

RFID JOURNAL VIRTUAL EVENTS

RFID IN MANUFACTURING

radio-itag® - How radiotag Prints and Encodes
Individual RFID Tags at Multi-lane Speed

radiotag RFID Laser Label Publishing

A jointed development of Voyantic and radiotag

Jochen Renfordt – MD & Co-Founder of radiotag

Today's Presentation

- Digital printing of UHF labels
- Why the market is changing
- radiotag's offer
- Label cost
- radiotag's product line

Digital printing of UHF labels

- Thermal
- Inkjet
- Laser

Digital printing of UHF labels

■ Thermal

- Not so fast – ard. 60 labels per minute
- Single lane mostly
- Expensive in consumables
- Short consumable running period

Digital printing of UHF labels

■ Inkjet

- Fast
- B&W or Colour
- Single lane mostly
- Expensive as single lane
- Experienced operator required

Digital printing for UHF labels

- Laser – Continuous Feed
 - Continuous feed proven in the market
 - Now available as RFID multi-lane
 - Fast and reliable
 - No guesswork of pricing a print job
 - Colour is an option

Digital printing for UHF labels

■ Laser – Cut Sheet

- B&W or colour cut sheet laser and radiotag RTU
- Heavy media solution, e.g. thread tags
- Now available as RFID multi-lane
- Fast and reliable
- Cut sheet RTU and cut sheet feeder as option

Why the Market is Changing

- Market - from mass to unique products
- Tracing - Production, logistics & recycling
- Label production - Central to local
- Quantity - From long runs to short runs
- Technology - From analog to digital
- RFID labels getting popular – 200 BN in 2025

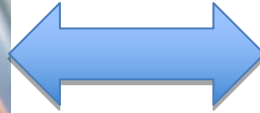
Why the Market is Changing

- Individual RFID labels will take off
 - Apparel
 - Aviation IATA bag tags
 - Automotive
 - Logistics

radiotag's Offer – How Does it Work



JEI 1865R



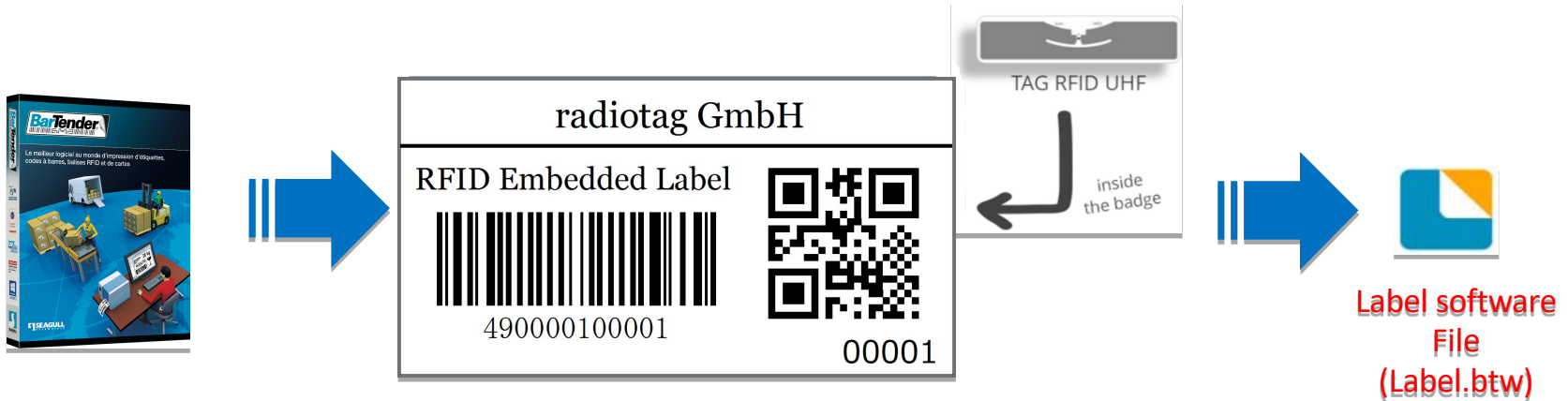
RTU4

radiotag's Offer – How Does it Work

- How the system is built
 - JEI 1865R continuous feed laser printer
 - Label printing calculation software
 - Professional Label Edition Software
 - RTU transport engine
 - Multi-lane encoding and verifying engine

