

JEWELRY · PASSIVE RAIN RFID

Long reach in a narrow form.

AU-IMP-M7M8-JW-4211



ANTENNA

42 × 11 mm

FREQUENCY

860–960 MHz

IC CHOICE

M730 / M750 / M830

PEAK REFERENCE

7 m

Electrical characteristics

Model-level specification

Chip manufacturer / chip	Impinj M730, M750 or M830
Protocol	RAIN RFID · ISO/IEC 18000-63 · GS1 Gen2v2; M830 supports Impinj Gen2X
Frequency	860–960 MHz
Operating mode	Passive backscatter; battery-free
IC endurance / retention	10,000 write cycles / 10 years data retention
ESD voltage immunity	2,000 V Human Body Model (HBM)

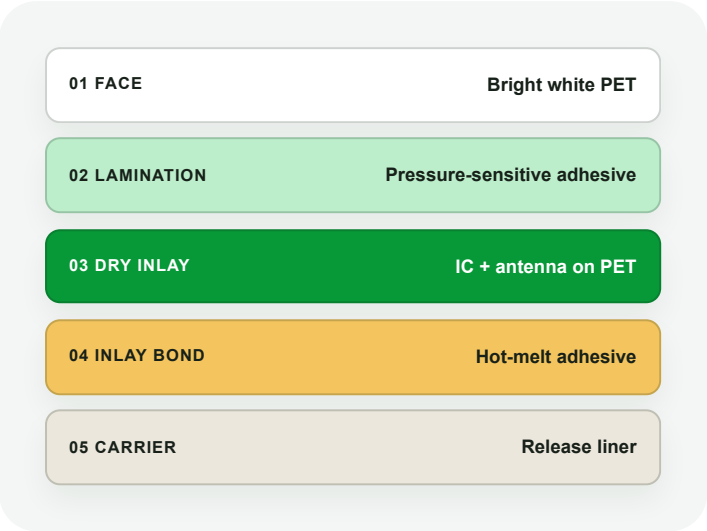
IC memory selection

Choose for identity or user data

IC	EPC	USER	TID	PLATFORM FEATURES
Impinj M730	128 bits	0 bits	96 bits; 48-bit serialization	AutoTune · FastID · Protected Mode
Impinj M750	96 bits	32 bits	96 bits; 48-bit serialization	AutoTune · FastID · Protected Mode
Impinj M830	128 bits	0 bits	96 bits; 48-bit serialization	Gen2X · AutoTune V3 · Power Boost

Layer construction

Exploded from face to liner



- **Base material:** 50 µm PET inlay carrier.
- **Antenna:** 10 µm etched aluminum on PET.
- **Antenna footprint:** 42 × 11 mm.
- **Finished face, adhesive and roll:** selected for the application and confirmed at order.

Reference read performance

Catalogue values

REFERENCE FREQUENCY	READ RANGE	APPLICATION
865 MHz	5 m	Jewelry · ETSI-region reference
920 MHz	7 m	Jewelry · FCC-region reference

Read range is not a guaranteed installation result. Material, mounting surface, item proximity, orientation, tag density, reader antenna, reader power and local radio limits affect performance. Validate the finished label in its intended environment.

Environment and handling

Converted label guidance

Application & service

Recommended application environment: +10 °C to +40 °C, 20–80% RH. Reference environment after application: –20 °C to +50 °C, 20–80% RH. Adhesive performance varies by surface.

Storage & handling

Reference shelf life: one year at 23 ± 5 °C and 50 ± 10% RH, sealed and away from direct sunlight. Protect from water and impact. Do not sharply bend the IC or antenna area.

Specifications may change as components and converting options evolve. IC ratings are not the same as finished-label service limits. Confirm the ordered configuration and validate it in the final application.