

YR-US03 Specifications

1 Specifications

Part Number	YR-US03
Drawing unit: mm	
Dimensions	60×20×1.7mm
Color	Light gray
Weight	Approx. 2.1g
Air Interface Protocol	ISO/IEC 18000-63 and EPC Global Gen2v2 compliant
Frequency	860-960MHz
Read Range (920MHz)	Approx. 9m [†]

[†] Voyantic Tagformance® Pro-measured theoretical read range. Varies depending on the mounting material, usage, and ambient environment.

2 Composition

Outer Sheath	Silicone rubber
IC Chip	Impinj M830
EPC Memory	128bit

3 Operating Conditions

Operating Temperature	-40°C - +85°C [†]
High Temperature+Humidity	85°C×85% RH×168h
Weather Resistance	10 years equivalent
Ingress Protection	IPX7 equivalent
Torsion/Bending	90° twist, 90° bend (R12 equivalent), 10,000 cycles [‡]

[†] Impinj M830/M850 Series Endpoint ICs Datasheet v2.4 indicates write operations are limited to the Gen2v2 extended temperature range maximum of 65°C

[‡] Test cycle time torsion: 1.6 cycles/s, bend: 1 cycle/s

4 Handling Precautions

- Store product in plastic bag or other sealed container in dry cool environment with stable temperatures away from direct sunlight.
 - Ensure product is not subjected to excessive physical force.
 - The IC chip is located centrally within the device. Excessive impact may harm product function.
 - Potential for device failure from antenna breakage is a function of bending radius and repetition cycles; avoid excessive bending e.g. 180° with R0 radius or repeated flexing at tight angles.
 - Ensure minimum R18 for applications with permanent bend.
 - Consult distributor for advice on compatibility with chemicals such as organic solvents, acids, alkalis, or oils.
 - Evaluate product for suitability in intended operation environment prior to use.
 - Reverse engineering or other destructive analysis of advice is not permitted.
- Should a defect or product failure occur, do not disassemble product; contact distributor for support.

5 Assurance

- The information contained in this document indicates typical product characteristics, and does not constitute an express or implied license to any intellectual property rights belonging to Asahi Rubber or any third party. Asahi Rubber assumes no liability for any rights infringement by use of this information.

- **Warranty Period**
The warranty period for this product is six (6) months, commencing from the date of delivery.

- **Scope of Warranty Coverage**
Asahi Rubber will replace or repair product within the warranty period at no cost for any malfunction due to causes for which Asahi Rubber is responsible.

- **Warranty Exclusions, Malfunctions Caused By:**
 - ① Improper conditions, environments, handling, or usage other than as specified in the Instruction Manual.
 - ② Design specifications of customer equipment or software external to this product.
 - ③ Unauthorized modifications or repairs.
 - ④ Factors unforeseeable given general scientific and technological understanding at time of shipment.
 - ⑤ External factors such as natural disasters or power supply irregularities (e.g. voltage fluctuations).

- Regardless of Asahi Rubber responsibility for product malfunctions within or outside the warranty period, this warranty does not cover any secondary damages as a result of product malfunction including, but not limited to, damage to equipment, loss of opportunity, and loss of profits. Furthermore, Asahi Rubber assumes no liability for damages incurred by equipment other than this product, nor for any other costs associated with restoration or recovery efforts.

These specifications are subject to change without prior notice.