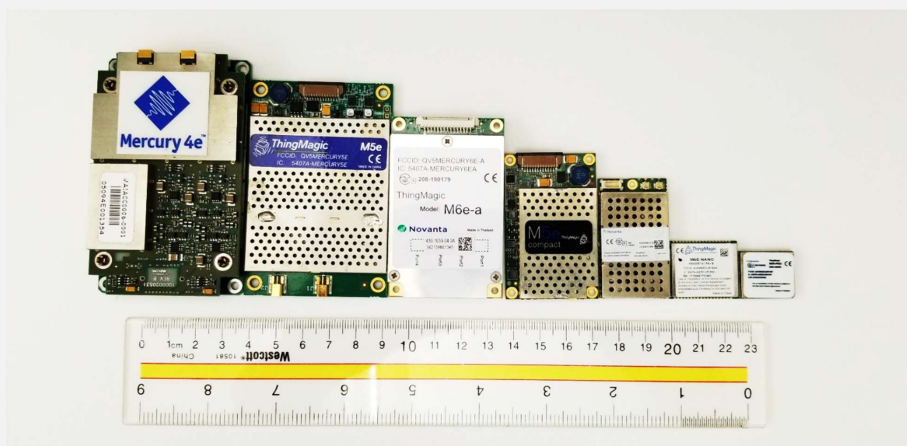


ARTICLE:

ThingMagic® RFID – Relentlessly innovating for the future

Where we've been. Where we're going. Why we're different.

The JADAK RFID product line ThingMagic has always been a model for high-performance in the RFID market. The technology was founded in 2000 by a group of visionary PhD students from the Massachusetts Institute of Technology (MIT) Media Lab. Kevin Ashton, former Vice President of ThingMagic, was the first in the world to propose the Internet of Things (IOT) at the International Conference on Mobile Computing and Networking in the United States in 1999. In the more than 20 years of continuous innovation that followed, ThingMagic embarked on a path of innovation with brilliant results.



From the M4e UHF modules to the latest M7e-Pico UHF RAIN® RFID Module, ThingMagic RFID modules serve customers worldwide, providing a solid hardware and software foundation for achieving superior, stable, and reliable RFID solutions.

ThingMagic has a long track record of successful RFID deployments in environments ranging from hospitals to distribution centers. The JADAK approach ensures the solution is specific to the environment by assessing the surroundings and materials/requirements that are present such as metal and liquids, temperatures, distance to read, and space constraints before designing a system and antenna specific to that environment. ThingMagic modules and finished readers are “tagnostic” and work with every tag vendor on the market.

Rapid acceleration of tomorrow's RFID solutions

Introducing the new ThingMagic M7e-Pico UHF RAIN® Module

The M7e-Pico Module is the smallest form factor UHF/RAIN RFID module on the market today measuring 18mm x 21mm x 3mm.



Featuring the Impinj E310 RAIN RFID Reader Chip, the new M7e Pico Module has very low power consumption (< 2.5W @5VDC) and is ideal for battery-operated, low cost, small form-factor portable readers. And its' wide RF output range is critical in supporting read/write requirements for RFID-enabled printers and tag commissioning stations.

ThingMagic Pico features a surface mount package designed for the efficiency of SMT manufacturing, driving down the total cost for embedding RFID in volume applications.

The M7e-Pico platform uses the same Mercury API as other ThingMagic products, allowing for easy software integration and customization based on form-fit-function SKUs. And the module is flexible enough to allow OEMs to tailor a license that enables the features of interest in the field.

Ideal Applications

- Mobile Devices, including Handhelds, Printers and Sensor Networks
- Tag Commissioning Stations
- Battery-operated Devices
- Access Control
- Smartphone Accessories
- Medical Equipment for Healthcare and Pharmaceutical Industries
- Kiosks and Vending Machines

The M7e Pico Module inherits the consistent performance and design features of the long line of proven ThingMagic technology that continues to innovate:

- Supports a wide range of RF transmit power (read and write power can be set independently)
- High RF transmission power accuracy (accuracy remains stable at different frequencies and temperatures)
- Small RF transmission power regulation step (fine adjustment can be met)
- Optimized tag reading and writing algorithms allow the read and write speed reach the highest speed of the protocol
- Frequency ranges that support most Global requirements

- RF certification in most countries and regions and ability to assist customers in obtaining certification in designated regions
- Supports custom tags (such as temperature tags, humidity tags, etc.) to store the reading and writing of extended areas
- Different modules use a unified API (application program interface), which greatly facilitates the continuous research and development of customers.

Let's engineer together

There's a reason why the JADAK RFID product line ThingMagic is trusted by original equipment manufacturers (OEMs) around the world: its extensive team of seasoned engineers. Many of the RFID team members hold multiple patents, as well as advanced degrees. Their expertise spans the detection and analysis spectrum, and includes embedded firmware, software, electrical, mechanical, RF and optics, machine vision, computer vision, and color and imaging science.

We look forward to partnering with your team of engineers to concept, develop and deploy mission-critical solutions that make your company's mission easier.

About JADAK

JADAK, a business unit of Novanta, is a market leader in machine vision, RFID, barcode, printing, and color and light measurement products and services for original equipment manufacturers. The business designs and manufactures custom embedded detection and analysis solutions that help customers solve unique inspection, tracking, scanning and documenting challenges. JADAK is based in Syracuse, New York, with sales and technical locations across the globe. For more information, visit www.jadaktech.com.

About Novanta

Novanta is a trusted technology partner to OEMs in the medical and advanced industrial technology markets, with deep proprietary expertise in photonics, vision and precision motion technologies. For more information, visit www.novanta.com.

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