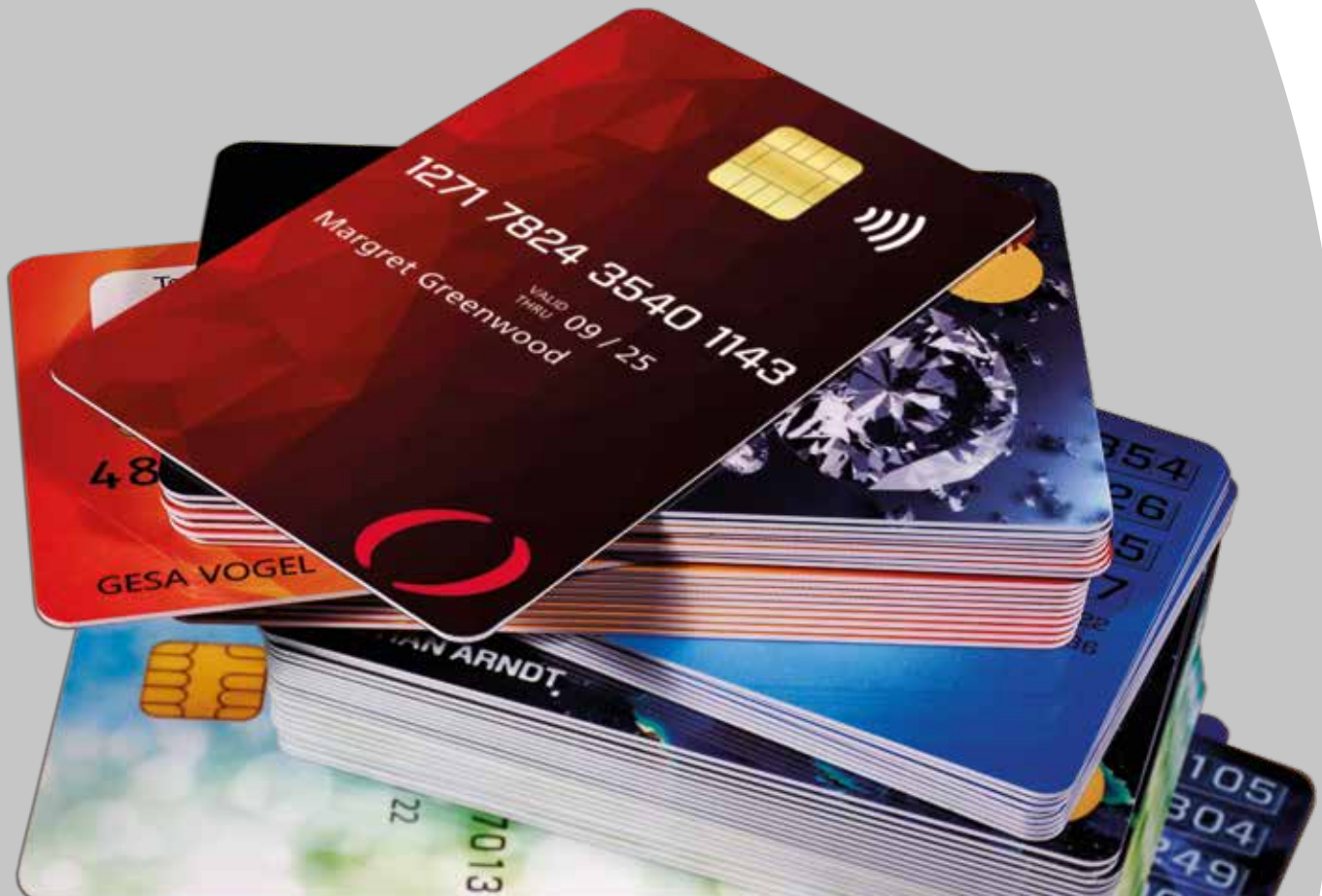# PERSOMASTER Pro

Enterprise-scale and Cost-efficient Personalization System for Payment and ID Cards

Cut costs. Eliminate embossing. Boost durability.

