

Improved

RFID Solutions

Ultra-Rugged UHF RFID Tag

# UHF RFID Tag WT-A533/WT-A533HT

Wash, Rinse,  
Track, Repeat.

## Ultra-Rugged UHF RFID Tags for Commercial and Industrial Textile Applications

- ▶ UHF technology to read hundreds of tags simultaneously
- ▶ More than 8 foot reading distance
- ▶ New mechanical design for improved performance for flat linens
- ▶ Cost efficient solution with exceptional durability for washing, drying, dry cleaning and ironing
- ▶ Suitable for high-pressure extractors up to 60 bar
- ▶ Suitable for Autoclave sterilization
- ▶ Small, soft, flexible material ideal for textiles, linens, garments and accessories
- ▶ Conforms to "ISO/IEC 18000-63 (formerly 18000-6C) and EPC Gen2"
- ▶ 100% non-magnetic construction, suitable for hospital use



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## WT-A533/WT-A533HT

### Fujitsu's Industrial RFID Flexible Linen Tags

Fujitsu latest industrial strength flexible UHF RFID tags have a new mechanical design offering improved performance for flat linen processing using high pressure extractors and flatwork ironers. Fujitsu tags enable bulk reading of hundreds of items simultaneously with the extended range and accuracy of state-of-the-art UHF tag technology. Laundries will greatly improve linen and garment processing with near 100% accurate reading and enhanced both soiled and clean items. Garment and Linen owners will see improved asset tracking and reduced loss, while keep their costs low by improving workflow and efficiency.

### Advantages of UHF Technology

#### Speed

UHF efficiency increases tag read performance to read hundreds of tags in a single pass.

#### Rugged

Can withstand high pressure extractors and flatworks irons used in high-throughput laundries

#### Accuracy

Inventory management can be performed accurately and easily by reading multiple tags with very low error rates.

#### ROI

Installation of UHF technology will provide cost-effective garment management by reducing labor cost associated with barcode or high frequency RFID tags.



Specifications				
Model		Fujitsu RFID Tag WT-A533		Fujitsu RFID Tag WT-A533HT
RFID Standard		ISO/IEC 18000-63 (EPC Gen2)		
Size & Weight		55(W) x 10 (D) x 1.6 (H) mm, 1.05g		
EPC Number Area		128bit (The first 96bit are pre-written by Fujitsu)		
User Memory		NONE		
Reading Range	Textile	902-928MHz	4W eirp: 270 cm	
		865.6-867.7 MHz	2W erp: 200 cm	
	Rubber Mat	902-928MHz	4W eirp: 250 cm	
		865.6-867.7 MHz	2W erp: 360 cm	
Tagging		Sewing, Heat-sealing, Pouch		
Estimated Lifetime		200 washing cycles/dry cleaning or 3 years from shipping date, whichever comes first <sup>*1</sup>		
Estimated Failure Rate		0.1% excluding DOA (Excludes discoloration, bending, distortion, etc. due to normal use)		
Environmental Resistance	Washing Method		Laundry, Dry cleaning <sup>*2</sup> (Perchloroethylene, Hydrocarbon solvent)	
	WaterExtraction Pressure		60 bar <sup>*3</sup>	
	Water Resistance		Water resistant	
	Chemical Resistance		Detergent, Softener, Bleach (Oxygen/ Chlorine), Alkali <sup>*4</sup>	
	Autoclave Heat Sterilization		121C, 15-20 minutes <sup>*5</sup>	135C for 5 minutes <sup>*5</sup>
	Heat Resistance	Drying	85 °C (Up to 60min.) or 120 °C (Up to 10 min.)	
		Ironing	200 °C (Up to 10 sec. with press cloth)	
	Temperature/Humidity Operating/Storage		-20 to 50 °C, 10 to 95% RH -40 to 55 °C, 8 to 95% RH	
MRI		MR Conditional for static magnetic field of 1.5 T and 3.0 T <sup>*6</sup>		

All data are results performed in our test condition according to Japan Industrial Standard JIS L 0217 - 102, 301, 401, 402. Your test result may vary.

\*1: Nominal industrial laundry conditions, 40 bar water extraction pressure

\*2: Conditions for dry cleaning: Up to 10min./cycle (Washing), More than 30min./cycle within 60 °C (Drying)

\*3: Tested in Fujitsu Frontech Laundry testing condition: 100 cycles at 60 bar with a simulated extractor press.

\*4: The tag has been tested for 10 times at the condition of JIS L 0856 Severe test.

\*5: 80 cycles or more depending on chamber conditions

\*6: In non-clinical testing, the image artifact caused by the device extends approximately 2 mm when imaged with a 3.0 T MRI system.



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