







APPLICATIONS

- · Indoor Device ULD Identification
- · Office Equipment
- RTI Management
- · Retail and Warehousing
- · On Metal Asset Tracking

FEATURES

- · Robust White PET Material
- · Up to 8 Meters Reading Range
- High performance acrylic adhesive optimized for metal and painted metal surfaces

RFID OPTIONS

- UHF: ISO 18000-63, EPC Class 1 Gen2
- 865 868 MHz (EU); 902 928 MHz (US)

PRODUCT DESCRIPTION

The Smartwave 660 and 880 labels are flexible and printable RFID label and are compatible with metal and liquid-rich environment. Its thin and light shape makes them easy to attach to curved surfaces such as cylinders, pipes, and metal containers and fixed assets. Widely used in product certification asset tracking, logistics tracking, anti counterfeiting of valuables, and medical asset management, to improve the operational efficiency and inventory management for manufacturers and retailers.

The integrated RFID UHF reader supports ISO 18000-63, EPC Class 1 Gen2 in the frequency areas 865 – 868 MHz (EU); 902 – 928 MHz (US). Smartwave 660 achieves a reading range of up to 6 meters and Smartwave 880 up to 8 meters.

Its robust IP67 white PET material has a good resistance against motor oils, salt water, sulfuric acid, sodium hydroxide and shocks and falls from a height of up to 1.2 meters.

Optionally we offer a printing of your logo or name. We can encode your RFID tags using Standard, NDEF or Crypto-Coding.

TECHNICAL DATA

ELECTRICAL SPECIFICATIONS		
Operating Frequency	UHF: 865 – 868 MHz (EU) 902 – 928 MHz (US)	
RF Protocol	ISO 18000-63, EPC Class 1 Gen2	
Chip Type	Impinj Monza R6-P	
Memory Configuration	128/96-EPC Bits extensible to 480 Bits 64/32 User Bits 48 Bit Unique TID	
Reading Range	Smartwave 660 On-Metal: Up to 6 Meters* Off-Metal: Up to 4 Meters* Smartwave 880 On-Metal: Up to 8 Meters* Off-Metal: Up to 6 Meters*	
Polarization	Linear	

ENVIRONMENTAL SPECIFICATIONS		
Operating Temperature	- 40 °C to + 85 °C	
Survivability Temperature	- 40 °C to + 85 °C	
Protection Class	IP 67 (20 °C, 0.5 m, 2 h)	
Humidity	5% to 95% non-condensing	
Shock & Vibration	MIL STD 810-G	
Drop Specifications	Multiple drops to concrete: 1.2 m across the operating temperature range	
Withstands exposure to	Motor oilSalt water (salinity 15%)Sulfuric acid (10%, pH 2)NaOH (10%, pH 13)	

MECHANICAL SPECIFICATIONS		
Dimensions	Smartwave 660 60 × 25 (±1) × 1.2 mm ±0.1 Smartwave 880 80 × 25 (±1) × 1.2 mm ±0.1	
Weight	Smartwave 660 Unit: 0.85 g Roll (500 pcs): 0.53 kg Smartwave 880 Unit: 1.12 g Roll (500 pcs): 0.71 kg	
Housing Material	PET	
Housing Colour	White	
Mounting Options	Adhesive Fixing • VHB Tape • Silicone sealants • Epoxy Others • Mounding embedded • Heat-shrinkable tubing	

APPLICABLE STANDARDS		
RoHS 2	EC Guideline 2011/65/EU and amendment 2015/863/EU, updated by 2017/2102/EU EN 50581:2012 (valid till 2024-07-07) EN 63000:2018	
REACH	EU Guideline 1907/2006, updated by 2020/171/EU	
Certificates	CE, FCC	

AVAILABLE ICS

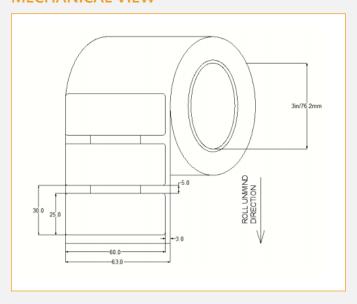
UHF: 865 – 868 MHz (EU) 902 – 928 MHz (US)				
IC TYPE	MEMORY	MODE		
Impinj Monza R6-P	64/32 bits	EPC Global Gen2 ISO/IEC 18000-63		

PERSONALIZATION OPTIONS

- Self-Adhesive Sticker
- Encoding (Standard / NDEF / Crypto Encoding)

^{*}READING DISCTANCE DEPENDS ON ANTENNA AND ENVIRONMENTAL CONDITIONS.

MECHANICAL VIEW



ORDER CODES

VERSIONS	ORDER CODES
Smartwave 660	
EU: 865 – 868 MHz	HCT-F0200-EU
US: 902 – 928 MHz	HCT-F0200-US
Smartwave 880	
EU: 865 – 868 MHz	HCT-F0100-EU
US: 902 – 928 MHz	HCT-F0100-US

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