KEY FEATURES

- **Powerful** and **flexible platform** for individual system configuration
- **High quality drop-on-demand** (DOD) inkjet printing in **deep black, opaque white, crispy CMYK** – using latest ProFlo inkjet technology
- Compatible with a **wide range of materials**
- **Perfectly integrates** with a wide variety of **personalization software** solutions
- **Lowest cost per card**
- Throughput **up to 4,000 cards per hour** – dependent on configuration, card and job type

PERSOMASTER Pro

PERSOMASTER Pro sets new standards in card personalization for Payment and ID cards.

With groundbreaking innovations like Atlantic Zeiser's ProFlo technology, it delivers unmatched printing reliability and true print-on-demand capability. The OMEGA ProFlo printer ensures vivid colors, razor-sharp details, faster output, and effortless operation – all with reduced maintenance and start-up time.

Efficiency meets flexibility: PERSOMASTER Pro economically personalizes flat cards across the full spectrum of print runs – from small rainbow decks to multi-million-card peaks. Its rainbow deck capability allows seamless processing of diverse, small-batch orders in a single run, without interruption.
And with speeds of up to 4,000 cards per hour and lower consumable costs than alternative solutions, PERSOMASTER Pro delivers operational excellence with maximum impact.

Revolutionizing card personalization, one card at a time

PERSOMASTER Pro empowers you to create state-of-the-art personalized cards, uniting premium print quality with exceptional flexibility. From **Payment** and **ID** cards to **Healthcare**, **Voter**, and **Driver Licences**, PERSOMASTER Pro ensures stunning results.

FLAT IS THE NEW STANDARD
• Supports the shift from embossed to flat cards in the banking sector

• Exceptional results on matte and hybrid metallic finishes

• High-opacity white ink ensures elegance on dark surfaces

APPLICATIONS AGILE & COST-EFFICIENT
• Perfect for the whole spectrum of print runs, from rainbow decks with small batches to peaks with several million cards

• Low total cost of ownership with high production adaptability

MATERIAL VERSATILITY
• Compatible with PVC, rPVC, Metal, Ocean Plastic, and Wood
• Ideal for sustainable and premium card applications

CERTIFIED & SECURE
• Fully compliant with VISA, Mastercard, and Amex payment standards
• Payment scheme logo printing certified
• Laser and color prints especially for high security

A platform built to adapt – configurable for every need

SYSTEM MODULARITY

Powerful and flexible platform that can be easily configured with different system modules to handle specific applications.

INPUT

- Reloading of cards without stopping
- Feeding process prevents scratching of card surfaces; processing of glossy cards possible
- Extension kit for processing of metal cards available
- Up to four card magazines with selective rainbow feeding (optional)

PRE-READ

- VERICAM Pro camera verification to check correct preparation of rainbow decks
- Card orientation verification
- Fast setup, no layout parameters required for teach-in
- X/Y print registration function for precise positioning of personalized content

MAGNETIC ENCODING

- Three-track HiCo and LoCo ISO encoding
- High precision encoding with the card in a static position
- Extension kit for JIS2 encoding available as factory option

CHIP ENCODING

- High-speed encoding of contact, contactless or dual interface cards
- Scalable number of chip programming heads (up to 21)
- Industrial standard readers allow easy integration into existing customer infrastructure
- All heads are equipped with antennas and contact pins

LASER MARKING

- Grayscale laser marking with industrial high speed 1064nm laser source
- Wide selection of laser technology:
  – 30W or 60W fiber laser
  – 25W diode pumped solid state
- Isolated laser engraving chamber with fume extraction system
- Embedded flipping feature for processing both card faces with one single laser (optional)
- MLI and CLI laser marking module (optional)

