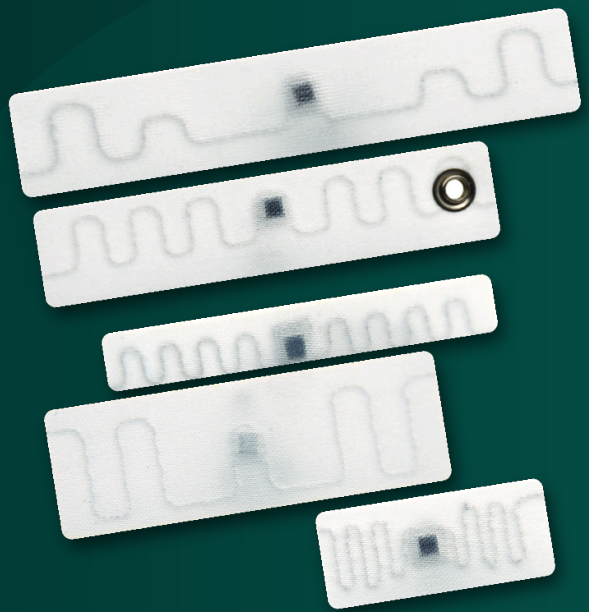


UHF | RAIN - Textile Tags

CT - Laundry Tag Series

- EPC Gen2, ISO/IEC 18000-63, 860–960 MHz
- NXP UCODE 9xe or Impinj M830 chip
- Sewn, heat-sealed or hang-on variants
- 200 wash cycles at 90 °C, 60 bar extraction
- Read range up to 15.5 m (ETSI, 2 W ERP)



UHF | RAIN - Textile Tags 20 variants, rated for 200 industrial wash cycles

The CT - Laundry Tag Series groups 20 UHF textile tags for commercial and industrial laundries. The flexible polyester tags come in eight footprints from 35 x 15 mm to 86 x 16 mm, are 0.55 to 0.65 mm thin outside the chip module and weigh 0.20 to 0.57 g. They have no sharp edges and go into hems, pouches or care labels.

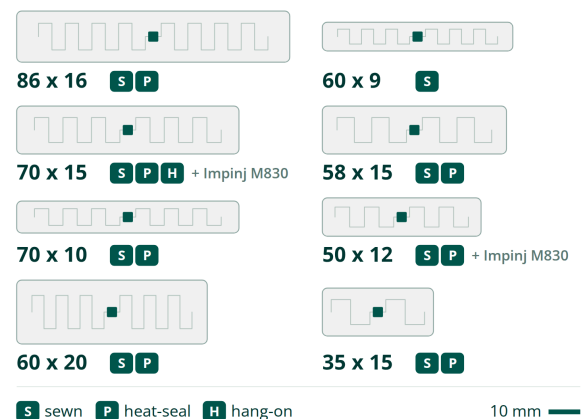
All variants follow EPC Gen2 (ISO/IEC 18000-63) and cover 860–960 MHz, so the same tag reads under ETSI and FCC. Sixteen variants carry an NXP UCODE 9xe, four an Impinj M830, both with a 128-bit EPC and a 96-bit TID. The tags are made for bulk reading in tunnel readers, sorting lines and handheld inventory; read range reaches 15.5 m (ETSI, 2 W ERP) on the 86 x 16 mm tag and depends on footprint and mounting.

Every footprint is available sewn (-S), all except 60 x 9 mm also as a heat-seal version (-P) applied at 210 °C and 0.6–0.8 MPa for 20 s, and the 70 x 15 mm UCODE 9xe tag with an eyelet for hanging (-H). The tags are rated for 200 industrial wash cycles or three years, whichever comes first: washing at 90 °C, water extraction at 60 bar, tumble pre-drying at 180 °C, ironing at 185 °C and sterilization at 135 °C. Printing and EPC encoding on request.

Common Applications

- Hotel Linen & Bathrobes
- Hospital Linen & Patient Gowns
- Workwear & Uniform Rental
- Cleanroom & PPE Garments
- Automated Sorting & Counting
- Textile Rental Pools

Tag sizes in mm, true to scale



TECHNICAL SPECIFICATIONS

RFID Interface

Air Interface	EPC Class 1 Gen 2, ISO/IEC 18000-63
Frequency	860–960 MHz (ETSI and FCC)
Chip	NXP UCODE 9xe or Impinj M830
Memory	EPC 128 bit, TID 96 bit, no user memory
Data Retention	> 20 years, 100,000 write cycles

Physical & Mounting

Material	Polyester textile
Thickness	1.40–1.53 mm at chip, 0.55–0.65 mm elsewhere
Weight	0.20–0.57 g
Sewn (-S)	Three-side stitching or pouch; 60 x 9 mm: two-side
Heat-seal (-P)	210 °C, 0.6–0.8 MPa, 20 s, or pouch
Hang-on (-H)	Eyelet for hanging, or pouch

Laundry Resistance

Lifespan	200 wash cycles or 3 years, whichever comes first
Washing	90 °C, 15 min; laundry and dry cleaning
Tumble Pre-drying	180 °C, 30 min
Ironing	185 °C, 10 s
Sterilization	135 °C, 20 min
Water Extraction	60 bar
Chemicals	Detergent, softener, bleach (oxygen, chlorine), alkali
Operating Conditions	–20 to +85 °C, 8–95 % RH

Part No. / Model – NXP UCODE 9xe

Part No.	Mounting	Size (mm)	ETSI / FCC (m)*
CT-LT-U8616-S	Sewn	86 x 16	15.5 / 13.0
CT-LT-U8616-P	Heat-seal	86 x 16	15.0 / 13.0
CT-LT-U7015-S	Sewn	70 x 15	14.0 / 11.5
CT-LT-U7015-P	Heat-seal	70 x 15	11.0 / 12.5
CT-LT-U7015-H	Hang-on	70 x 15	12.0 / 9.0
CT-LT-U7010-S	Sewn	70 x 10	7.0 / 7.5
CT-LT-U7010-P	Heat-seal	70 x 10	6.5 / 6.3
CT-LT-U6020-S	Sewn	60 x 20	8.0 / 8.5
CT-LT-U6020-P	Heat-seal	60 x 20	10.0 / 9.0
CT-LT-U6009-S	Sewn	60 x 9	4.3 / 5.0
CT-LT-U5815-S	Sewn	58 x 15	11.0 / 6.0
CT-LT-U5815-P	Heat-seal	58 x 15	10.5 / 6.0
CT-LT-U5012-S	Sewn	50 x 12	8.0 / 7.0
CT-LT-U5012-P	Heat-seal	50 x 12	5.5 / 5.0
CT-LT-U3515-S	Sewn	35 x 15	5.7 / 3.0
CT-LT-U3515-P	Heat-seal	35 x 15	3.7 / 2.8

Part No. / Model – Impinj M830

Part No.	Mounting	Size (mm)	ETSI / FCC (m)*
CT-LT-M7015-S	Sewn	70 x 15	15.0 / 11.5
CT-LT-M7015-P	Heat-seal	70 x 15	12.0 / 13.0
CT-LT-M5012-S	Sewn	50 x 12	8.5 / 5.8
CT-LT-M5012-P	Heat-seal	50 x 12	6.0 / 5.8

* Minimum read range, laboratory values at 2 W ERP (ETSI 868 MHz, FCC 920 MHz), for reference only. Actual range depends on reader, antenna, textile and mounting. Packaging: 1,000 pcs per bag.