Card

The UG2 is a new generation of UHF cards targeted for the e-Identity market bringing a long range communication distance together with stringent durability criteria.

Behind a windshield for speedy border control or to access parking lots and corporate buildings, these long lasting cards are the perfect media for high speed, long range and secure access control. Privacy protection mechanisms are available for added security.

This card has already been demonstrated onto highly demanding border control projects with outstanding feedback.

UG2

Long Range UHF Gen2 EPC Smart Card

Main Features

- Extended read range of up to 8 meters
- Long lasting smart card: 100 000 ANSI 322 and ISO bending cycles
- EPC UHF Gen2 fully compliant product

Applications

- Border control
- Vehicle identification registration (windshield card)
- Item identification (traceability, …)
- Access control (parking, building, large areas,…)

Teslin®
UHF
Melinex®
EPC Gen 2
PET
T°
PC

The UG2 benefits from the unique contactless expertise of ASK in the UHF and RFID application domain.

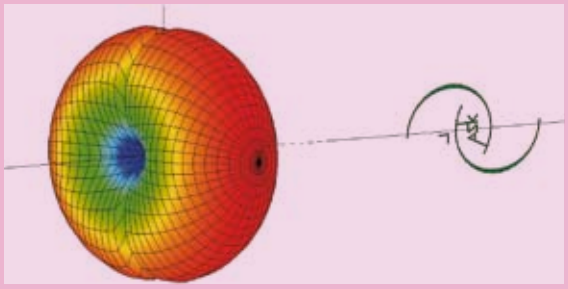
The UG2 provides outstanding performance making the card widely accepted by the card issuance authorities as well as their end users. Among specific characteristics:

- Very long reading range (up to 8 meters)
- A low activation level
- A radiation pattern allowing the card to be read from all possible orientation
- High durability, reducing risks related to card failure

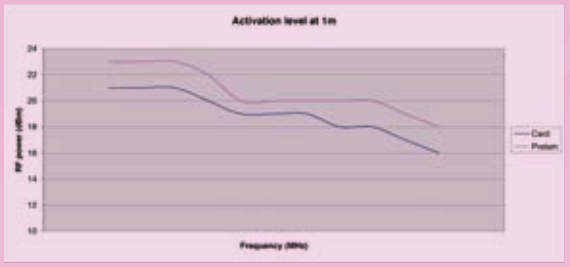
Another benefit for choosing a high performance card is to ease the setup of the reading infrastructure taking into account the performance of the UG2.

Such cards are ideally targeted for border control applications and access control applications for which both high performance and durability are equally critical.

3D radiation pattern



Activation level diagram



Product specification

Material/Card body

- PVC
- Teslin®/Melinex® product 100 000 ISO bending cycles
- Polycarbonate

Standard

- UHF EPC Global Gen 2
- ISO/IEC 18000-6C
- ISO/IEC 15963 (UID standard)
- ANSI 322
- ISO 10373

Physical characteristics

- ISO 7810 ID1
- -10°C to +50° C (Teslin®/Melinex® : -20°C to +70°C)

Security features

- eID specific version with unique chip identifier and permanent memory locking feature
- Advanced security printing features available upon request, including guilloches, microtext, rainbow printing, UV, holographic features, …

Options

- Security printing
- Magnetic stripe
- Signature panel

Performance

- EPC Code: 96 bits scalable up to 240 bits
- User memory: up to 512 bits of data
- Access password and kill password features
- Multiple read/write capability
- High speed reading
- Anti collision capability
- Reading distance of up to 8 meters
- Up to 100,000 cycle/50-year retention reliability
- Operating frequency within the released operating bands from 860 Mhz to 960Mhz (option for dedicated operating frequency range)
- Activation level diagram
- 3D radiation pattern