

# Textilligence

*intelligent linen solutions*

UHF RFID technology will change our industry



**Textilligence**

*intelligent linen solutions*

Track and tracing of linen,  
garment and containers

Distributor of UHF RFID tags

Turnkey UHF RFID solutions

Portals & custom built readers

Global experience

## Textilligence for intelligent linen solutions

### In pole position

Textilligence develops, installs and maintains UHF (Ultra High Frequency) RFID solutions worldwide. With the experience of multiple installations of UHF RFID solutions at many laundry and textile rental companies, Textilligence is your trusted resource. Our focus is on implementing UHF technology as a turnkey solution for our customers. Whether it comes to the use of standard reading portals or developing custom made configurations, our team of experienced engineers will find the best solution.

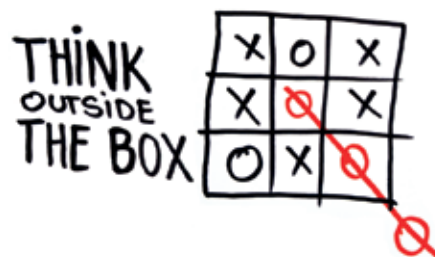


### A different business concept

Textilligence wants to make a difference. The success of a technology project is not to deliver the components, like tags, readers and software, but to make everything work together. It all starts with picking the right components to build the best technical solutions. Our engineers will help our customers in this process. As UHF technology is completely different from previous technologies that have been used in the linen and laundry field, we will assist with the configuration of parameters and tuning of the reading devices to the specific circumstances of each individual project. Our engineers hand over the keys of the project only when the maximum results have been achieved.

### UHF will change the laundry world

Previous technologies offered to our industry, such as low frequency and high frequency RFID, have helped mainly with the track and tracing of work wear. UHF RFID will not only help in this field, but opens up huge opportunities in the track and tracing of flat linen as well. Now that reading over greater distances is possible, it is technically possible to read high volumes of tags in a matter of seconds at many locations in a laundry facility. Also at the customer site, reading of tagged linen items helps to control flows and keep inventory moving. The result is better management of the huge amount of money invested in linen for hospitals, hotel and other industries by textile rental companies. Laundries and textile rental companies benefit from UHF technology, so can end-customers, where large volumes of linens are used or where safety and security is key.



# Why UHF RFID?

Textilligence has helped organizations with implementing UHF RFID technology for:

- improving **efficiency**
- **measuring** linen logistics
- **identifying** lost merchandise
- controlling **circulating inventory**
- optimizing the **capital investment**
- **stockroom control**
- measuring **turnaround time**

... Because your bottom line is important.

## Hospitality

In the hospitality sector 'just in time' is important. This means that linen has to be at the desired location on time and in the right quantity. UHF RFID technology allows better linen management and better protection of the investment in linen as well. Improving services at lower costs is now possible with the introduction of UHF RFID controlled solutions. Locating bath towels and wardrobes is now made easy without introducing customer-unfriendly procedures.

Here Textilligence can help to reduce lost linen and to optimize the use of quality sensitive products in the sector.



## Industrial garments

Previously barcoding, low frequency and high frequency RFID have been used in garment applications. Now with UHF RFID being available, the industry can benefit tremendously in terms of inventory control and safety. These benefits can save a life! Textilligence can help customers to introduce pool garments and still have visibility to 'who is wearing which item' by introducing UHF RFID. In some sectors safety is the most important argument for introducing this technology. Textilligence mobile solutions have already been introduced into the oil and gas industry.

For larger customers in this sector, Textilligence has helped to introduce UHF garment dispensing systems that assist in reducing capital investments and lowering operational costs.

## Only for expensive items?

The returns on a UHF project are normally very high. A common misunderstanding in the industry is that the costs of UHF tags are relatively high and so not applicable to low cost items. Textilligence disagrees with this statement. Rather than looking at the price of the linen item compared to the purchase price per tag, one should look at the costs per washing cycle and compare that with the costs of the tag.

## Healthcare

In the healthcare sector large volumes of linen are used. Optimizing the use of linen requires sophisticated systems for track and tracing. UHF RFID is the only technology that gives management in the healthcare sector the tools needed to do their job accurately and efficiently. The days of managing linen use by weight are gone. Manually counting items is not cost efficient. UHF RFID makes it possible to know at every given moment in time, the exact stock location as a whole or even on the department level. Reading incoming or outgoing batches of linen items is now a matter of seconds. Avoiding overstocking or understocking will help to minimize costs and streamline processing in a healthcare organization better.

Textilligence can help control incoming and outgoing linen better and help management to know exactly the usage and costs per department.

# UHF RFID Scanning Portals

## Innovation

Textilligence helped early adaptors of UHF RFID technology to implement their business concepts. Since the introduction of UHF tags, Textilligence has invested significant R&D funding on designing portals to read large batches of linen in as little as seconds. Together with engineers from different parts of the world, Textilligence introduced a portal concept that now covers three areas:

- Scanning of linen containers / hampers with clean linen;
- Scanning of large batches of soiled linen;
- Scanning of stacks or boxes of linen.

Each of these areas has its own challenges. That is why just one single concept will not work for all applications. Experience is what counts and here is where Textilligence makes the difference for its customers.

Specific software to configure readers and antennas has been developed so that we can reach the highest possible read-range. This way we can overcome the challenges of reading linen in a typical European metal linen container.



### Inscan Portal

An Inscan portal is used for scanning soiled linens into the laundry or when leaving the hospital or hotel customer. Installation of this portal can be on the soil weighing scale or when containers are unloaded from the truck, eliminating any additional space requirements. The width of the portal uses the most common containers in the industry.