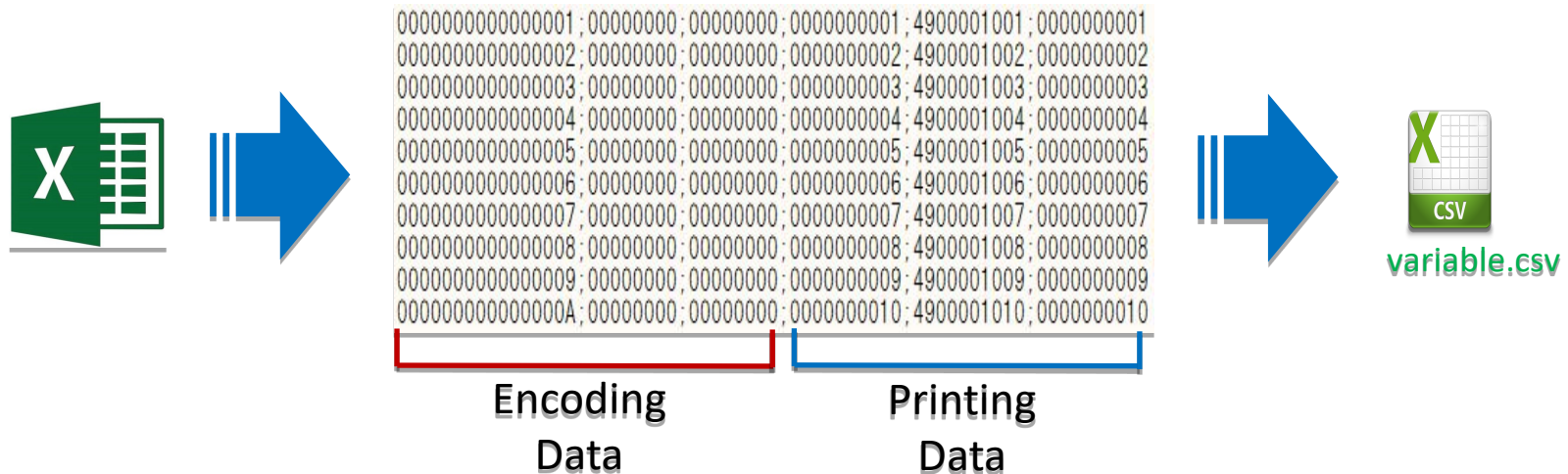
radiotag's Offer – How does it Work

Create label by label software



radiotag's Offer – How does it Work

Create variable data



radiotag's Offer – How does it Work

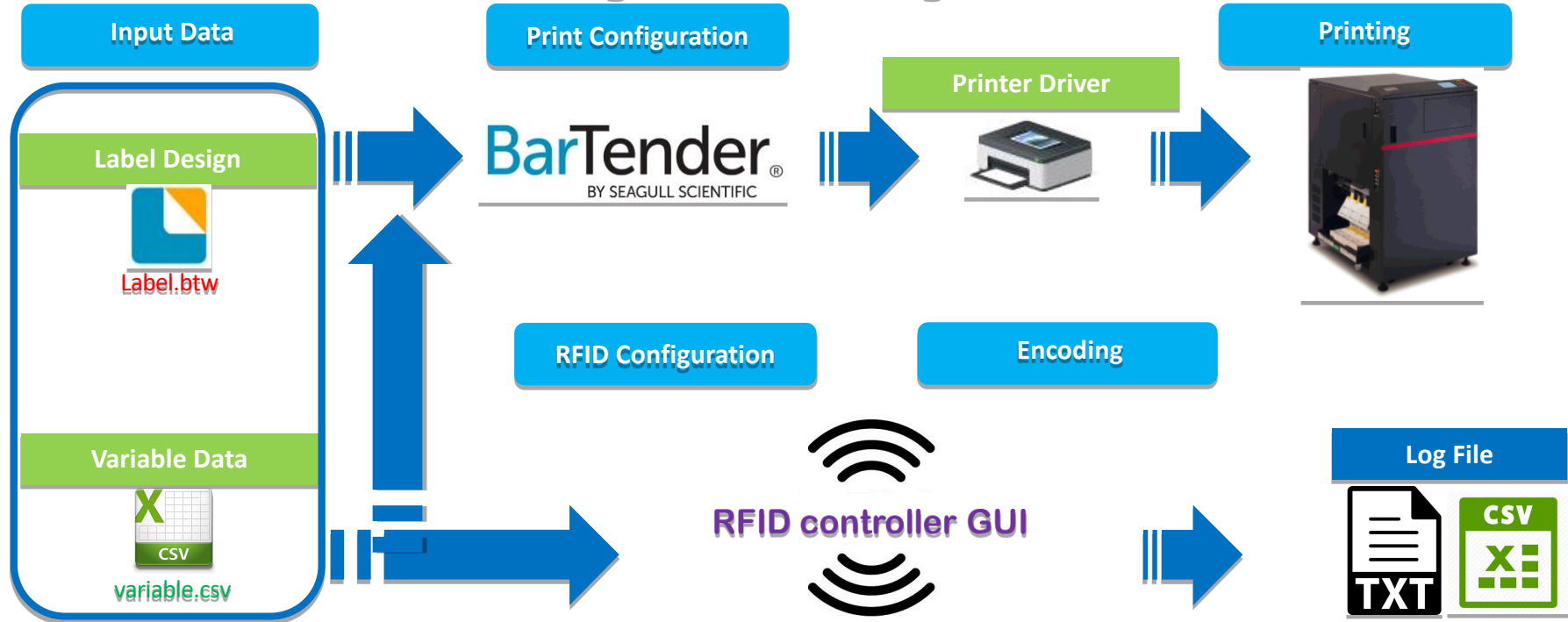
Merge CSV file with label design



radio tag GmbH RFID Embedded Label 490000100001 00001	radio tag GmbH RFID Embedded Label 490000100002 00002	radio tag GmbH RFID Embedded Label 490000100003 00003	radio tag GmbH RFID Embedded Label 490000100004 00004
radio tag GmbH RFID Embedded Label 490000100005 00005	radio tag GmbH RFID Embedded Label 490000100006 00006	radio tag GmbH RFID Embedded Label 490000100007 00007	radio tag GmbH RFID Embedded Label 490000100008 00008
radio tag GmbH RFID Embedded Label 490000100009 00009	radio tag GmbH RFID Embedded Label 490000100010 00010	radio tag GmbH RFID Embedded Label 490000100011 00011	radio tag GmbH RFID Embedded Label 490000100012 00012
radio tag GmbH RFID Embedded Label 490000100013 00013	radio tag GmbH RFID Embedded Label 490000100014 00014	radio tag GmbH RFID Embedded Label 490000100015 00015	radio tag GmbH RFID Embedded Label 490000100016 00016
radio tag GmbH RFID Embedded Label 490000100017 00017	radio tag GmbH RFID Embedded Label 490000100018 00018	radio tag GmbH RFID Embedded Label 490000100019 00019	radio tag GmbH RFID Embedded Label 490000100020 00020
radio tag GmbH RFID Embedded Label 490000100021 00021	radio tag GmbH RFID Embedded Label 490000100022 00022	radio tag GmbH RFID Embedded Label 490000100023 00023	radio tag GmbH RFID Embedded Label 490000100024 00024

