

Aqua LA603-P

70 x 20 mm EM4425

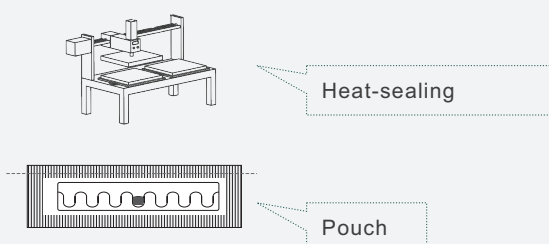
RICHRFID dual-frequency laundry tags (UHF + HF/NFC) are designed for advanced textile management in commercial laundry, hospitality, healthcare, and workwear rental operations.

In industrial laundry environments, UHF enables long-range, high-speed and accurate bulk identification in laundry tunnels, sorting lines, and storage areas, while HF/NFC supports close-range reading via handheld readers or NFC-enabled smartphones for manual verification, issuance and returns, and point-of-use identification. This dual-frequency design allows a single tag to support both automated mass processing and human interaction, ensuring reliable asset differentiation, unique ID encoding, customizable memory, and full lifecycle traceability.

Designed for harsh industrial laundry conditions, RICHRFID dual-frequency laundry tags offer excellent durability and are proven to withstand at least 200 industrial washing cycles, including exposure to high temperatures, washing, drying, and chemical cleaning processes, while maintaining stable RF performance and data integrity.

In addition, these tags can serve as a key data carrier for the Digital Product Passport (DPP), enabling access to product identity, material composition, lifecycle events, and sustainability-related data. Featuring UHF-based bulk management alongside NFC-enabled close-range access, as well as robust construction and flexible installation options, RICHRFID dual-frequency laundry tags provide a scalable and future-proof solution that supports emerging EU DPP requirements, smart inventory systems, and digital textile management.

Installation



Applications

- ✓ Hospitality: Hotel linens, towels, robes, uniforms. Prevents loss, optimizes inventory, automates sorting.
- ✓ Healthcare: Hospital linen, patient gowns, surgical textiles. Tracks sterilization cycles, ensures compliance.
- ✓ Industrial / Corporate: Workwear, rental uniforms, cleanroom garments. Manages stock, usage cycles, and maintenance.
- ✓ Sports / Leisure Clubs: Towel rental, locker management.
- ✓ Laundry Service Providers: Automated sorting, billing, loss prevention.



Highlight & Benefits

- Long, efficient and reliable bulk reading for fast inventory and sorting.
- Withstands industrial washing, drying, and ironing processes.
- Flexible attachment options. High resistance to water, detergents, chemicals, pressure, etc.
- Customization-design, printing, encoding available.
- Compatibility with MRI & needle detector.
- Hybrid band: UHF for efficient inventory count and HF/NFC for smart phone identification, traceability, social networking, etc

Technical Features

Model	Aqua LA603-P
RFID Features	
Air Interface Protocol	EPC Class 1 Gen 2, ISO / IEC 18000-63 Type C HF: ISO/IEC 15693 TYPE A NFC: FORUM TYPE 5
Frequency	860-960 MHz & 13.56MHz
Chip Type	EM4425
Memory	UID-64 bits, TID- 96 bits 2048-bits used for HF +UHF USER memory
Data Storage	> 15 years
Re-write	100,000 times
Read Range (2W ERP)	FCC: > 4.8 m (15.8 ft) ETSI: > 3.8 m (12.5 ft)
Read Range (13.56MHz)	HF: > 4.0 cm(0.13 ft)
Physical Features	
Dimension	70 x 20 mm (2.76 x 0.79 in)
Thickness	1.80 mm (0.07 in) on chip location only, Rest of tag is 0.75 mm (0.03 in)
Weight	0.65g
Material	Polyester
Installation	Heat-seal the tag onto the textile at 210°C and 0.6-0.8 MPa for 20 seconds or pouch
Durability Features	
Lifespan	200 washing cycles or 3 years, whichever comes first
Washing Method	Laundry, Dry cleaning
Water Extraction Pressure	60 bars
Chemical Resistance	Detergent, Softener, Bleach (Oxygen / Chlorine), Alkali
Washing Temperature	90°C (194°F) / 15 minutes
Pre-drying in Tumble	180°C (356°F) / 30 minutes
Ironing Temperature	185°C (365°F) / 10 seconds
Sterilization Temperature	135°C (275°F) / 20 minutes
Other Features	
Humidity / Temperature-Operating	-20~+85°C (-4~+185°F) / 8~95%RH
Customization	Printing, Encoding, Design, etc.
Package	1000 pcs / bag, 10 bag / box

RICHRFID

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DISCLAIMER

All specifications are indicative and results may vary. Each user bears full responsibility for making its own determination as to the suitability of RICHRFID products, materials, services, recommendations, or advice for its own particular use.

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