

JEWELRY · PASSIVE RAIN RFID

Compact identity for jewelry.

AU-IMP-MR6-JW-1142



ANTENNA

11 × 42 mm

FREQUENCY

860–960 MHz

IC CHOICE

MR6 / MR6-P

PEAK REFERENCE

3.5 m

Electrical characteristics

Model-level specification

Chip manufacturer / chip	Impinj Monza R6 or Monza R6-P
Protocol	RAIN RFID · ISO/IEC 18000-63 · EPCglobal Gen2v2
Frequency	860–960 MHz
Operating mode	Passive backscatter; battery-free
IC endurance / retention	100,000 write cycles / 50 years data retention
ESD voltage immunity	2,000 V Human Body Model (HBM)

IC memory selection

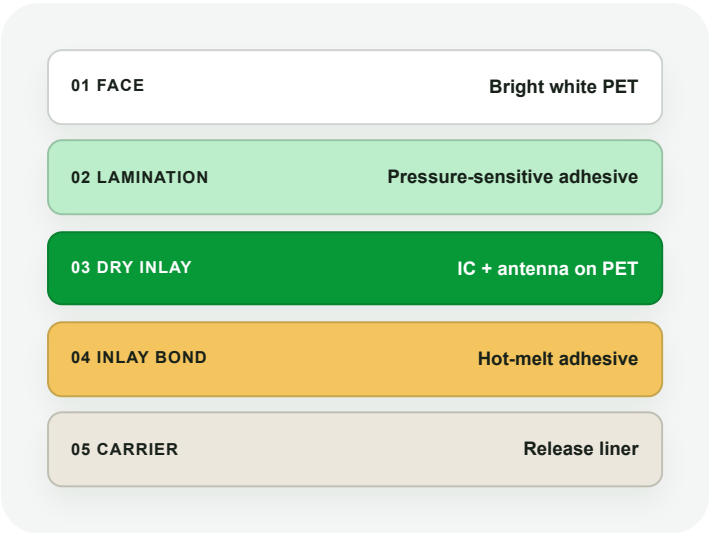
Choose before encoding

IC	EPC	USER	TID	PROTECTION
Monza R6	96 bits	0 bits	96 bits, serialized	Standard Gen2 locking
Monza R6-P	96 or 128 bits	64 bits with 96-bit EPC; 32 bits with 128-bit EPC	96 bits, serialized	Access / Kill; short-range mode

Lifecycle: Monza R6 is in end-of-life status and Monza R6-P is a legacy IC. This model is intended for established programs; confirm IC availability before new production.

Layer construction

Exploded from face to liner



- **Base material:** 50 µm PET inlay carrier.
- **Antenna:** 10 µm etched aluminum on PET.
- **Antenna footprint:** 11 × 42 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	2 m	Jewelry · ETSI-region reference
920 MHz	3.5 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.