#### Witte Group:

#### Witte plusprint GmbH - Self-adhesive materials

high-quality, technical foil labels & type plates for adhesion even on challenging surfaces; printed electronics, printing systems for label inscriptions as well as Smartlabel-based RFID solutions





#### Witte plusguide GmbH - Vehicle safety products

warning boards, warning markings made of reflective foil as well as protective equipment based on current laws and regulations such as GGVSEB/ADR.





#### Witte safemark GmbH - High Security Printing

Product and brand protection, vehicle stickers and vignette systems as well as security marking systems (self-adhesive) with visible or invisible, forgery and copy-proof features





#### DSD Staatliche Dokumente GmbH - State documents with a certified value printing company

certified manufacturer and partner for the development and production of security-related printed matter such as official documents and forms.





#### Maquiladora Gráfica Mexicana, S.A. de C.V.

Self-adhesive printed matter and special labels, seals and die-cut parts, high-quality cardboard sales packaging. With two locations in Guadalajara and Tijuana, MGM looks after Mexican, US American and international customers, primarily from the automotive, entertainment and electronics industries as well as the alcoholic beverage industry.







## Witte plusprint<sup>®</sup> - printed electronics...

... printed labels & packaging, printed security, printed functionalities





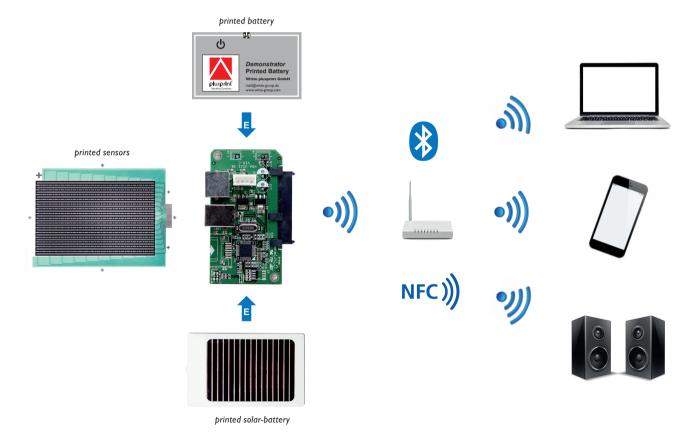




## Witte plusprint® - printed electronics...

As a manufacturer of printed functionalities (e.g. for packaging), film labels and safety marking systems on flexible substrates, the Witte Group also provides **solutions in the printed electronics area.** It is obvious to combine competences in the areas of printed energy storage, printed solar cells and other printed components (such as sensor elements) for the Internet of things.

The Witte Group, with its **powerful partner network,** is able to support your projects with existing core competences in the areas of functional printing and finishing, and by advising and obtaining feedback from broad market access in order to take the important steps to lead your application to market success.



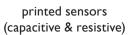
Platform to demonstrate combinations of printed and conventional electronics for e.g. IoT

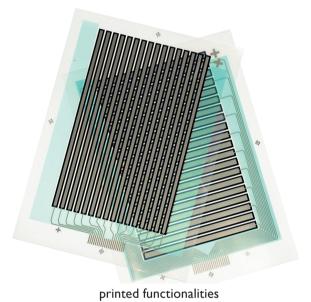
### Witte plusprint® - printed electronics...

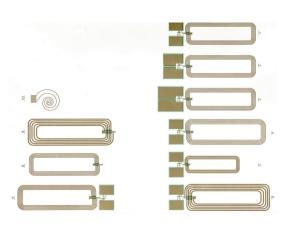
# print Electric®

- conductive polymers or inks for low cost use on foil, paper, glas or fabrics
- simple layers or high-advanced electric circuits
- shining packages with capacitive and resistive switch-mechanisms and printed energy supply
- sensor platform PlusSense for IoT: completely printed sensors, direct connection to conventional electronics, printed energy supply, data transmission via WLAN, bluetooth, NFC
- production of 2D, fexible and technical devices
- printed electronics and devices for:
  - heating elements
  - solar cells (OPV)
  - sensors
  - keyboards
  - electrochromic displays
  - internet of things (IoT, IoE)
  - batteries
  - antennas (RFID, NFC)
  - capacitors, resistors
  - lighting for packaging









NFC-antennas & printed capacitors