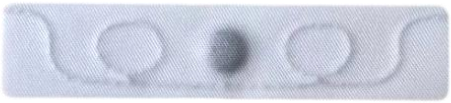
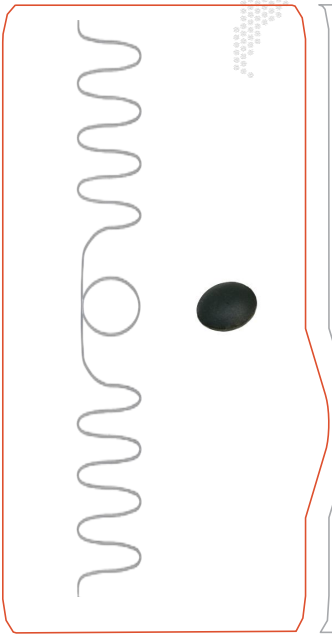
JYL-FLD7015



JYL-FLD UHF/HF Textile Laundry Tag is a **dual-frequency** RFID tag designed for industrial laundering processes including sterilization and ironing. Combining **UHF (860-960MHz)** and **NFC/HF (13.56MHz)** technologies, it meets EPC Class1 Gen2, ISO 18000 and ISO/IEC 15693-2:2006 standards, enabling batch reading from several meters to effectively track and manage linens, workwear and medical textiles through automated systems.

Architecture



Textile laundry tag consists of 3 main parts which can withstand harsh industrial environment for laundry processes operating for hundreds cycles.

Part1: LaundryChips
A silicon chip protection by rigid resin housing withstand harsh industrial laundry environment repeat for hundreds of circulations washing

Part2: Laundry Antenna
Antenna made of flexible, anti-oxidative stainless steel fibers, coated with Teflon, resistant to high temperature chemical detergent liquids during all laundry processes

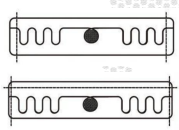
Part3: FABRIC SUBSTATE
Based on the RFID module and antenna, the components are held in place and withstand millions of shocks. The fabric material requires a series of pretreatments to keep shrinkage and deformation within minimum range, and is coated with a silicone heat adhesive as a laminating overlays to protect the laundrychip inside

Highlights

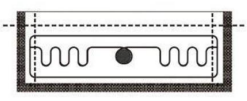
- More than 200 washing cycles (under industrial washing environment pressure 60 bars, heating at 200°C);
- Small dimensions & Maximum flexibility, with ultra-high-density bulk reading;
- Available in 2 versions: source tagging(sewn), and in pouch;
- On Demand Service: Laser logo with EPC encoding in RFID chip;

Installation

Stitching



Pouching



JYL-Tech®

Specifications

Tag Type	JYL-FLD7015
Tag Dimensions	70(L) x 15(W) x 1.5(H)mm
Tag Weight(Approx.)	0.6g
Tag Warranty	Over 200 wash cycles or 2 years from shipping date (whichever comes first)
Tag Memory	64-bit UID (HF) / 96-bit TID + Up to 480-bit EPC (UHF)
Data Retention	20 years
Read Distance	Fixed Reader: 3.8 m(12.5 ft), on clothes; 4.2 m(13.8 ft), in air Handheld Reader: 1.6 m(5.0 ft), on clothes; 2.0 m(6.6 ft), in air
Operating Power	Passive, operates through antenna's RF field
Operating Frequency	865~928MHz and 13.56Mhz
Typical Washing Cycle	Washing: 90℃ (194℉), 15 minutes, 200 cycles Pre-drying: 180℃ (356℉), 30 minutes, 200 cycles Ironing: 180℃ (356℉), 12 seconds, 200 cycles Sterilization: 135℃ (275℉), 20 minutes, 200 cycles Mechanical Resistance: Up to 60 bars
Autoclave	Air removal: +100℃ (+212℉), 5 mins, 0.1 bar Sterilizing: +134℃ (+273℉), 10 mins, 3.25 bar Drying: +45℃ (+113℉), 15 mins, 0.2 bar
Patching Instruction	+215℃ (+419℉), 18 secs, 0.6-0.8 kg/cm²
Storage Temperature	-40℃ to +85℃ (-40℉ to +185℉)
Chemical Resistance	Normal common chemicals in the washing processes
Compliance	UHF: ISO/IEC 18000-63, EPC Global GEN2 V2.0 HF: ISO/IEC 15693, ISO/IEC 18000-3 Mode 1, NFC Forum Type 5
Certification	OEKO-TEX®, ATP, REACH , Over 200 times Washing , ROHS , MRI Safe

Order Code

JYL= Laundry Tag Brand **FL**=Fabric Laundry

3515/3611/5512/5815/7010/7015/7018/7510/7512/7515 = Laundry Tag Size Options

T = Tagging (to be sewn into textile)

H = Heat-Sealable (to be heat-sealed on textile)

P = Pouching (pouch with generic RFID logo embroidered)

E = Re-programmable(to be encoded on chips)

L = Laser (Numbering, Bracode, EPC laser-marked)

For example: JYL-FL7015-T = JYL Fabric Laundry sewing type Tag with 70*15mm size