radiotag's Offer – How does it Work

Printing and Encoding Workflow



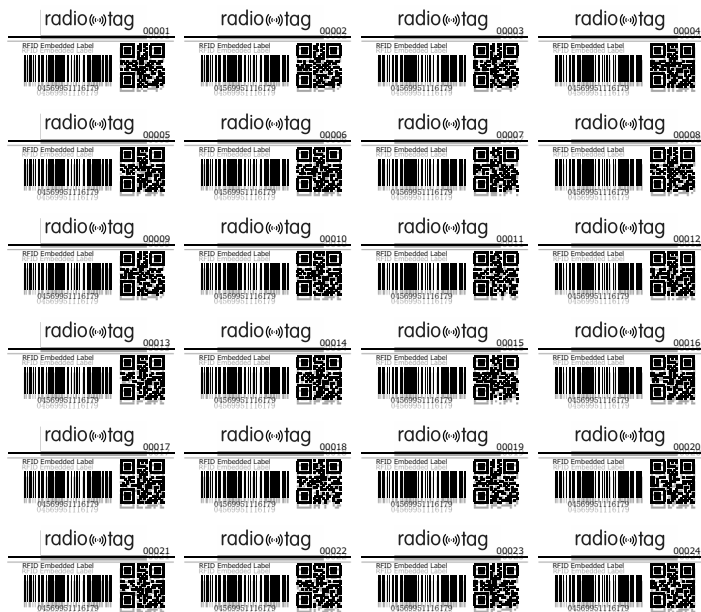
radiotag's Offer – How does it Work

- Requirements in production
 - Small footprint
 - Easy job changes
 - Less waste
 - Throughput increase
 - Affordable investment

radiotag's Offer – How does it Work

- Requirements in production
 - Open for various label and tag designs
 - No tools needed for different jobs
 - Label recovery for corrupted labels
 - radio-itag© - single pass read, write, verify, bad tag mark & recover

LABEL COST



Page size: 330 mm x 12"

Lanes: 4

Label size: 80 x 45 mm

Labels per page: 24

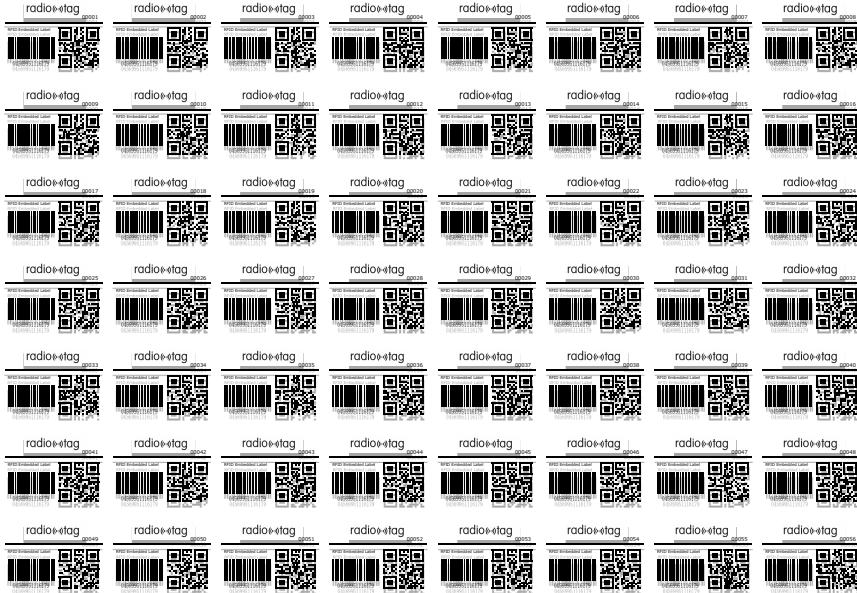
B/W ratio: 14.87%

Label volume: 400 Million

Labels per minute: 1,100

Cost per label: ard. 0.0015€

LABEL COST



Page size: 431.8 mm x 12"

Lanes: 8

Label size: 48.3 x 37.8 mm

Labels per page: 56

B/W ratio: 18.21%

Label volume: 800 Million

Labels per minute: 2,570

Cost per label: ard. 0.00088€

radiotag's Product Line

- RFID Laser Label Publishing – 4 Lanes
- RFID Laser Label Publishing – 8 Lanes
- Stand-Alone Encoding – 4 & 8 Lanes
- Retrofit 4 & 8 Lanes Encoding
- Cut Sheet 4 Lane Encoding

radiotag's Product Line

- Build to order
- Label layout analysis
- Supply of shielding plates
- Customer specified Site Acceptance Test
- Commissioning

Information & Inquiries

Please contact:

info@radiotag.eu

or

jrenfordt@radiotag.eu

THANK YOU