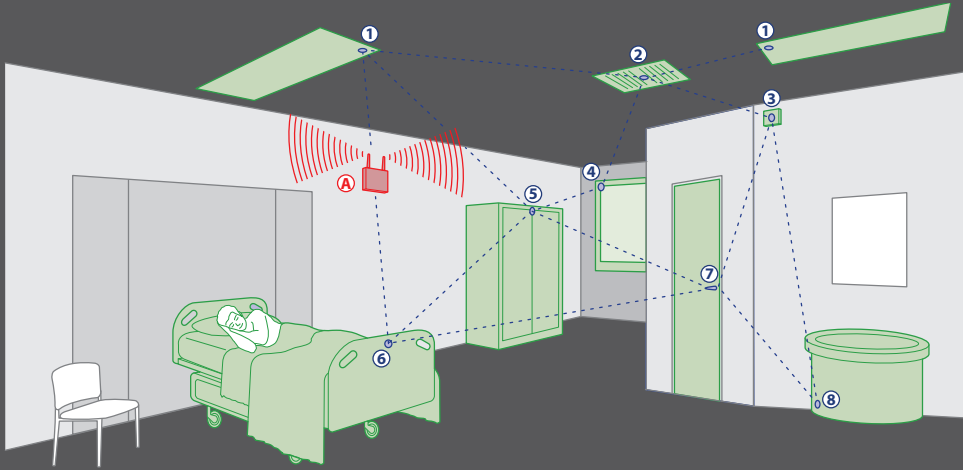
WHAT IS MIRA?

Mira is a complete IoT ecosystem that provides a mesh network with unprecedented scalability and reliability to an unlimited number of nodes. The Mira network is self-healing, easy to configure and can be deployed in heavily congested radio environments.

Mira is designed to facilitate installations of various sizes. We have confirmed operation at 1000m in line of sight conditions, and over 200m in indoor applications. This range is the point to point range between two nodes - the theoretical limit of the size of the mesh is significantly larger.

Mira is a transport method for your data. Whether you already have existing network protocols or are creating something from scratch, our engineers can provide support to ensure optimal performance of the Mira system together with your devices.

The easy and secure commissioning for large scale networks makes it possible for your company to get started and implement the technology into your products. The fast setup enables a fast to market approach.

MIRA IN A HOSPITAL ENVIRONMENT

MIRA IN CONTEXT

A. WI-FI access point
1. Lighting fixtures with wireless control
2. Ventilation duct with air flow sensor
3. Presence detector
4. Magnetic window sensor
5. Medicine cabinet with electronic lock
6. Bed with pressure sensor
7. Door sensor/electronic lock
8. Humidity sensor

The picture shows an example of Mira's endless possibilities. Imagine a hospital where everything is connected to the Cloud to enable a smarter and improved healthcare.

The Wi-Fi access point in the picture can coexist with the Mira radio network without interference. All the nodes in the network gathering data allows new services when connected to a cloud service.

Here the bed is equipped with pressure sensors which can monitor the patient's movements to help avoid bedsore. The HVAC system is connected to the window sensor so that energy is saved when the patient needs fresh air. The cabinet for personal belongings is electronically secured to prohibit unauthorized access and theft. The lighting fixtures are intelligently controlled and the intensity can be adapted to the surrounding light conditions in order to save energy.

LET US GET YOU STARTED

LumenRadio wants to help you understand and to seize the large opportunity that connectivity can be. We offer an IoT - Workshop where your competitive landscape is analyzed and the biggest benefits are identified.

When the opportunities are identified and prioritized you can use our Better World Kit where your ideas rapidly can be prototyped.

Think big, Start small and Move fast.