For extra wide containers, like for dust mats, or when there are other reasons to widen the portal, additional width extension units are available in 100 millimetre increments.

### Outscan Portal

The outscan portal base unit is the same as the Inscan Portal. Additional wings are attached to maximize the reading ability of the unit in order to minimize the chance of reading tags outside the unit.

Industry research on UHF RFID technology has led to the design and construction of this outscan portal.

In combination with a laundry information system, this portal allows a laundry to produce delivery documents without the labour of counting and the chance of making counting or data entry mistakes. Just another reason why end customers will benefit from a service provider that embraces UHF RFID for linen.



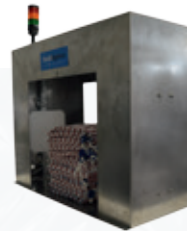
## Conveyor belt scanner

Industrial laundries often have conveyer belts for linen distribution. The conveyor belt scanner has been developed to read soil items while they are being moved to a washing machine or sorting area. This can be used as an additional scanning station in the production process after using the Inscan portal or as an alternative to the portal scanner. Tuning of this kind of antennas is the expertise of Textilligence engineers and key to successful reading. A specialized stack-check-scanner is used for scanning linen bundles after the finishing or folding machines in a laundry. This helps to determine the unique tags that are in a certain stack and can help to validate if the right items are bundled together.

## Monorail Bag scanner

UHF RFID technology makes it possible to also scan full bags of linen in just seconds. This scanning becomes important when needing to know the contents of a mono-rail bag. Knowing what is being returned from a customer allows a new order for that customer to be generated.

## Stockroom UHF assigning station



Assigning a unique tag to a garment or linen to customers or wearers will be done using an assigning-station. This short range reading of one or just a small number of items is mainly done in the stockroom of a laundry. Specific configuration is key, so as not to scan unwanted items.

## Easy shipping and installation

Portal units are supplied on a standard pallet, minimizing the costs of transportation. An easy to follow manual leads the technical staff through the installation of the unit. Textilligence staff is experienced and available on-line to help support the installation. When preferred, a technical engineer can also be on site to provide assistance or even install the portal.

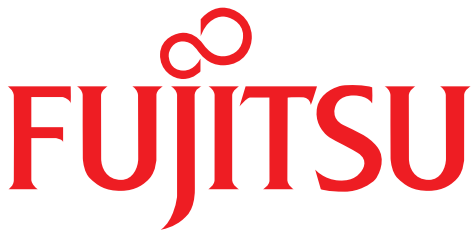
## Software & Interfacing

Textilligence works with laundry business applications labelled "Textilligence Compliant". Please contact us to learn more about the interfacing options available with your current software application.

**Textilligence**



## UHF tags for industrial washing processes



Fujitsu is Japan's largest IT services provider and No. 3 in the world. Fujitsu uses their experience and the power of technology to shape the future of society with their customers. Over 170,000 Fujitsu employees support customers in more than 100 countries, and generate revenue of over 50 billion USD.



### Advantages of Fujitsu UHF Technology

- **Speed:** UHF RFID efficiency increases tag read performance to read hundreds of tags in a single pass.
- **Rugged:** Can withstand high pressure extractors and flatwork ironers 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 RFID technology will provide cost-effective linen management by reducing labour cost associated with barcode or high frequency RFID tags.

### An industrial laundry UHF RFID tag

Via Textilligence, Fujitsu supplies their ultra-rugged UHF RFID tags for commercial and industrial textile applications to customers in Europe and the Middle East. Some key attributes:

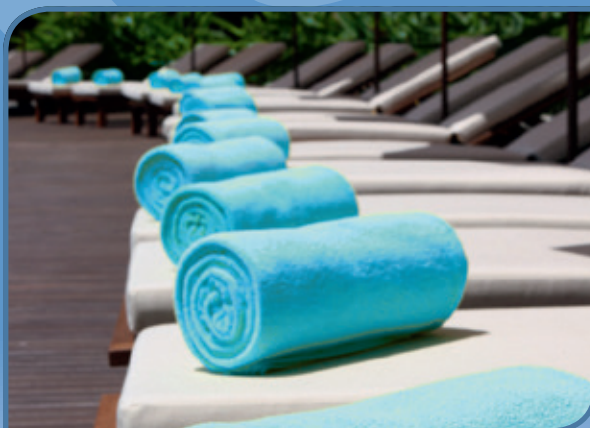
- UHF RFID technology reads hundreds of tags simultaneously
- More than 3 meters reading distance
- Cost efficient solution with exceptional durability for washing, drying, dry cleaning and ironing
- Suitable for high-pressure extractors up to 60 bar
- Small, soft, flexible material ideal for textiles, linens, garments and accessories
- Conforms to "ISO/IEC 18000-6 Type C"
- 100% non-magnetic construction, suitable for hospital use

### Fujitsu's Flexible UHF RFID Tags

Businesses can take advantage of the new ultra-rugged Fujitsu flexible and washable RFID tags to manage their textile, linen and garment assets. Combining the efficiency of check-at-once inventory management with the extended range and accuracy of state-of-the-art UHF tag technology, customers will greatly improve receiving, shipping, and tracking of assets while keep their costs low by improving workflow and efficiency.



“...UHF RFID technology will change the way we do business”



# Textilligence

*intelligent linen solutions*

**Contact information :**

Textilligence bvba  
Molenzicht 23, 2380 Ravels Belgium  
VAT BE 0456.855.944

Tel. : +32.14.65.8061 (Belgium)

Tel. : +34.647.026.213 (Spain)

E-mail : [info@Textilligence.com](mailto:info@Textilligence.com)

Web : [www.textilligence.com](http://www.textilligence.com)

