THE LEADING RFID INLAY AND TRANSPONDER MANUFACTURER FOR HIGH-SECURITY IDENTITY DOCUMENTS.

e-passports  e-social security cards  e-permanent resident cards
e-driver's licenses  e-visa documents  e-health cards  e-national ID cards
SMARTRAC is the leading developer, manufacturer, and supplier of RFID transponders and inlays. We produce ready-made and customized RFID transponders and inlays used in access control, animal identification, automated fare collection, border control, RFID-based car immobilizers, contactless payment, electronic product identification, high-security identity documents, industry, libraries and media management, laundry, logistics, mobile & smart media (NFC), public transport, retail, and many more.

SMARTRAC was founded in 2000 and has its registered headquarters in Amsterdam, the Netherlands. The company currently has a workforce of around 4,000 employees and maintains a global research and development, production, and sales network.

THE LEADING SUPPLIER FOR HIGH-SECURITY RFID TRANSPONDERS AND INLAYS
We are the global leader for high-quality RFID inlays for e-passports and national ID cards. Relying on SMARTRAC contactless inlays and PRELAM® products provides the highest security, reliability, and durability for sophisticated contactless identity documents.

SMARTRAC pools its expertise, product, and technology know-how for high-security identity documents in the Government segment. Operating from Centers of Excellence in Germany and Thailand and drawing upon a global manufacturing footprint, the company offers a broad product portfolio specifically developed for the needs of the secure printing industry including e-covers for e-passports as well as inlays and PRELAM® products for high-security identity documents.

BUSINESS MODEL
In the global RFID value chain, SMARTRAC has successfully positioned itself as the leading developer, manufacturer, and supplier of RFID transponders and inlays. Working closely with industry partners, our successful business relationships are based on reliability, expertise, competitiveness, technological leadership, and partnership.

The value chain for high-security identity documents.
SMARTRAC is the preferred technology partner and supplier to secure passport manufacturers, secure card manufacturers, and other players in the security printing industry. Our success as the leading supplier of RFID transponders and inlays for high-security identity documents has been driven by continuous innovation, cost leadership, flexibility, and responsiveness to customer requirements.

We hold more than 370 patents and patent applications for technology, equipment, and production of contactless components and related processes. Based on our strong intellectual property, we have been able to set standards in several fields in the global RFID industry.

We manufacture our RFID antennas in-house. Our expertise in the four main antenna manufacturing technologies – wire-embedding, etching, coil winding, and printing – combined with patented technologies and long-standing experience in antenna-chip-connecting technologies give us a clear competitive advantage. Close collaboration with the global key IC manufacturers enables us to conduct the full range of wafer processing steps, i.e. dicing, grinding and SMARTRAC’S patented palladium bumping, from the raw chip wafer to the ready-to-manufacture chip die.

At SMARTRAC, we aim to constantly develop our technologies and enhance our existing product portfolio. We seek to exceed our customers’ expectations by offering global manufacturing, excellent service support, leading technology, and customized solutions.

We employ some of the most skilled experts in the RFID industry with R&D competence centers and prototyping facilities in Asia, Europe, and the Americas. This enables us to permanently evaluate technical trends and assure the competitiveness of our products and developments worldwide.
SMARTRAC OFFERS THE MOST COMPREHENSIVE PRODUCT PORTFOLIO FOR HIGH-SECURITY IDENTITY DOCUMENTS.

Individual SMARTRAC product data sheets are available at www.smartrac-group.com or via government@smartrac-group.com
PRODUCT FAMILIES

- SMART-SL
- SMART-DC
- SMART-DI

FUNCTIONALITIES

- SMART-AC
- SMART-CAP
- SMART-STePP

APPLICATIONS

- e-passports
- e-national ID Cards
- e-driver’s licenses
- e-visa documents
- e-health cards
- e-social security cards
- e-permanent resident cards
WE CONTRIBUTE TO INCREASED PROTECTION AGAINST FRAUD & FORGERY.

Modern RFID technology redefines the world of personal identification. SMARTRAC is the trusted technology and manufacturing partner for inlays and PRELAM® products targeted at providing a secure proof of identity.
Manufacturers of electronic identity (eID) documents constantly face new challenges in terms of increased document durability, reliability, and security. Based on a combination of highly sophisticated technologies and operational processes, SMARTRAC offers a product range which addresses these requirements and contributes to the overall target of creating a forgery-proof document that ensures reliable identification of individuals and protects the document holder’s identity while at the same time enabling fast processing.

SMART-SL PRODUCT FAMILY
A contactless ID card is typically made of a sandwich structure with the RFID inlay residing at the core of the eID card. Further layers of foil and plastic are added over the course of the manufacturing process incorporating numerous security features. With every additional layer, the security of the document increases as does the thickness of the ID card. At the same time, eID card inlays have to comply with the ID-1 standard when it comes to size and thickness.

Therefore, SMARTRAC has introduced its SMART-SL product family to accommodate the need for thin inlays in accordance with international interoperability standards. The thin monobloc structure enables the incorporation of more complex card layers during the manufacturing process to meet today’s augmented security requirements while at the same time providing highest reliability and durability over the entire lifetime of the identity document.

SMART-DC PRODUCT FAMILY
Today’s state-of-the-art contactless inlay technology has significantly improved the complete value chain for e-ID documents from the chip supplier via the inlay manufacturer to the document producer. New features in next generation e-ID documents are enabled by ultrathin, durable, flexible and homogenous flat inlay characteristics.

