



## NXP® UCODE® 8 Flexible & Printable UHF On-Metal RFID Label

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|               |                                                                  |
|---------------|------------------------------------------------------------------|
| SKU:          | RS-U8-OMPET-2010                                                 |
| Chip Type:    | NXP® UCODE® 8                                                    |
| Frequency:    | UHF 902-928 MHz(US)                                              |
| EPC Memory:   | 128 bits                                                         |
| TID Memory:   | 96 bits                                                          |
| Protocol:     | ISO/IEC 18000-63,<br>EPCglobal Gen2v2                            |
| Industry:     | Retail, Logistics, Automotive,<br>Laboratory, Aviation           |
| Applications: | Inventory, Asset Tracking,<br>Warehouse, Vehicle Tracking, Metal |

The NXP® UCODE® 8 Flexible & Printable UHF On-Metal RFID Label (20×10 mm) is engineered to deliver consistent, high-efficiency RFID performance in environments where metal surfaces typically interfere with signal reliability. Featuring the advanced UCODE® 8 chip, it offers fast read/write speeds, high sensitivity, and dependable long-range readability, ensuring accurate identification for metal assets across industrial and commercial operations. Its flexible design allows the label to conform smoothly to curved or uneven surfaces without compromising performance.

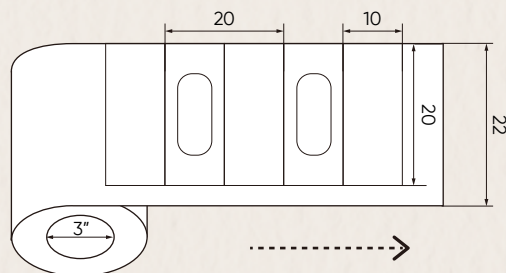
Designed for operational efficiency, this on-metal UHF label includes a printable top layer compatible with standard RFID printers, enabling customization with barcodes, serial numbers, or branding. Fully compliant with ISO/IEC 18000-63 and EPCglobal Gen2v2 standards, it integrates easily into existing RFID infrastructures. With its durable construction, strong adhesion, and optimized on-metal performance, this label is a practical and scalable solution for asset tracking, warehouse management, and supply chain visibility.

|                      |                       |                                                                                      |
|----------------------|-----------------------|--------------------------------------------------------------------------------------|
| Physical Information | Material              | PET                                                                                  |
|                      | Label Size            | 20×10×1 mm                                                                           |
|                      | Support Printer       | SATO CL4NX, Zebra ZT411 RFID Silverline and On-Metal, TSC Printronix T6000e, etc.    |
|                      | IP Code               | IP68, test for 5 hours at 1m deep water                                              |
|                      | Customizable Content  | Printing Logo, Barcodes, Serial Number, Encoding, Designing, etc                     |
|                      | Operating Environment | -20°C~+50°C, 20%~80% RH                                                              |
|                      | Storage Environment   | +18°C~+28°C, 40%~60% RH                                                              |
|                      | Mounting Method       | Stick                                                                                |
|                      | Surface               | Paper Carton, Plastic, Wood, Metal                                                   |
|                      | Handling Precautions  | 1. Keep away from water.<br>2. Labels with black-dot marks are bad ones, do not use. |

|                       |                              |                                    |
|-----------------------|------------------------------|------------------------------------|
| Technical Information | Operating Frequency          | 902~928 MHz(US)                    |
|                       | Communication Protocol       | ISO/IEC 18000-63, EPCglobal Gen2v2 |
|                       | Read Range (Fixed Reader)    | FCC: 1.5 m, On Metal               |
|                       | Read Range (Handheld Reader) | FCC: 0.4 m, On Metal               |
|                       | Chip Type                    | NXP® UCODE® 8                      |
|                       | EPC Memory                   | 128 bits                           |
|                       | TID Memory                   | 96 bits                            |
|                       | Unique Serial Number         | 48 bits                            |
|                       | Memory Safeguard             | Support                            |
|                       | Security Features            | 32 bits Access & Kill Password     |

|                     |                  |                                              |
|---------------------|------------------|----------------------------------------------|
| Packing Information | Packing Format   | Packed in roll, vacuumed packing in ESD bag. |
|                     | Roll OD          | Max. 220 mm                                  |
|                     | Core ID          | 3 inch(76.2 ± 0.50 mm)                       |
|                     | Packing Quantity | 1000 pcs/roll, per roll 1 kg                 |

**Label Dimensions**  
(Unit: mm)



● **Performance and Illustrations:** Graphs and visuals are for reference only; actual product performance may vary depending on usage and environment. ● **Storage and Handling Guidelines:** Follow standard ESD-safe storage and handling procedures to maintain product integrity and avoid damage. ● **Product Updates and Revisions:** RFIDSolution.com may change products, specs, or services at any time without prior notice. ● **General Use Disclaimer:** Products are for general-purpose use and not intended for safety-critical or life-support applications. ● **Legal Notice:** Information is believed accurate but may change. RFIDSolution.com is not liable for use-related issues or outcomes.



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Version: V2.0 Last Updated: 2026-09

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