

The Rapidise BLE Beacon product line utilizes both **Inplay** and **Nordic** chipsets, with specific modules tailored to different use cases like environmental monitoring, asset tracking, and indoor navigation.

Below is a detailed breakdown of the modules and technical advantages for each beacon variant:

## 1. Rapidise N1 BLE Beacon

Module/Chipset	Specification	Technical Advantage
Main Chip	Inplay IN100 D1	Utilizes <b>Bluetooth 5.3</b> . This is the <b>entry-level, compact</b> model.
Power/Battery	CR2032 Li-ion coin cell battery	Achieves a lifetime of <b>3+ years</b> despite the smaller battery size, making the device very lightweight (9.7 g).
Sensors/Protection	No sensors	Features a high <b>IP67 waterproof rating</b> , ensuring durability and efficiency in various environmental conditions.
Configuration	Non-configurable (fixed firmware)	Supports iBeacon, Eddystone (UID, URL, TLM), and Custom advertising formats.

## 2. Rapidise N2 BLE Beacon

Module/Chipset	Specification	Technical Advantage
Main Chip	Inplay IN100 Q1	Utilizes <b>Bluetooth 5.3</b> . This model is designed as the "powerhouse for tracking and monitoring critical goods".
Integrated Sensors	Temperature & Humidity	<b>Specialized for Environmental Monitoring</b> . Crucial for monitoring temperature-sensitive goods in environments like the cold chain.
Power/Battery	CR2450 Li-ion coin cell battery	The larger CR2450 battery ensures <b>3+ years</b> of continuous life while running sensor operations.
Configuration	Non-configurable (fixed firmware)	Broadcasts Temperature & Humidity sensor data every 5 seconds (default setting).

## 3. Rapidise N3 BLE Beacon

Module/Chipset	Specification	Technical Advantage
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<b>Main Chip</b>	<b>Nordic nRF52805</b>	Utilizes <b>Bluetooth 4.2 Compliant</b> and <b>Bluetooth 5.0 Certified</b> .
<b>Features</b>	<b>1 Red LED Indicator</b>	The LED is present for various status indications.
<b>Advertising Formats</b>	Supports 6 different types of advertisement formats	Includes standard formats plus <b>SOS</b> .
<b>Customization</b>	Customizable Configurations	Configuration is available on <b>Android</b> to customize settings like beacon name, Tx power, advertising format, and interval.

#### 4. Rapidise N4 BLE Beacon

<b>Module/Chipset</b>	<b>Specification</b>	<b>Technical Advantage</b>
<b>Main Chip</b>	<b>Nordic nRF52820</b>	Utilizes <b>Bluetooth 4.2 Compliant</b> and <b>Bluetooth 5.2 Certified</b> . This is the most feature-rich beacon.
<b>Integrated Sensors</b>	<b>Temperature, Humidity, Ambient Light Sensor, and 3-axis accelerometer (IMU)</b>	The <b>IMU</b> enables advanced features like <b>Motion Detection</b> and <b>Fall Detection</b> .
<b>Features</b>	<b>SOS Button</b> (PCB-mounted switch) and <b>1 Red + 1 Green LED</b>	The button can be pressed to trigger an <b>SOS packet broadcast</b> .
<b>Firmware Update</b>	<b>OTA Update (Nordic DFU)</b>	Allows for firmware to be updated over the air, providing flexibility and remote management.
<b>Configuration</b>	<b>Available on Android</b>	Fully configurable, allowing customization of Device Name, Tx Power, Advertising Interval, and Sensor data broadcast interval.

#### 5. Rapidise N14 BLE Beacon

<b>Module/Chipset</b>	<b>Specification</b>	<b>Technical Advantage</b>
<b>Main Chip</b>	<b>Inplay IN100 D1</b>	Utilizes <b>Bluetooth 5.3</b> . This model is similar to the N1.

<b>Power/Battery</b>	<b>CR2450</b> Li-ion coin cell battery	The N14 provides <b>longer battery life</b> by using the larger CR2450 battery (compared to N1's CR2032).
<b>Sensors/Protection</b>	No sensors	Features an <b>IP67</b> rating (also listed as IP65 in other sources), making it highly resistant to ingress.

## Key Takeaway

The Rapidise product line strategically aligns the chipset and feature set with the application: the **N4 (Nordic nRF52820)** acts as the advanced sensor and safety hub, allowing remote updates and motion detection; the **N2 (Inplay IN100 Q1)** is optimized purely for environmental data collection; and the **N1/N14 (Inplay IN100 D1)** are optimized for cost-effective, durable, long-life, and non-configurable **Indoor Navigation** and Proximity Marketing.

This modular approach is similar to a tool chest: instead of one multi-tool, they offer specialized implements (N2 for temperature monitoring, N4 for advanced safety, N1/N14 for basic tracking) built on reliable component platforms (Nordic or Inplay) to efficiently address diverse IoT needs.