

# Windshield RFID label – RFID vignette

## smart products from COMEX







#### RFID vignette - label with personalization

#### RFID - technology and systems

Primary RFID applications were mostly deployed in access control systems. Nowadays, the field of applications becomes more and more miscellaneous – from library, documents marking and tracing to pharmaceutical industry and logistic systems. RFID tags are the warranty of logistic processes speed-up, unique identification and product protection against counterfeiting and theft.

# Windshield RFID label – RFID vignette.

Innovative product, designed especially for car windshield.

Dedicated antenna shape adapted to dielectrical properties

of windshield glass optimizes speed reading parameters. Perfect to be used as highway vignette, parking label, car identification tag or electronic license plate (third license plate of vehicle).

Tamper evidence assured by two independent features, precuts on the label and label composition - fragile inner layer between two strong adhesives and strong outer layer. Any attempt to peel properly adhered label shall result in visible damage both from precuts and from defragmentation of fragile layer.

Proven speed reading results – tested EPC memory reading with 200 km/h.

## Implemented RFID technologies

- antenna printing nano silver paste
  antena design optimized for windshield reading
- antena design optimized for windshield rea
  - chip NXP UCODE G2iL, UCODE7

## **COMEX** printing technologies

- offset
- flexo
- digital printing
- · silkscreen, embosing, hologram

### **Apllications**

 license car plate, car parking systems, electronic toll collection systems (ETC)

# From specification to implementation

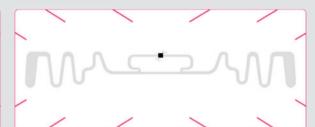
Entire production under one roof – starting from graphical concept study, antenna printing, selected chip embedding and label manufacturing

RFID vignette- dimensions: 40x100mm

#### rewers







#### Chip NXP UCODE G2iL, UCODE7

IC properties UCODE G2iL, UCODE7:

- UHF RFID Gen2, EPCglobal v1.2.0, EPC memory 128 bits
- working temperature: -40 °C to +80 °C
- Integrated status flag (PSF) UCODE7
- High sensitivity 21dBm UCODE7

#### Antena RFID

Designed for G2iL of UCODE7, manufactured in RFID.ON technology. Nano-silver ink printed.

#### Overall product specification

- Antenna dimensions: 12x96 mm
- Antenna material: nano-silver ink
- Label dimensions: 40x100 mm or on request
- Material: PET+BOPP
- Printing: digital/offset/flexo

Security features: special inks, hologram, edge pre-cuts to protect from peeling-off.

Available options: outer and inner visible thermo-transfer personalization – license plate etc.



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All products manufactured by COMEX are made in strict accordance with ISO 9001:2008