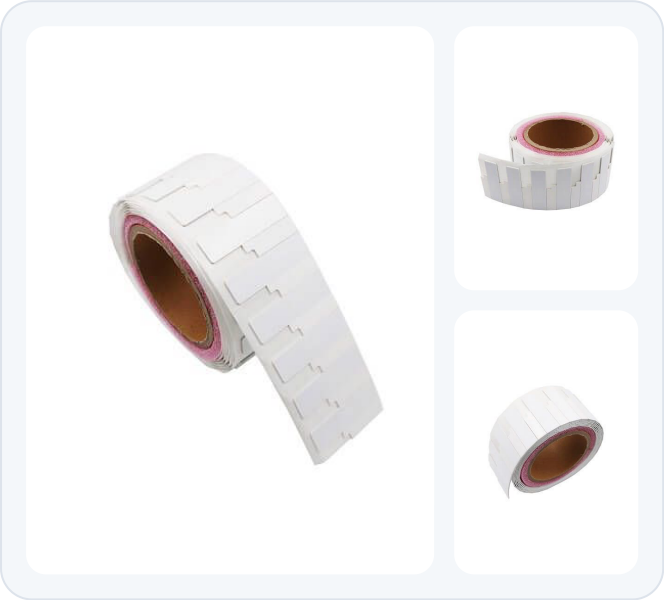
UHF RFID LABEL · UNIVERSAL TAG

RFID label UL5020

Compact and Universal — On Metal or Off Metal



The **UL5020** packs universal **on-metal / off-metal** performance into a compact **50 × 20 mm** footprint — built for assets where space is tight but reliable reads still matter. A built-in anti-metal foam layer decouples the antenna from the surface, so one label works on a steel panel or a plastic bin.

Powered by the Impinj M830 chip with EPC Gen2 / ISO 18000-6C, it stays thin and flexible and is rated for −20 °C to +80 °C operation.

On + Off	~4 m	50×20 mm	100K
METAL, ONE LABEL	READ RANGE ON METAL	1.2 MM THIN	WRITE CYCLES

KEY FEATURES

Truly universal mounting
Validated on metal, and equally at home on plastic, wood or cardboard.

Anti-metal foam spacer
A 1 mm IXPE foam layer isolates the antenna, keeping tuning stable on steel or aluminium.

Impinj M830 engine
EPC Global Class1 Gen2 / ISO 18000-6C for dependable enterprise-grade reads.

Region-flexible frequency
865–868 MHz (EU) or 902–928 MHz (US) — same construction, tuned to your market.

SUPPLIED ON-REEL — Self-adhesive backing · Die-cut perforations · Apply straight off the roll

TECHNICAL SPECIFICATIONS

Full Datasheet

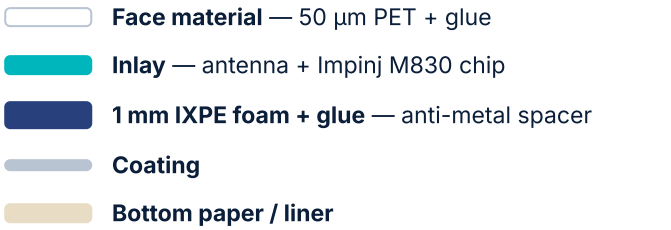
ELECTRICAL PARAMETERS

IC type	Impinj M830
Air interface	EPC Global Class1 Gen2 / ISO 18000-6C
Frequency	865–868 MHz (EU) or 902–928 MHz (US)
Application surface	Metal and non-metal surfaces
Reading range	About 4 m on metal (1 W handheld)
Memory	EPC 128 bits · TID 96 bits · no user memory
IC life	100,000 write cycles
Data retention	10 years

MECHANICAL PARAMETERS

Tag dimensions	50 × 20 × 1.2 mm
Face material	Bright white PET, 50 µm + glue
Spacer / inlay	1 mm IXPE foam + glue (anti-metal layer)
Liner material	Glassine
Reel inner diameter	76.2 mm

STRUCTURE DIAGRAM



ENVIRONMENT & CERTIFICATION

Operating temp.	−20 °C to +80 °C
Storage temp.	−30 °C to +100 °C
Customisation	Printing, coding, writing data, etc.
Certification	RoHS

WHY UL5020

- Same universal on/off-metal construction as our larger UL labels, scaled down
- 50 × 20 mm footprint fits smaller tools, parts and equipment
- One SKU for mixed-surface fleets — no separate metal / non-metal stock

APPLICATION AREAS

- Small tool & equipment tagging
- Retail & apparel inventory
- Warehouse racking & metal bin tagging
- IT asset & component tracking
- Logistics & supply chain labelling
- Library & archive management

RFID·BG

Talk to Bulgaria's RFID team

End-to-end deployment: consulting, hardware, software, install & support.

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