PLASMA TREATMENT

- Plasma unit for better adhesion and print quality on challenging substrates
- Treatment widths covers full card

Enhance your printing performance with ink recirculation

DROP-ON-DEMAND PRINTING

OMEGA ProFlo Printer

- ProFlo inkjet technology designed for unprecedented inline printing reliability and print on-demand availability
- Robust monochrome or full-color DOD printing
- Stainless steel jetter for improved durability and robustness
- 600 dpi high-resolution deep black or opaque white DOD personalization of 1D/2D codes, biodata, MRZ, PDF 417 codes, fingerprints and other data
- Superior abrasion resistance and adhesion to a wide variety of card materials and surfaces
- Atlantic Zeiser application tailored inks for high contrast, graphical resolution and superior durability
- On the fly RIPing
- Full data driven operation without impacting machine performance

UV Curing

- LED-based air-cooled device effectively cures UVA-curable inks across the entire card surface
- Maintenance-free, without liquid coolant
- Increased productivity with instant on/off

UV Varnish

- Varnish protection for extended card life and security
- Edge-to-edge or spot color varnish to embellish and outline selected card areas
- Custom-designed tactile effects with a stylish finish

PROFLO TECHNOLOGY

Automated Continuous Ink Recirculation

- Prevents nozzle clogging
- Minimizes bubble formation for a smoother application
- Ensures consistent ink viscosity for optimal performance
- Prevents unnecessary ink consumption during machine downtime

Automated Wiping (optional)

- Ensures the highest level of production yield due to fully automated wiping
- Provides minimal operator interaction
- Achieves minimized downtime

MAXIMIZE PRINT QUALITY

The OMEGA ProFlo printer is designed for unprecedented uptime and jet reliability in demanding industrial applications.
The OMEGA ProFlo's advanced ink recirculation with active nozzle cleaning effortlessly supports highly pigmented inks. The printer delivers exceptional quality with fine details, has a short startup time, and requires low maintenance.

KEY ADVANTAGES

- Improved print quality and consistency
- Increased reliability and productivity
- Reduced production downtime with automated wiping (option) and automated purging
- Low maintenance
- Variable data printing on-the-fly, in various data formats
- Intuitive layout design software
- Application-tailored inks

OMEGA **ProFlo** monochrome printer on PERSOMASTER

VERICAM PRO PRINT VERIFICATION

- 100% OCV (Optical Character Verification), 1D/2D code reading
- Secure print verification independent of card backgrounds

PRE-PRINTED AND PRINT ON-DEMAND LABELING

- Inline application of pre-printed activation labels
- Handles a wide variety of label dimensions
- No tooling required for different label sizes
- Print-on-demand label application to apply blank white labels and personalize it on the fly

FLIPPING AND BUFFER

- Allows inline processing of both card faces at full speed
- Reduces reject rates due to the buffer design allows emptying of upstream modules during a downstream stop

OUTPUT STACKER

- Allows card-only production
- Cards can be unloaded without stopping the machine
- Automatic change of magazines
- Up to four card magazines with selective rainbow unloading (optional)
- Reject box

Refine your approach to personalization with a system built for complexity and agility

CONTROL PC AND DATA MANAGEMENT

- Full rainbow capabilities

- Intuitive user interface

- Windows based

- Handles a wide variety of file formats
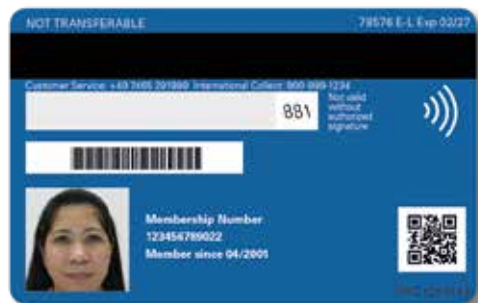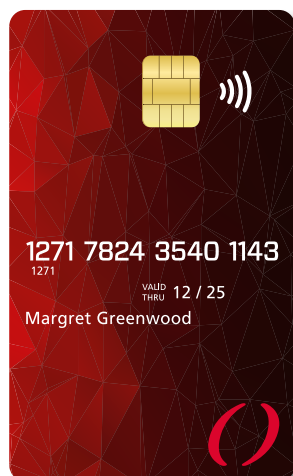
OPEN DLL INTERFACE

