



## **RadusCard** Coding and Scratch System

RADUSCARD - the "get in business solution" for the production of prepaid scratch cards.

Designed for coding and personalization of prepaid phone cards, calling and internet cards.

The system processes ISO CR80 - sized cards (85,6mm x 54mm / 3 3/8" x 2 1/8"), thickness from 0,25mm to 0,9mm (10mil to 35mil), cardboard and plastic.

Printed PIN's are concealed by a scratch panel applied by a hot stamping unit or a labeller.



Due to the modular design the machine can be equipped with different functions:

- databased coding and personalization up to four inkjets
- PIN covering by hot stamping scratch foil and scratch labels
- camera verification of print data and scratch panel
- 180° card flipper - frontside / backside
- RFID encoding, up to 12.000 cards/h

The user guidance for print and camera software is done in Microsoft Windows™, so all settings for different jobs can be saved easily.

Card input and card delivery allow refilling and clearing of the magazine during the operation mode. By the upstairs working card delivery the outcard sequence is always kept while clearing. The well-dimensioned magazines of the Raduscard enable to operate the machine by a single person in production mode.

The operation speed of the processor-controlled chain advance can be adapted by the machine software in order to ensure best results on different surfaces.



## ***InkJet Printing System***

The coding via inkjet printers using fast-drying MEK inks. The print head enables working up to a total print height of 10mm in one to four lines imprint and allows font sizes from 0,8mm to 10mm. If required, up to four print heads can be mounted, in order to achieve wider line spaces without reducing the production performance.

As a result, flexible presentations of personalization, numbering and coding, as well as standard barcodes are enabled. The printing system is low-maintenance and favorable in its consumables costs.

The operator control is done in a graphic surface presented in Microsoft Windows™.

## ***“Simply Plug-In” Scratch Units***



Application of scratch panels can be done by hotstamped scratch foils and self-adhesive scratch labels.

Every base machine can be equipped with two of the corresponding devices in various combinations, e.g. hot/hot or label/hot also to create customized scratch panels by using hot overstamping. Future extension can be retrofitted without any body extension by “Simply Plug-In”.

## ***Foil Hot Stamping***



PIN's are concealed with scratch foils by a hot stamping head with powerful embossing mechanism.

The device is electronically / pneumatically controlled and surveyed by the microprocessor of the main system. By means of the optimized foil advance lowest consumption with exact positioning is granted.

The dies are easy to change for the application in different sizes, the foil advance is adapted to stamp heights via display.

Different hotstamping foils can be applied onto cardboard and plastic surfaces at rates up to 12.000 cards per hour.

## ***Label Dispenser***



Instead of the hotfoiling unit for covering security codes a labeler can be used. The electronically control of the unit is surveyed by the microprocessor of the Raduscard and applies self-adhesive scratch panels.

## **Highest Data Security**

The protection of customer's data is attended with first priority. The Raduscard's integrated systems software offers the selection between different encryption algorithms:

- PGP (Pretty Good Privacy)
- AES (Advanced Encryption Standard)
- 3DES (Triple Data Encryption Standard)

In all procedures, two eight-digit passwords are assigned in each case. By using an encryption tool, contained in the scope of delivery, data are encrypted by any Office-PC before starting the production.

Any data, decrypted by the Raduscard's integrated systems software, are only kept in RAM, they never get stored on hard disk. By administrator's allocation of rights, decrypted data are never displayed to the operator.

After processing a database, it is blocked automatically, a repeated production of these data by the machine's operator is prevented hereby.

All operating states of the machine are registered with time and date conditions in logfiles, as a result a gapless production surveillance is provided.

## **Dual Camera System**

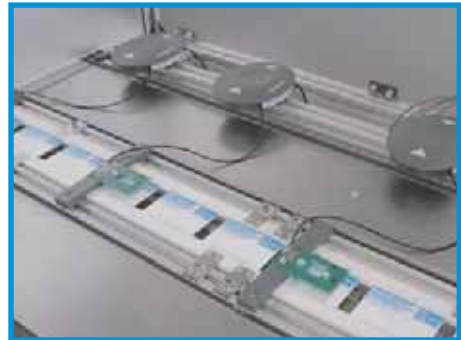
By using two CCD-cameras both print data as PIN code, serial number and barcode as well as position and quality of the scratch panel are verified.

By the Raduscard's integrated systems software the scanned array is compared to the database, eventually bad produced cards are rejected by a separating filter into a locked container, simultaneously the record number is saved for reproduction.

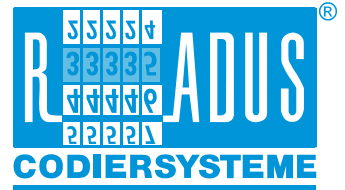
Via mouse click all bad cards are reproduced automatically in order to attain the total database processing.

## **Modular and Flexible**

Due to the modular system the machine meets most different demands. Your requirements determine the configuration of application devices such as inkjet and thermotransfer, hot-stamping and labeller, card flipper and RFID encoder.



## Specifications



System	RadusCard
Control	Microprocessor
Control desk	Display 4x40 digits and 24 keys
Card format	ISO CR80: 85,6mm x 54mm (3 3/8" x 2 1/8")
Thickness	0,25 - 0,9mm (10 - 35mil), different upon request
Material	Cardboard, plastics as ABS, PET, PVC, etc.
Magazine size	500 cards (0,8mm)
Performance	with hot stamping unit up to 12.000 cards/h with labelling unit up to 15.000 cards/h
Print system	Continuous 1-nozzle inkjet, print height 0,8 - 10mm each head One to four print heads, each with own cabinet
Inks	MEK-inks, fast drying, non-pigmented
Control	Software for Microsoft Windows™
Fonts	International, alphanumeric fonts in upper and lower case letters, free scalable fonts in 5 - 24 dot matrix
Barcode	Code 39, Code 128, 2/5i, EAN8, EAN13, UPCA12, UPCE8
Label-dispenser	Continuous Labeller (Plug-In unit) Operator control via main system
Roll size	Roll-Ø max. 12", core 1,5" or 3"
Label size	Width up to 20mm, Length up to 55mm
Hotstamping device	Pneumatic (Plug-In unit), with interchangeable dies, Operator control via main system
Foil size	max. 55mm wide (optional 100mm), 115mm Ø, core 1" or 3"
Stamping area	900mm², max. width 50mm (optional 90mm)
Temperature	70 - 250°C
Camera system	two CCD-cameras with highspeed shutter, adjustable aperture and focusing
Range coverage	Adjustable from detailed to full size CR80 scan, three individually programmable fields for each camera
OCR	machine fonts
Barcode	all usual barcodes
Scratchpanel	surface recognition
Illumination	Verification for presence, integrity and position high frequency lighting
Connections	
Compressed air	4-8bar, oil free and dry
Voltage	single phase 200/240V, 50/60Hz, 110V optional, consumption max. 1kW
Measures	2950mm x 790mm x 1480mm (length x depth x height)
Weight	approx. 500kg, depending on configuration

Manufacturer:

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