




Smart Packaging Solutions

One Stop Shop for your Smart Traceability needs.

TERMOPLAST

ITALY (INDIA) PRIVATE LIMITED

Driving Supply Chain Innovation with RFID

In an increasingly dynamic marketplace, businesses are turning to RFID technology to enhance supply chain visibility, strengthen product traceability, and ensure seamless authentication. By fostering consumer confidence, mitigating counterfeiting risks, and addressing the growing demand for transparency, RFID has become an indispensable tool for modern enterprises.

At Termoplast, we are dedicated to equipping businesses with robust, compliant, and cutting-edge RFID solutions tailored to diverse industries such as Retail, Jewellery, Pharmaceuticals, Manufacturing, Logistics, Warehousing and many more. Together, let's drive innovation, optimize operational efficiency, and build a future where connectivity and automation redefine success.

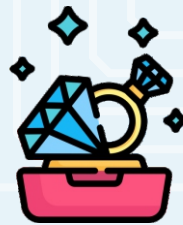
Applications



Apparel



Retail



Jewellery



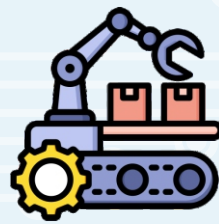
Warehousing



Pharmaceuticals



Logistics



Manufacturing



Automotive

Our Smart Products

- **RFID Hang Tags** : Sandwich tag | Inkjet Printed tag | Perforated tag
- **RFID Labels** : Sandwich label | Taffeta/Satin Folded label | Woven label
- **RFID Stickers** : Plain Die-cut sticker | TT/Inkjet Printed sticker
- **RFID Pocket Labels** : 3-side/4-side/Welded finish label | EAS Security label
- **RFID Hardware** : Readers | Scanners | Antennas | Printers
- **RFID & IoT Software Solutions**

Our Services

● Design, Development and Prototyping

Our in-house graphic studio and advanced machinery ensure seamless prototype development, **from concept to execution**. With premium raw materials and cutting-edge printing, we craft intricate designs that meet the highest industry standards. Managing design, development, and sampling in-house guarantees precision, quality, and efficiency. Whether for complex trims or custom packaging, our expertise delivers refined, innovative solutions for the most demanding clients.

● Variable Data Management

We avail the use of **Quadient® Inspire Designer**, a market-leading software, to create and manage high-quality customer communications across all digital and print channels from a central platform. Its drag-and-drop design enables fast mapping and conversion of variable product data such as barcodes, garment composition, care instructions, etc. into print-ready output. By cutting design, approval, and implementation time by up to 80%, we provide a cost-effective solution that enhances accuracy and speeds up time-to-market.

● RFID/IoT Implementation & Consulting

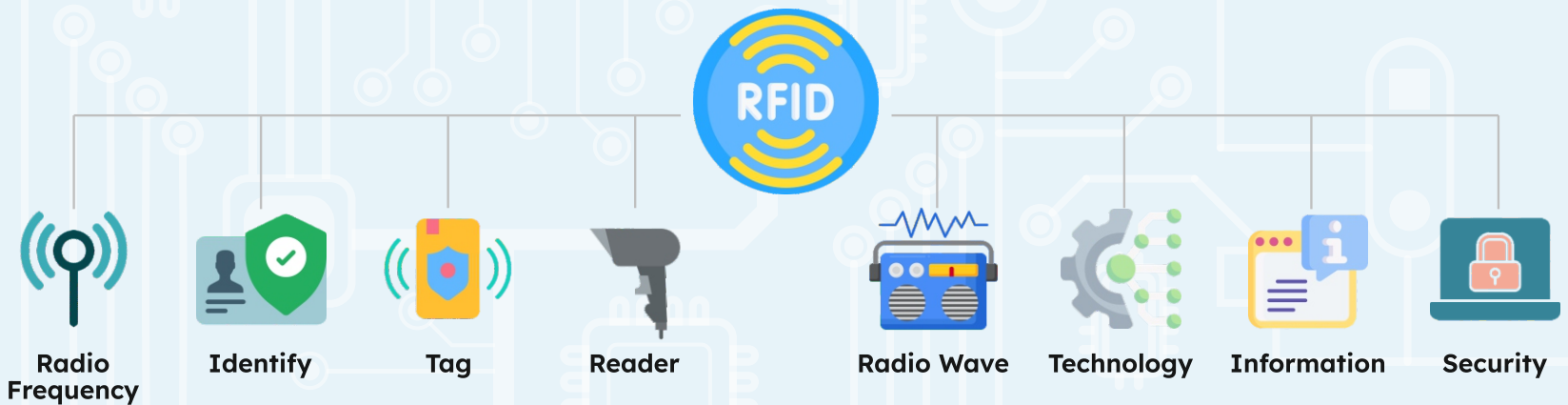
Through our dedicated RFID Software Solutions partner, we provide end-to-end **RFID and IoT consulting services** to help customers integrate intelligent tracking and robust automation solutions tailored to meet their unique business needs. Our strategic approach begins with an in-depth operational analysis to identify high-impact RFID applications. With a phased, cost-effective deployment, we maximize efficiency and accuracy while minimizing disruptions. Continuous monitoring ensures optimized inventory management, traceability, and overall performance, unlocking new levels of growth and innovation.

