



## Cubnut Mini Needle

30 x 5 x 2 mm U8



Unlike flexible sticker-style RFID labels, these tags use PCB technology for their antenna and circuitry and are constructed from rigid materials, making them extremely robust, compact, and optimized for challenging environments — especially when attached to metal surfaces, tools, and industrial equipment, or deployed in harsh conditions (high temperatures, humidity, impact, vibration, etc.).

With multiple mounting options and support for global UHF RFID standards, these RFID PCB tags integrate seamlessly into existing systems, offering accurate identification, improved visibility, and reduced operational costs.

### Highlights & Benefits

- ✓ Outstanding performance
- ✓ Durable PCB construction for long term usage
- ✓ Multiple mounting options for installation
- ✓ ETSI(865-868 MHz) and FCC(902-928 MHz) optional
- ✓ Customization-design, printing, encoding available

### Applications

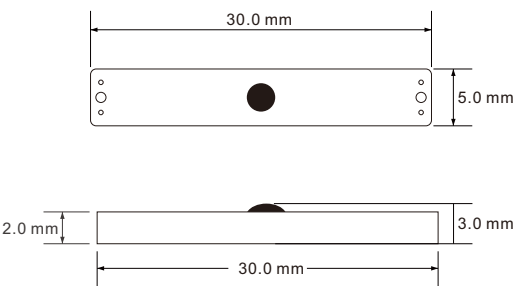
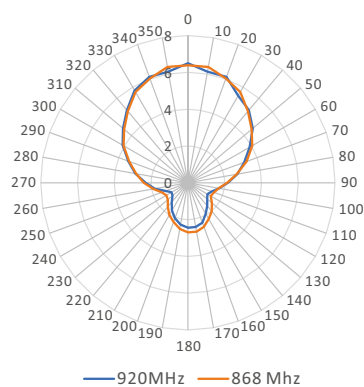
- ✓ Device & tool
- ✓ Electronics
- ✓ Mould
- ✓ Metal part



Technical Features

|                        |                                                                       |
|------------------------|-----------------------------------------------------------------------|
| Model                  | RCP8010                                                               |
| RFID Features          |                                                                       |
| Air Interface Protocol | EPC Class 1 Gen 2 / ISO 18000-63 Type C                               |
| Frequency              | 860-960 MHz                                                           |
| Chip Type              | NXP Ucode 8                                                           |
| Memory                 | User - N/A; EPC - 128 bits; TID - 96 bits                             |
| Data Storage           | > 10 years                                                            |
| Re-write               | 100,000 times                                                         |
| Read Range(2W ERP)     | FCC: > 6.4 m(21.0 ft) , on metal<br>ETSI: > 6.4 m(21.0 ft) , on metal |
| Physical Features      |                                                                       |
| Dimension              | 30 x 5 x 2 mm / 1.18 x 0.20 x 0.08 in                                 |
| Material               | FR-4                                                                  |
| Weight                 | 0.7 g                                                                 |
| Color                  | Black                                                                 |
| Operating Temperature  | -40°C to 85°C / -40°F to 185°F                                        |
| Survival Temperature   | -40°C to 150°C / -40°F to 302°F                                       |
| Storage Condition      | 20±5°C, 50±10% RH, Store away from sunlight                           |
| IP Rate                | IP68, test for 5 hours at 1m deep water                               |
| Other Features         |                                                                       |
| Installation           | Adhesive(clean and dry surface), Rivet, Magnet, Screw                 |
| Customization          | Printing, Encoding, Design, etc.                                      |
| Package                | 200 pcs / bag, 10 bags / box                                          |

Radiation Pattern



PS: The performance is theoretical values in the lab and the actual effect depends on the specific applications.



Web: <https://www.richrfid.com> E-mail: [info@richrfid.com](mailto:info@richrfid.com)  
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