

STARSIM® Reload

New technology for more voucher security



Operators of prepaid telecom services (GSM networks, IP providers) are seeing increased demand for high-security voucher cards, which are used for delivering personal identification numbers (PINs) to end users. The PIN is then activated in order to provide the user with access to the operator's services. Basically, the voucher is a banknote

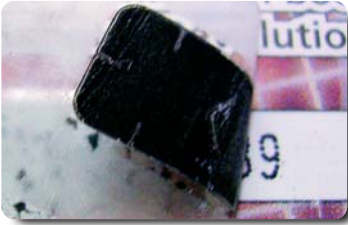
which is spent the moment the PIN is activated. Theft and counterfeiting are significant security threats, ones that many operators have already experienced first-hand.

The traditional methods of preventing counterfeits via hot stamping and label-secured cards are rather poor and provide considerable

counterfeit potential. G&D has more than 100 years of experience in banknote printing, has patented numerous breakthroughs in anti-counterfeiting technology and is proud to have developed a new technique for the high-security personalisation of voucher cards. We call it "STARSIM® Reload".



Giesecke & Devrient



The pictures on the left clearly show how easy it is to peel off the security label from a standard voucher card. Since any kind of label is vulnerable to such attacks, they are physically insecure. By contrast, the STARSIM® Reload panel is printed, not applied, on top of the PIN code using several layers of metallic colours ink and offers no weak points for a scalpel or a knife.



Since the STARSIM® Reload panel is a purely printed technology, it allows the insertion of graphic images and Pantone colours. The panel can be overprinted with a text which extends over the edges of the panel. Special thermo-sensitive or UV phosphorescent inks can be added at the customer's request.

For customers requiring a very high level of security, STARSIM® Reload cards are printed on a triple layer of cardboard with black inlay. The opaque layer inside the card material prevents attacks with strongly cohesive light such as quartz lamps.

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Technical features

Card body

- Materials: 0.3-0.5 mm thick cardboard
- Size: ISO card size (85.6 x 54.0 mm) with rounded edges
- Special formats: hole punching for hang-tags or different shapes
- Tear-off perforation, cross-cut pattern

Printing quality

- Printing quality rated excellent and certified by leading operators
- Glossy and matt, printed design covered with varnish
- Anti-photocopying varnishes, UV sensitive varnishes
- Partial varnishes with "invisible" features
- Holographic patterns, metallic embossing

Personalisation

- Online high-quality inkjet personalisation
- Alphanumeric fonts and barcode
- Automatic inspection supported by OCR and visual inspection system to ensure correct printing and database matching of secret and serial numbers
- PIN code generation services, using cryptographic security

STARSIM® Reload security panel

- Multi-layer metallic printing with optical diffusion layers
- Highly protected against white light, UV light, heat, cold, copying, reproduction, chemicals, and physical attacks
- Proven aging resistance, scratch-ability after a long time in storage
- Design variations with company logo, Pantone colours, UV-sensitive inks

Packaging

- Individual and group wrapping
- Transparent and customised polypropylene foil
- Easy to open, perforated single wrapping
- Insertion of leaflets, up to 1 mm thick
- Sealing in stacks of up to 50 cards
- Over-wrapping with individual identification label