● Termoplast Portal

We have deployed a cutting-edge **B2B web platform** designed to streamline order management for high-volume, multi-product operations. This fully customised **Order Management System (OMS)** offers vendors a seamless, real-time interface for order placement, production tracking, invoicing, and comprehensive reporting. Featuring an intuitive GUI, personalised dashboards and robust data integrity measures, it ensures fast, accurate, and user-friendly order processing, enhancing operational efficiency and reducing turnaround times.

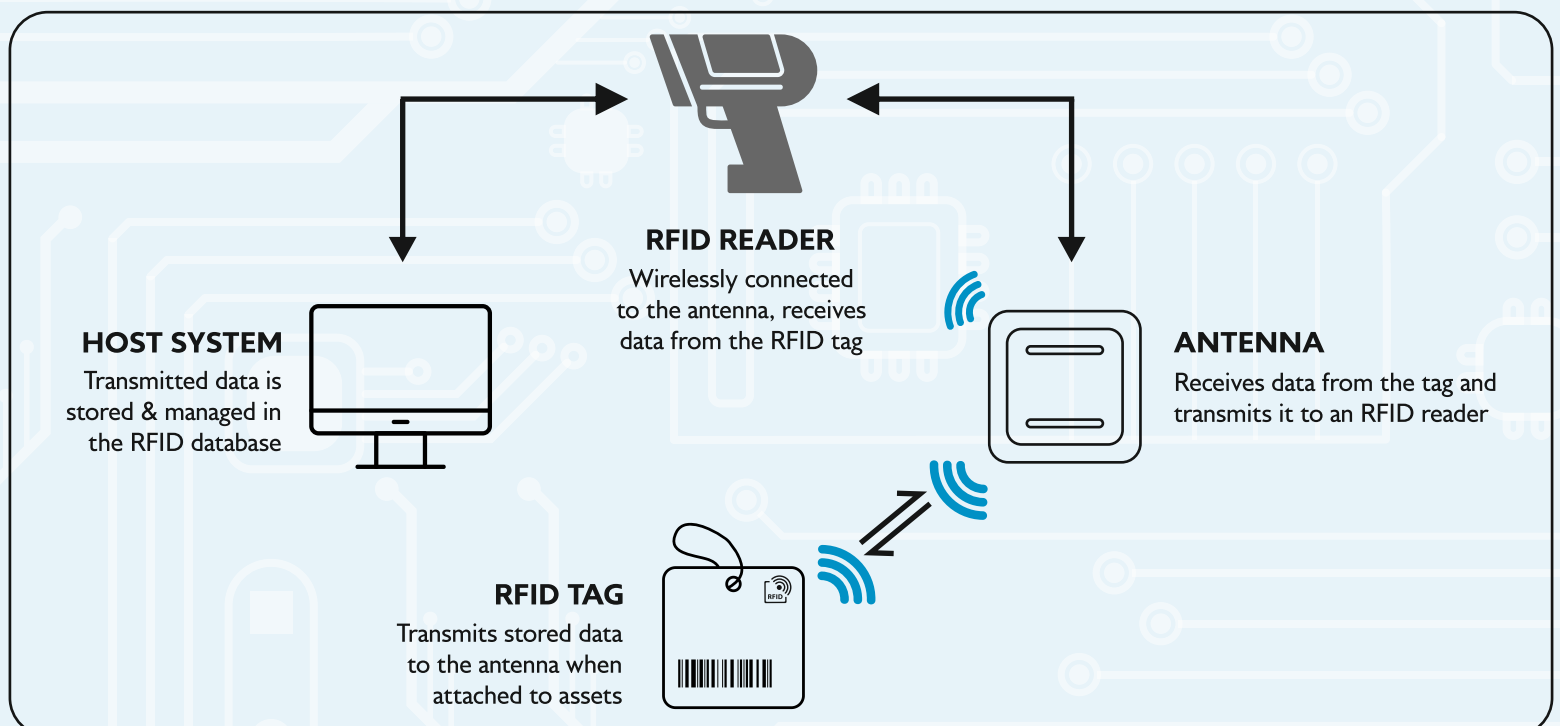
How RFID works?

