RADUS CODIERSYSTEME

modular I flexible I future-oriented

RADUSTAG® SYSTEMS

Radus®.de TAG

SMART I LABELS I TICKETS

RADUSTAG® - ONE STEP AHED

Encoding and Print Personalization System for Labels and Tickets with RFID-Tags

Highest Functionality - Lowest Life Cycle Cost

High performance encoding and personalization system for smart tickets and labels from roll

- Support for parallel RFID chip encoding
- Print personalization, database and chip related variable data printing
- Flexible printing systems with high-resolution 360 dpi
- Verifying of imprints and layout by camera system
- Processing up to 30.000 products per hour

You are perfect equipped for the future RFID market with the RadusTag personalization system. Whether you want gapless traceability of products using track and trace, tickets for local public transport, tag labels for the textile industry or to implement the EU Directive on fighting counterfeit medicine using RFID - the RadusTag now offers you top performance to consistently meet the demands of tomorrow.

Based on the tried-and-tested RadusCard, the personalisation system for RFID single cards, the RadusTag has been specially developed for continuous RFID products such as self-adhesive and tag labels, as well as tickets. Using parallel programming of several RFID products, up to 30,000 products/hour can be achieved, depending on the product length and programming requests.

Specially developed R-CONTROL using TCP/IP allows the easy use of the customized programming modules and applications. In this way, current HF modules that meet the ISO 14443A/B and ISO 15693 standards, as well as UHF modules that meet ISO 18000 / EPC Gen2 standards, can be used without any problems. The scalable expansion of the system supports single and parallel operation with up to 4 independent programming modules.

The programmed product is usually personalized by inkjet printing. Options include both simple single nozzle inkjets for matrix printing and high-resolution DOD devices with 360 dpi. To monitor the consistency between printing and RFID programming data, a CCD camera is an integrated component of the system. Products with faulty RFID chips are marked as defective completely automatically.

Web widths of up to 250 mm allow all types of current products, such as stripped label webs, or perforated and die-cut tag labels and tickets. With roll diameters up to 600 mm for winding and unwinding, this also allows a high level of autonomous time.

With its sophisticated concept and the major diversity of features the RadusTag is perfect for the RFID encoding and personalization of narrow web products from the roll.

Autonomous Time
Generously dimensioned unwind and rewind with pneumatic quick fastener for rolls up to 600mm outer diameter guarantee a high autonomous time.

Transport System
Rapport detection either by gap or print mark reader. A servo drive and continuously variable winding tension ensure precise web processing. (Resolution 0.1mm)

RFID Programming
Support for 4 x RFID standard (LF, HF, UHF) programming modules. Parallel programming of up to 4 chips simultaneously. E.g. ISO 14443A/B, ISO 15693, ISO 18000 / EPC Gen2 etc.

SPECIFICATIONS

Industrial RFID chip encoding and print personalization system for narrow web products from roll.

Functions
_Parallel processing for high performance
_Chip testing, encoding (initialization, formatting, personalization)
_Variable print personalization, database and chip related
_Ink Jet and thermo transfer imprints
_Faulty chip marking
_Verifying of imprints by camera system

Main System RadusTag

Control	Microprocessor
Operation	Fully automatic
Controll desk	Display with keyboard
PC control system	Windows™

Ticket / Label Dimensions

Width	max. 160mm, single line (optional 250mm)
Length	approx. 500mm (other on request)
Material	plastic and paper, 50 - 300g/m²

Roll Dimensions

Diameter	max. 600mm
Width	max. 165mm (optional 255mm)
Core	76mm (3)"

RFID System	Support for 1 to 4 RFID standard programming modules ISO 14443A/B, ISO 15693, ISO 18000 / EPC Gen2, etc.
Print System I	Continuous single nozzle inkjet, MEK-inks, fast drying
Print System II	DOD (Drop-on-Demand) inkjet 360dpi with UV curing
Print System III	High-Speed industrial thermo transfer 300dpi
Camera System	CCD-camera with adjustable aperture and focus individually programmable fields
OCR/OCV	machine fonts / teachable
Barcode	Usual barcodes, datamatrix
Illumination	LED lighting
Connections	
Compressed air	4 - 6 bar, oil free and dry
Voltage	single phase 220/240V, 50/60Hz (optional 110V)
Measures	2830 x 820 x 1720 mm (length x depth x height)
Weight	approx. 500 kg, depending on configuration
Performace	4 x RFID programming modules up to 30.000 products/h (pitch: 20mm, test and print) up to 20.000 products/h (pitch: 20mm, encode: 200msec) up to 15.000 products/h (pitch: ID1 format - 85,6mm, test and print) up to 11.000 products/h (pitch: ID1 format - 85,6mm, encode: 400msec)

Print Personalization
360 dpi high-resolution DOD inkjet, 300 dpi thermo transfer print engine or continuous single-nozzle inkjet with 24 dot matrix available. Database and chip-ID related print personalization, alphanumeric and barcodes, single and multi-line.

Everything at a glance
Integrated software operation concept for easy control of camera system, chip encoding and print personalization. Dual Monitor System for clear process visualization.

Camera Inspection System
Alphanumerical and barcode imprints are verified for integrity and legibility by CCD-camera. Up to three fields can be scanned simultaneously and compared by the integrated system software.

ARNOLD HERZIG GMBH

Experience and Innovation

For over 50 years, our company has manufactured series and customized machines for print processing and has been a long established supplier to governmental and private security printing companies. Innovative and future-oriented concepts, in-house development and the production of highly-efficient and reliable machines explain the high degree of brand awareness for RADUS around the world.

The Arnold Herzig GmbH manufactures machines for the following applications:
Hologram stamping, crash numbering and coding, labeling, RFID chip encoding and variable data print personalization by high-resolution UV-DOD inkjet, laser and thermo transfer.

Product lines

RadusCard: Chip encoding and print personalization for RFID smart cards (single cards ISO / ID-1)
RadusTag: Chip encoding and print personalization for RFID smart labels and tickets, roll-to-roll
CFS series: Continuous forms pack-to-pack and roll-to-roll
SV series: Sheet-fed systems from ticket size to 50x70cm
SU series: Imprinting and numbering heads for use on RADUS systems and as OEM device
HP series: Hologram applicator - hot stamping heads for use on RADUS systems and as OEM device

made
in
Germany
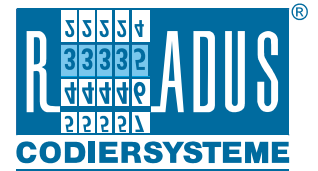
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