M crotron
Flexible electronic solutions

L: 30mm W: 25mm H: 5mm

Benefits:

- Small Size, Low Power Consumption and PCI Express Interface for Mobile Applications

- Fast Integration and Time-to-Market

- Cost-Effective and Highly Scalable

- Tagnostic – Compatible with Most Tags

2-Port, Embedded UHF RAIN® RFID Module

ThingMagic Nova is an ultra-small, power efficient, EPC Class 1 Gen 2 reader/writer module. A cutting edge ARM Cortex microcontroller and the latest RAIN UHF transceiver technology combined with the reader's intelligent operating system make this a feature-rich module.

The ThingMagic Nova adheres to the PCI Express Mini half card form factor, a widely popular format, allowing the Nova to be used quickly and easily. Its small size allows this module to fit into almost any new or existing Original Equipment Manufacturer (OEM) design.

ThingMagic Nova's low power features, including software stand-by mode and sleep mode, wide-input voltage range, and highly efficient switching power design makes it well-suited for battery-powered and other power sensitive applications.

ThingMagic Nova utilizes two antenna ports that can be selected via software control, making this module well-suited for mobile or fixed applications. ThingMagic Nova provides an interface board in the same form factor as the M9, providing the absolute shortest path for integration into existing applications.

It uses common blade technology, including common size and connection methods, for maximum design and solution flexibility. Its simple and intuitive API and ability to adjust to various software host interfaces, including UART (TTL), SPI, USB, and I2C, make it easy to integrate.

Applications:

- Mobile Computing Applications, such as Tablets and Handhelds
- Fixed OEM Applications

JADAK
A Novanta Company

RF Output Power	Supply Voltage	Antenna Options	Weight
10dBm - 27dBm	2.0-5.5V	2 antenna ports, 50 Ω impedance	3.0 g
Host Interfaces/Data Rates	**Transponder Communication Rate**	**Current Consumption**	**Dimensions**
UART (TTL): 9.6-115.2 kbps SPI: Mode 1 up to 4 Mb/s USB: 2.0 Full Speed 12 Mb/s I^{2}C: 100/400 kHz	ISO 18000-6C: FM0 Miller4 Miller8	Sleep Mode: 200 uA Idle Mode: 150 mA Scan Mode:500 mA	Length: 30 mm Width: 25 mm Height: 5 mm
Frequency	**Peripheral I/O Connection**	**Air-interface Protocols**	**Environment**
860-960MHz	4 programmable GPIO pins	ISO 18000-6C (EPC Class 1 Gen 2)	Storage Temperature: -20°C to 85°C Operating Temperature: -20°C to 70°C
Effective Range	**Software**	**SkyeOS™ Embedded**	**Certification**
Passive tags: up to 6m Battery Assisted Passive Tags: up to 10m	SkyeAPI C/.NET API, SkyeTek Protocol v3, SkyeWare 4 developer interface Demonstration applications	Field upgradeable firmware	USA (FCC Part 15.247, FCC Part 15 Modular Approval) EU (EN 302-208, RED 2014/53/EU) Canada (Industrie Canada RSS-210) Japan, Brazil, Mexico, Bolivia, Chile, Korea, Malaysia, India, Taiwan

Tag Support

Air Interface	Manufacturer	Product Family	Tags
ISO 18000-6C	NXP	UCODE	G2XM, G2XL, G2iM, G2iL
ISO 18000-6C	Impinj	Monza	Monza3, Monza4, Monza5, I2C
ISO 18000-6C	Alien	Higgs	Higgs3, Higgs4