RFID technology uses radio waves to identify and track tagged items, offering real-time inventory management and improved operational efficiency. RFID tags, containing microchips and antennas, are attached to products. RFID readers, both mobile and fixed, send signals to activate the tags, which then transmit their data back to the reader. This data is processed by software, providing insights into inventory levels, stock movement, and potential theft.



Core Elements of the RFID System

- 1 RFID Tags**
RFID Tags, containing a unique identifier, transmit data to RFID readers using waves.
- 2 Readers and Antennas**
Reader and Antennas capture the RFID signals and pass the information to the central database for processing.
- 3 Central Database**
The Central Database stores and manages the information received from RFID tags, enabling real-time tracking and reporting.



Key Components for Smart Retail Solutions



RFID Printer/Encoder



RFID Encoder/UHF Reader



RFID Tag



Handheld/Fixed Scanner



POS Device

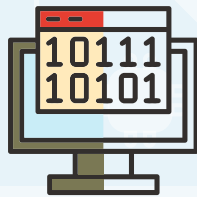


RFID Anti-theft Gate

RFID System Architecture



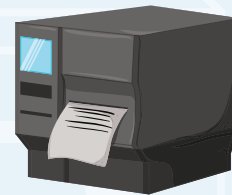
Data Prep & Bulk Upload



Encoding Application



Printing file



RFID Printer/Encoder



RFID Tag



App Schema



Inventory Schema

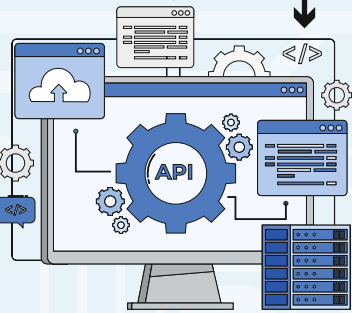
JSON



Handheld Scanner + Mobile Application

Tag encoding & printing process

Stock Taking



RFID/IoT Software Platform



Sales Schema



POS Device

Billing & POS



RFID Gate

Exit gate Anti-theft system



Benefits of RFID Smart Labeling

While barcodes and RFID will continue to complement each other, RFID offers unique advantages that significantly improve operational efficiency and accuracy.



Product Authentication

Quickly verify product authenticity during receipt and returns with a simple scan, improving security and reducing counterfeit risks.



Reduce Pilferage

Track goods in real time from receipt to dispatch, preventing losses by alerting you to unauthorized movement.



Inward Processing

Efficiently scan bulk-tagged products in a single pass, significantly reducing sorting and receiving time.



Supply Chain Visibility

Monitor goods from warehouse to retailer via detailed dashboards, boosting predictability and improving forecasting accuracy.



Automatic Location Tracking

Fixed readers automatically record product locations as they are shelved, tracking movement in real time for precise & efficient inventory management.