- Customer-based interfacing with external data sources

- Easy integration with external personalization platforms

- No recurring licence fees

- Already integrated with major EMV personalization platforms

MAILING

Atlantic Zeiser offers a stand-alone mailing system: the MAILMASTER

OMEGA ProFlo full-color printer on PERSOMASTER

Payment card personalization

- **Monochrome** or **full-color DOD** and/or **laser** card personalization of **pre-printed cards**

Seamless 'Rainbow Deck' processing

Rainbow deck processing allows combining personalization orders consisting of a wide variety of card products requiring different setup configurations to one production batch. This batch is seamlessly processed in one go without stopping the personalization system.

PERSOMASTER Pro with its innovative software design for the machine workflow, printer and camera efficiently processes rainbow decks.

ID card personalization

- **Monochrome** or **full-color DOD** and/or **laser** card personalization of **pre-printed cards**

Reduce your card personalization costs while improving durability and design flexibility

- Unprecedented flexibility for the design and positioning of personalized data
- Long-lasting color personalization
- High-resolution personalization in black, white, and color – using latest ProFlo inkjet technology
- Laser marking combined with color printing for greatest fraud protection
- In-house developed inks for sharper results (deep black, opaque white, crispy CMYK)
- Scalable chip encoding
- Perfectly integrates with a wide variety of personalization software solutions
- Lowest cost per card

