rfid as a feature



#### **BENEFITS:**

- » Fast integration and time-to-market
- » Fits into any application
- » Cost-effective and highly scalable
- » Common software interface with the SkyeModule™ Gemini, M2, M7, M9 and M10 readers for maximum design and solution flexibility

#### **FEATURES:**

- » Miniscule footprint smaller than a business card
- » SkyeTek Adaptive Antenna Tuning
- » Greatest tag compatibility with Tagnostic® and TaglQ™
- » USB communication and power, no external power source required
- » Simple and intuitive API

# Super**Nova**



#### **Product Overview**

**SkyeTek's SuperNova** is the world's smallest, high-performance 2-port UHF RFID reader.

The SuperNova is an ultra-small, power efficient, EPC Class 1 Gen 2 reader/writer. Based on SkyeTek's latest UHF reader technology, this new reader brings RFID within reach with incredibly small package, 2 SMA connectors, and USB connectivity.

The SuperNova reader is designed to be easy to use so that you can deploy your RFID solution quickly and without hassle. It provides USB plug-and-play functionality by utilizing the HID drivers, and does not require any other power source besides USB to achieve maximum output power. Each antenna port can be selected via software, and utilizes SkyeTek's Adaptive Antenna Tuning, so that any antenna can be connected and automatically tuned for optimal performance.

With a footprint ¾ the size of a standard business card, the SuperNova can go where other fixed readers can't. Its small size makes it the perfect reader for POS systems, file tracking applications, portals and smart shelves and cabinets. Available at roughly half the cost of other enterprise readers, the SuperNova opens new opportunities to customers that want to take advantage of RFID's many benefits.

#### **Features:**

- 860-960MHz UHF RFID
- Reads and writes transponders based on EPC Class 1 Gen 2
- 2 SMA antenna ports with SkyeTek Adaptive Antenna Tuning
- 500mW output power, up to 10m read range
- Ultra-small form factor
- RSSI and DRM (coming soon!)
- Sleep mode current down to 10uA
- Easy migration from M7, M9 and M10
- USB power and communication
- FCC and CE compliant



### Super**Nova**

#### About SkyeTek:

SkyeTek, Inc continually strives to enable the pervasive adoption of RFID technology. SkyeTek's Tagnostic<sup>TM</sup> RFID readers work with most industry standard tags and smart labels; their low power requirements and small form factor make them the optimal choice for embedding into new or existing products. SkyeTek's RFID reader technology is available in several formats including reader modules, finished readers and hardware reference designs. SkyeTek markets to OEM customers in targeted vertical markets with several high-volume licensing options available.

#### For more information:

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#### Software and Security

#### Software

SkyeAPI C/.NET API SkyeTek Protocol v3 SkyeWare 4 developer interface Demonstration applications

#### SkyeOS™ Embedded

TagIQ<sup>TM</sup> Field upgradeable firmware bootloader

#### Tag Support

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

#### **Specifications**

| Frequency  |  |
|------------|--|
| 860-960MHz |  |
|            |  |

# **Physical**

Length: 68mm Width: 58mm Height: 11 mm

#### **Host Interfaces/Data Rates**

USB: 2.0 Full Speed 12 Mb/s

**Environment** Storage Temperature: -20°C to 85°C Operating Temperature: -20°C to 70°C

### **Current Consumption**

Sleep Mode: 10µA Idle Mode: 50 mA Scan Mode: 500 mA

## **Supply Voltage**

5V via USB

#### **Transponder Communication Rate**

ISO 18000-6C Forward: 40/160kHz Return:

256kHz, FM0, M2, M4, M8

#### **Air-interface Protocols** ISO 18000-6C (EPC Class

1 Gen 2)

#### **Antenna Options**

2 antenna ports,  $50 \Omega$ impedance

#### **Effective Range**

Passive Tags: up to 6m **Battery Assisted Passive** tags: up to 10m

#### Compliance

FCC Part 15.2471 FCC Part 15 Modular Approval<sup>1</sup> EN 302-2081

#### SkyeTek Reader Technology

SkyeTek provides a variety of reader technology at both 13.56 MHz (HF) and 860-960 MHz (UHF). ReaderDNA, a comprehensive reference design, is available for component level integration of the technology including complete design files, BOM, and test fixture. All SkyeTek readers leverage powerful firmware that drastically reduce hardware costs and are delivered in conjunction with ReaderDNA. SkyeModules are controlled via the SkyeTek Protocol, a powerful but simple communication protocol that grants the user access to all features of an RFID transponder. Further, they have been designed with flexible and modular embedded software that allows one to select only the features desired.

<sup>&</sup>lt;sup>1</sup> Planned, pending final testing