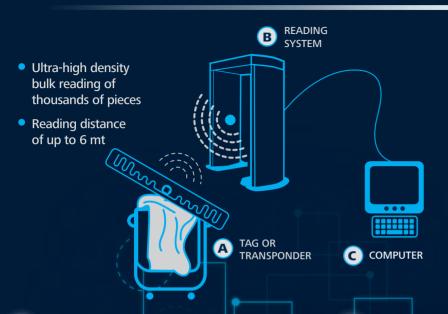


ABOUT RFID AND ITS APPLICATION IN TEXTILE IDENTIFICATION



RFID (Radio Frequency Identification) is the wireless use of electromagnetic fields to transfer data through tiny tags (carrying electronically stored information) attached to textiles in order to identify and track them automatically.

An **RFID system** is composed by **tags** (or transponders) that carry the data and a **reading system** that **reads the data** and sends it to a computer system.

Since a tag contains an unique ID number which gives a precise description of the related textile, RFID enables laundries to track and control textiles and assets anywhere in the industrial process and along the lifecycle. This allows the laundry to know how many textiles are in circulation, the units processed, their precise location, how long they last and why.

WHICH SECTORS CAN BENEFIT FROM **RFID**?

- Industrial laundries and laundry textile rental companies
- Hospital and healthcare facilities
- Hotels and hospitality facilities
- Elderly homes and private clinics
- Industrial companies who need to wash their textiles
- Textile producers who want to offer an additional service to their customers

WHICH KIND OF ASSETS CAN BE **TRACED**?

- Work wear (uniforms, smocks...)
- Flat linen (bed sheets, pillows, tablecoats...)
- Personal protection equipment
- Private wear (underwear, personal wear)
- Mats and mops

HOW CAN COSTS BE **REDUCED**?

Loss reduction

More efficiency

Process automation

Less personel costs

Improved customer service

More quality

Inventory reduction

Less capital

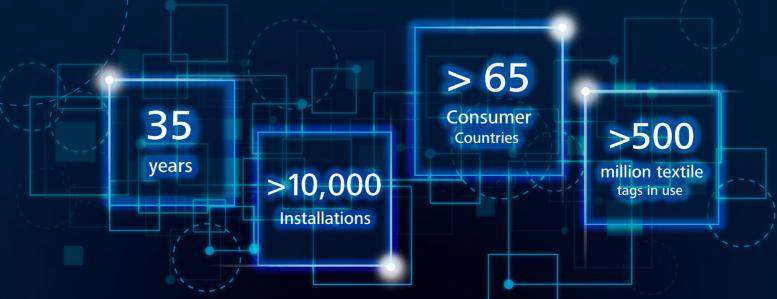
WHY DATAMARS?



Datamars is one of the **leading global suppliers** of high performance unique-identification solutions, specializing in radio frequency identification **(RFID) technology**.

With **34 years** of innovation and leadership in RFID, Datamars is a **pioneer in electronic textile identification** solutions for the **industrial laundry process**, developing important RFID-based patents & trademarks, inventing the **LaundryChip™** in 1990, and offering today the most complete range of RFID identification solutions.

Datamars is an **ISO 9001 certified company** and represents one of the few **fully-integrated players** in the RFID industry. The **in-house product development and manufacturing**, according to specific customer requirements, is the core capability and differentiating factor.



TRANSPONDERS

The LaundryChip™ was **invented by Datamars in 1990** and it was the **first RFID transponder** specifically designed for the **industrial laundry sector** to withstand the harsh environments of washing, ironing, and logistics cycles without being detected and without damaging the textile, well-suited to, but not limited to, **flat linen** and **garment tracking**, **process automation**, **product authentication** and **asset management applications**.



UHF LAUNDRYCHIP™ 40x family

Over the years Datamars has continued to innovate, developing a **vast range of UHF LaundryChip™** in different sizes and packages, up to the latest UHF 401 and 403 lines.

Successfully certified as **OEKO-TEX® Standard 100** and **MR (Magnetic Resonance) conditional**, the UHF LaundryChip™ 40x is our latest disruptive transponder generation that encompasses in a **very small size** (thickness halved and width reduced by 33% vs the previous generation 301) **the best mechanical and electrical performances** ever.



READING SYSTEMS

Datamars has introduced the most innovative RFID reading systems (composed by readers and antennas) in the textile ID market, well-renowned for their accuracy and reliability. Datamars designs and manufactures all systems in-house, fitting perfectly into customers' existing processes and letting them increase productivity in a sustainable way.



UHE PORTALS

Fast and reliable, they are the perfect solution for **bulk scanning on the soil side**. Now also suitable for the clean side with Datamars S-UHF-Portal Plus.



UHF CABINETS

Available either in manual version for light industrial environment or fully automated for heavy duty operations, they can read **1000s of textiles in a few seconds** with an unsurpassed level of accuracy.

UHF CONVEYOR SYSTEMS

Designed to **read hanging garments**, they are compatible with major brands of workwear conveyors. Multiple options allow to adapt the reading system to the conveyor speed, spacing between garments or conveyor arrangement.



The UHF Open Tunnel 201, powered by artificial intelligence (RFAID $^{\dagger}M$), has been designed to be mounted on any existing laundry conveyor belt and is the perfect reading system to read clean stacks of textiles.



No-brainer solution for any table-top need, they are available in a large number of configurations and can be customized to fit any customer situation.



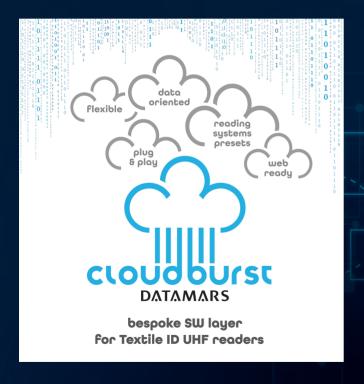
COMBO SYSTEMS (UHF-HF-LF)

Combo systems illustrate Datamars long term commitment to support its customers and technologies. 30 years after the first introduction of LF technology, Datamars is still improving its LF systems to help customers transitioning to newer technologies.

SOFTWARE

Datamars has completely reimagined reader software and has developed **CLOUDBURST**, a software layer that runs on UHF readers and reading systems specifically designed for the laundry environment. Cloudburst minimizes the complexity of implementing RFID while maximizing reader performance in a laundry environment.

In 2023, Datamars has enhanced its software lineup by introducing **STORM**, a web platform that allows to manage efficiently and remotely all RFID devices installed in locations, preventing downtimes and data losses.





HOW RFID CAN IMPROVE A TYPICAL LAUNDRY CYCLE

LAUNDRY



CLEAN

All clean textiles CHECK-OUT ready to be loaded on the truck are read by an RFID system.

> Transparency with the customer is improved and billing can be performed based on reliable data.

Once tags are attached to textiles,

they can be identified and tracked automatically in each step of the laundry process with amazing advantages.



SOIL

CHECK-IN

know exactly

washed

DATAMARS

00 00

have arrived to be



All soiled textiles CHECK-OUT are read by an RFID system. No more concern

or discussion about lost textiles: the laundry is informed about the customer needs before the textiles get to the facility.



(STOCK)

Through a portable RFID reader. inventory at the customer premises is performed to make sure all stock has been

accounted for

CLEAN

CHECK-IN

All clean textiles that arrive at the customer's warehouse are read by an RFID system to let the customer know exactly how many textiles have arrived from the laundry and which ones.

CUSTOMER

Discover more on www.textile.datamars.com

and follow us on:







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