









Enabling digital business with secure and sustainable paper electronics.

### Technology Summary



Utilizing print technologies to create connected electronic features without NFC cost and complexity

Today we see a variety of ways how to connect documents with digital applications. So far, the available technologies are not able to combine the need for economically viable mass production with security and end-user friendliness. Barcodes and QR Codes can be easily copied. RFID and NFC tags come with recyclability issues and high cost for production and integration.

To close this gap between security, interactivity and cost, Prismade has developed an entirely new approach. With standard printing equipment, available at security printers worldwide, we enable our partners to create electronic features during the regular print production. Those features can be printed invisibly underneath the color print or even embedded into ID cards.

The result of this process is a regular security print product with minimal added complexity, even though it now serves as a digital key that connects with an enduser's smartphone. Simply by placing the document on your smartphone screen, the printed, electronic key inside, is able to unlock any type of digital content.

With this approach, it is finally feasible to replace todays optical holograms with a new feature where brands and security providers do not need to rely on the consumer's knowledge of the hologram anymore. Instead we allow the end-user's smartphone to check products and documents for authenticity and added information.

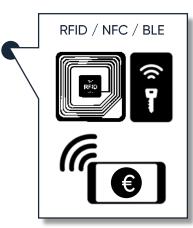
## Print to digital - available technologies



### THE BEST OF BOTH WORLDS:

- + secure interaction + scalability & low cost
- + scalability & low cos + eco-friendly









Cost of manufacturing and system

Printed electronics taken literally...

Using **standard industrial printing equipment** to print electronic features directly into products.







With the *printed smart identification* tag, the internet of things arrives in security documents. The *prisma ID* tag enables any print product to seamlessly communicate with websites or apps through your smartphone.

**USER FRIENDLY:** Touch, swipe, interact.

Activate the *prisma ID* tag intuitively.

**EVERYWHERE:** Low cost print manufacturing on paper

or foil products, from cards and labels

to packaging.

**IN YOUR POCKET:** Works on smartphones and tablets

within apps or websites.

**INVISIBLE:** Does not interfere with product design.

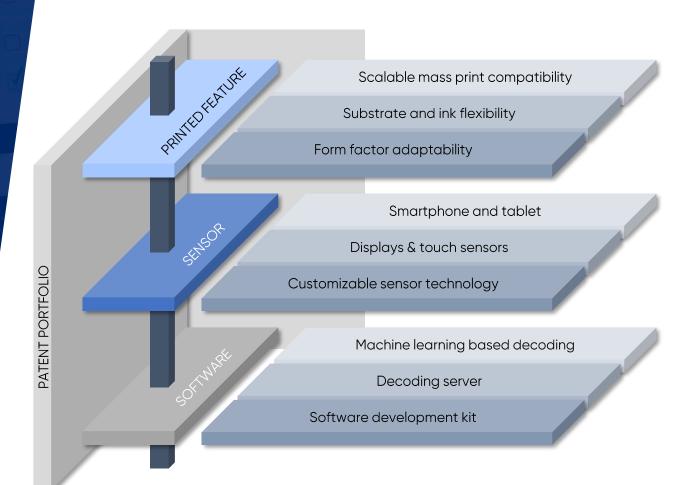
Easy to embed in any layout.

**SECURE:** prisma ID is not copyable and

inseparably bound to the product.



A new technology core as a highly flexible product toolkit



# Document security and accessibility

## LEVEL 3: FORENSIC

Laboratory

#### **LEVEL 2: COVERT**

Identifiable with special tools by consumers & authorities

#### **LEVEL 1: OVERT**

Identifiable without special tools by consumers



Enabling end-users to verify covert security features with available devices.

prisma ID in secure documents

prisma ID integrated into secure documents during regular print production.



No barriers: Accessible with smartphones to authenticate and unlock sensitive data! Direct communication with citizens.

Closed environments for authorities: Customized reading devices offering additional data and security. Prismade is **licensing** its unique technologies and is interested in partnering with businesses in **product development**, **manufacturing & sales!** 

## Thank you for your attention!



MANAGING DIRECTOR & FOUNDER

Dr.-Ing. Karin Weigelt karin@prismade.com

**MANAGING DIRECTOR & FOUNDER** 

Jan Thiele jan@prismade.com