SMARTRAC’s latest technology connects bare microcontroller chips directly to the antenna. A process necessary to fulfill the requirements of highly durable, secure and reliable eID documents. Bonding the chips to the antenna with a pure metallic interconnection using SMARTRAC’s wafer processing and patented palladium bumping technology, avoids using any material sensitive to ageing. An important factor, considering the high quality and general 10-year lifetime requirements of e-ID documents, like e-ID cards or e-passports.

SMART-DI PRODUCT FAMILY
The SMART-DI product family is tailored to combine stringent durability and quality requirements with the benefits of Dual Interface (DI) technology. Our SMART-DI products are manufactured based on advanced and proprietary production technologies thereby enabling a very strong and reliable antenna-chip interconnection. As a result, the SMART-DI product family is one of the most reliable and sophisticated Dual Interface products available on the market.

To learn more about our inlays and PRELAM® products for electronic identity documents visit www.smartrac-group.com or contact us at government@smartrac-group.com
WE ARE THE TRUSTED PARTNER FOR MORE THAN 40 E-PASSPORT PROJECTS THAT MAKE THIS WORLD MORE SECURE.

We are the global leader for high-quality RFID inlays for e-passports and national ID cards. Relying on SMARTRAC contactless inlays and PRELAM® products provides the highest security, reliability, and durability for sophisticated contactless identity documents.
To find out which product works best for your e-passport project, please contact government@smartrac-group.com

Providing high-security RFID inlays and e-covers of outstanding quality to customers worldwide helps improve secure identification and increase the effectiveness of border control processes. SMARTRAC guarantees reliable and flexible products that meet customers’ stringent demands and exceed industry standards.

In terms of secure travel documents, SMARTRAC offers a wide range of tailor-made e-passport inlay and e-cover products.

Our e-passport products are typically manufactured applying a number of the company’s proprietary and patent protected technologies consisting of a wire-embedded antenna on a carrier substrate connected to a chip module. The laminated inlay is then smoothly incorporated into the data page or the back cover of the passport.

One of the most famous SMARTRAC patents in this respect is DURASOFT®, a resilient material that enhances a document’s reliability and durability significantly. SMARTRAC’s DURASOFT® has pioneered globally and been the material of choice in the e-passport industry for more than a decade. It continues to successfully be used in numerous worldwide e-passport projects.

SMART-AC™
Inlays for eID documents are typically made of polycarbonate (PC). The material is widely used and has proven its durability in other application fields over several years. However, manufacturing eID cards using PC has revealed a weakness in the material: Continuous mechanical stress can cause micro-cracks around the chip module inside of the card body.

SMARTRAC realized this shortcoming at an early stage and invented the SMART-AC™. Equipped with our proprietary anti-crack feature, the SMART-AC™ is a product functionality which combines mechanical robustness with the benefits of a PC-based contactless inlay.

SMART-CAP
The SMARTRAC eCover with Chip Activation Protection (CAP) takes privacy concerns of travelers serious and ensures that personal information stored on the advanced encrypted microcontroller chip of an electronic passport can only be read by authorized parties.

SMART-STePP
SMART-STePP enables a convenient and highly secure migration to electronic identity documents. Manufactured with the proven technologies and quality level of a general SMARTRAC e-passport inlay, the SMART-STePP e-passport sticker comes in the standard ID-3 format. Easy to integrate into the passport booklet, the sticker fulfills ICAO standards and offers protection against misuse, forgery, and fraud.

To find out which product works best for your e-passport project, please contact government@smartrac-group.com
WE PURSUE AN ALL-ENCOMPASSING SECURITY CONCEPT.

Our security concept starts at the very first stage of the inlay manufacturing process – with the certification of our production facilities. Proven by certificates from independent authorities, our production environment lives up to the highest international standards.
Highest security means that our manufacturing facilities for identity documents themselves comply with the most stringent security requirements. Proven by certification from independent authorities, these “site certificates” ensure that the production environment for high-security RFID transponders and inlays meet international standards.

SMARTRAC is the only high-security inlay and e-cover manufacturer holding two active EAL5+ site certificates. Furthermore, the production location in the United States earned Security Assurance Certification from NASPO, the North American Security Products Organization, in addition to qualification from U.S. government authorities for the high-security production of RFID inlays.

Committed to consistently maintaining and raising the existing security level and upgrading further manufacturing sites to certified high-security production facilities, SMARTRAC partners rank our dependability and high industry standards as one of the company’s top assets.

We apply the highest quality standards and technical excellence in the production of every single transponder to create prime quality products that perfectly fit customer needs.

Our organizational structure combined with efficient tools and the right network of partners, allows us to supply significant volumes of high-quality and reliable RFID transponders and inlays with competitive lead times.

OUR CUSTOMERS BENEFIT FROM

- Our superior technology portfolio
- Manufacturing experience from more than 40 e-ID projects worldwide
- More than 200 million e-ID products manufactured and supplied
- Tailored solutions compliant to international standards (ISO/IEC, ICAO)
- Excellent product quality
- Worldwide interoperable products
- Network of high-security production facilities in Thailand, Germany, and the United States of America
- Security Certification according to Common Criteria EAL 5+ (“Site Certificate”)
- NASPO Security Assurance Certification for U.S. facility
- Certified product quality