Efficient Checkout

Accelerate checkout by scanning items without the need to unpack, reducing last-mile errors and enhancing the overall customer experience.



Instant Item Location

Quickly locate tagged items without the need for line of sight, eliminating the need for manual scanning.
































Easy Returns

Instantly authenticate returned items to prevent unauthorized stock from re-entering inventory, ensuring accuracy and quality control.

RFID Inlay Portfolio (ARC certified)

We offer a robust inlay portfolio, featuring ARC-certified inlays from our trusted partners—Arizon, China and Tageos, France. These high-performance inlays bonded with the latest chipsets from NXP and Impinj ensure global compliance, superior reliability, and seamless integration, powering our smart packaging solutions with cutting-edge RFID technology tailored for diverse industry needs.

S/n	Product Code	Antenna Size (mm)	Chip	Antenna Shape	ARC Specifications											
					C2	F/G	H	I	L	O	Q	R	S	W5	W6	Y2
1	AZ-H9A	10*70	NXP UCODE 9		●	●	●	●	●	●	●	●		●	●	●
2	AZ-H99	14.5*70	NXP UCODE 9			●	●	●	●	●	●	●		●	●	●
3	AZ-H97	14*70	NXP UCODE 9			●		●	●	●	●	●		●	●	●
4	AZ-H85	14*70	NXP UCODE 9			●		●	●		●	●		●	●	
5	AZ-G95	30*50	NXP UCODE 9			●		●	●	●	●	●		●	●	●
6	AZ-G9A	28*44	NXP UCODE 9			●		●	●	●	●	●		●	●	●
7	AZ-G97	28*44	NXP UCODE 9			●		●			●			●	●	
8	AZ-M9A	20*44	NXP UCODE 9			●		●	●	●	●	●		●	●	●
9	AZ-M98	16*42	NXP UCODE 9			●				●	●			●	●	
10	AZ-M97	16*42	NXP UCODE 9			●					●			●	●	
11	AZ-HR8	14*70	Impinj M830			●		●	●	●	●	●		●	●	●
12	AZ-GR86	30*50	Impinj M830			●		●	●	●	●	●		●	●	●
13	AZ-MR8C	20*44	Impinj M830			●		●	●	●	●	●		●	●	●
14	AZ-GR8	28*44	Impinj M830			●		●	●	●	●	●		●	●	●
15	AZ-MR84	24*42	Impinj M830			●		●	●	●	●	●		●	●	●
16	AZ-MR7N	16*42	Impinj M830			●				●	●			●	●	
17	AZ-MR8A	16*42	Impinj M830			●				●	●			●	●	
18	AZ-MR8D	16*42	Impinj M830		●											
19	AZ-HR7A	14*70	Impinj M730/750			●		●	●	●	●	●		●	●	●
20	AZ-UR78	8*71	Impinj M730			●		●	●	●	●	●		●	●	●
21	AZ-GR7E	30*50	Impinj M730/750			●		●	●	●	●	●		●	●	●
22	AZ-MR7N	16*42	Impinj M730/750			●				●	●			●	●	
23	AZ-GR7K	28*44	Impinj M730/750			●		●	●	●	●	●		●	●	●
24	AZ-GR7	28*44	Impinj M730/750			●		●		●	●			●	●	
25	AZ-UR77 (EAS)	35*65	Impinj M730/750			●		●								
26	AZ-MR7T	24*42	Impinj M730/750			●		●	●		●			●		
27	EOS-300	30*50	UCODE9 M730/830			●	●	●	●	●	●	●		●	●	●
28	EOS-241	16*42	UCODE9 M730/830			●				●	●			●	●	
29	EOS-261	20*44	UCODE9 M730/830			●				●	●	●		●	●	●



Ready to partner with us for growth?

Get in Touch!

-  www.termoplastindia.com
-  chirag@termoplastindia.com
-  +91-98406 44648, +91-63815 95123
-  2/11, Thiruchitrambalam Koot Road,
Pondy Tindivanam Main Road,
Vanur Taluk, Viluppuram Dist,
Tamil Nadu - 605111, India.

Scan to
know more.

