WASHABLE UHF TEXTILE & GARMENT TRANSPONDERS

A Full Range of Washable Tags Matched to Your Textiles.

No single transponder suits every fabric weight, hem profile, or industrial finishing line. GJBS supplies battery-free washable UHF RFID tags across four specialist families and multiple graduated footprints, engineered to survive tunnel washers, high-pressure water extraction, caustic chemistry, and commercial calender ironers for the working life of each item.



Woven Ribbons · Micro-Hem · Heat-Seal Patches · PPS Buttons · Silicone PPE

200+ Cycles
WASH LIFECYCLE
Industrial wash & dry endurance

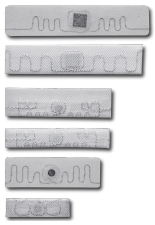
60 bar
HYDRO-EXTRACTION
Mechanical press survival rating

200°C
CALENDER IRONERS
Flatwork ironer & steam finisher safe

Bulk UHF
NO LINE OF SIGHT
Reads sealed sacks & linen trolleys

Four Core Washable Transponder Families · Multiple Sizes & Attachments

Combine multiple tag constructions across the same AR-LaundryPro estate, selected around your textiles and finishing process.



TYPE 01 · MULTIPLE GRADUATED LENGTHS

Sew-In & Micro-Hem Woven Ribbons

Soft jacquard polyester ribbons supplied across compact micro-hem and full-length variants so fine table linen, bedsheets, towels, and plush bathrobes each receive a comfortable, durable fit.



TYPE 02 · RAPID HEAT-PRESS APPLICATION

Thermoplastic Heat-Seal Patches

High-bond thermoplastic adhesive patches press permanently onto polycotton staff uniforms, medical theatre scrubs, and chef whites using a standard commercial heat press, with optional laser serials and 2D QR codes.



TYPE 03 · MULTIPLE BUTTON DIAMETERS & POUCHES

Two-Hole PPS Garment Buttons & Pouches

Rigid high-temperature PPS circular transponders in multiple diameters stitch on like a standard two-hole garment button on shirts, coats, and overalls, alongside soft pouch-insert tags for dry-cleaned outerwear.



TYPE 04 · HEAVY INDUSTRIAL & SAFETY PPE

Flexible Silicone Mat, Mop & PPE Tags

Sealed elastomer and reinforced high-temperature transponders engineered for heavy rubber-backed dust mats, commercial microfibre mop heads, laundry wash nets, and flame-retardant or cleanroom safety PPE.

1. Verified Technical & Environmental Specifications

Tested for commercial laundry plants, hospital sterile & scrub estates, hospitality venues, and industrial workwear.

SPECIFICATION PARAMETER	GJBS WASHABLE UHF TRANSPONDER RANGE STANDARD
Air Interface & Protocol	EPCglobal Class 1 Gen 2 / ISO 18000-63 (Passive battery-free UHF transponder)
Operating Frequency	UK & Europe ETSI 865–868 MHz standard (FCC 902–928 MHz variants available for multi-region groups)
IC Memory & Security	High-sensitivity current-generation laundry UHF ICs (96-bit / 128-bit EPC, unique factory TID serial, lockable memory)
Attachment Constructions	Sew-in woven ribbons, micro-hem strips, thermoplastic heat-seal patches, two-hole PPS buttons, pouch inserts & silicone strips
Industrial Wash Lifecycle	Rated for 200+ commercial wash, hydro-extraction, and drying cycles (typically outlasting the textile)
Water-Extraction Pressure	Up to 60 bar mechanical hydro-extraction press resistance via flexible secondary micro-wire coupling
Thermal Ratings	Washing up to +90°C · Tumble drying up to +120°C · Flatwork calender ironers +180°C to +200°C contact
Chemical & Dry-Clean Safe	Resistant to caustic/alkali detergents, bleach, optical brighteners, softeners, perchloroethylene & autoclave options
Healthcare & Skin Safety	OEKO-TEX Standard 100 skin-safe fabrics and MRI-conditional constructions available for healthcare estates
Bulk Read Performance	Simultaneous multi-item anti-collision reading across sealed soiled sacks, hanging rails, and wheeled linen trolleys
Bureau Encoding & Marking	Supplied blank or pre-encoded by GJBS with customer prefix, human-readable ID, or laser 2D DataMatrix / QR

2. Flexible UK Supply & Encoding Options

Order standalone washable transponders for existing readers or deploy as part of a complete GJBS tracking system.

OPTION 01 · STANDALONE SUPPLY

Volume Tag Supply

Supplied in cut singles, boxed batches, or continuous rolls for high-speed sewing and heat-press stations.

OPTION 02 · BUREAU SERVICES

Custom Pre-Encoding

Delivered pre-encoded to your EPC numbering scheme with optional laser serials or 2D QR codes to eliminate clashes.

OPTION 03 · COMPLETE ESTATE

Turnkey Hardware & Software

Paired with UHF handheld sleds, Drop & Go return containers, doorway portals, and AR-LaundryPro software.

Ready for AR-LaundryPro & Open Readers

- ✓ Works seamlessly with **AR-LaundryPro 360** (bureaus), **Guard** (hotel & spa exits), and **Workforce** (uniforms & PPE).
- ✓ 100% open ISO 18000-63 standard: compatible with UK ETSI handheld UHF sleds, table pads, return bins, and portals.
- ✓ Supports per-garment wash-cycle counters and mandatory PPE maximum wash-cap alerts.

GJBS UK Engineering & Rollout Guidance

- ✓ Consultative transponder specification tailored to your fabric weights, wash chemistry, extraction press, and ironer line.
- ✓ Practical UK guidance on optimum hem placement and commercial heat-press temperature, dwell, and pressure settings.
- ✓ Direct UK technical support from our Northampton team from initial scoping through multi-site rollout.

Discuss Your Washable RFID Tag Requirements

Speak with our Northampton RFID specialists for tailored transponder recommendations, encoding options, and UK volume quotes.

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