Modules and options at a glance

INPUT
PRE-READ
MAGNETIC ENCODING
CHIP ENCODING
LASER MARKING
PLASMA TREATMENT
DOD PRINTING – MONOCHROME OR FULL-COLOR
UV CURING
UV VARNISH
PRINT VERIFICATION
PRE-PRINTED LABELING
PRINT-ON-DEMAND LABELING
OUTPUT STACKER
CONTROL PC AND DATA MANAGEMENT
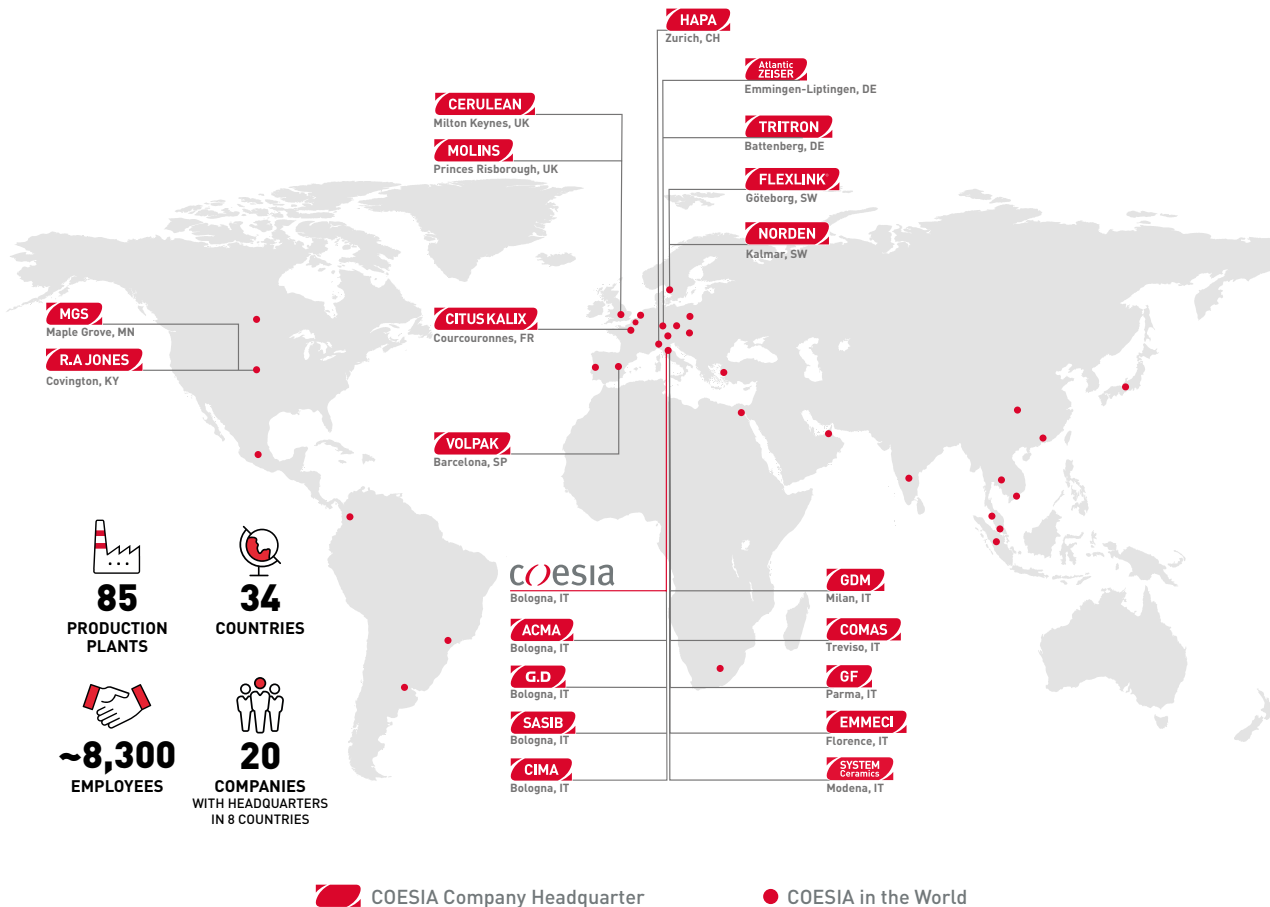OPEN DLL INTERFACE

PERSOMASTER Pro: Throughput 4,000 cards/per hour – production speeds can vary dependent on configuration, card and job type

Technical Specifications	PERSOMASTER Pro		
Card Formats	ID-1/CR80 format according to ISO/IEC 7810		
	Thickness:	0.76 mm	30 mil
	Length:	85.6 mm	3.37 inches
	Width:	54 mm	2.13 inches
Dimensions	Length:	dependent on machine configuration	
	Width:	dependent on machine configuration	
	Height:	1,815 mm	71.5 inches
Production Throughput	Up to 4,000 cards/hour		
	Max. speeds can be higher or lower, dependent on machine configuration, card and job type		
Power Supply	400 VAC ±10% / 50 or 60 Hz / three phases + N + PE		
Power Consumption	Dependent on configuration		
Compressed Air Supply	7 bar (102 psi) – consumption dependent on configuration		
Air Consumption	Dependent on configuration		
Ambient Temperature	15 – 30 °C		
Relative Humidity	40 – 60% at 25 °C not condensing		
Exhaust	Dependent on configuration		

Coesia Group in the world

HAPA
Zurich, CH

Atlantic ZEISER
Emmingen-Liptingen, DE

TRITRON
Battenberg, DE

FLEXLINK
Göteborg, SW

NORDEN
Kalmar, SW

CERULEAN
Milton Keynes, UK

MOLINS
Princes Risborough, UK

MGS
Maple Grove, MN

R.A JONES
Covington, KY

CITUS KALIX
Courcouronnes, FR

VOLPAK
Barcelona, SP

coesia
Bologna, IT

ACMA
Bologna, IT

G.D
Bologna, IT

SASIB
Bologna, IT

CIMA
Bologna, IT

GDM
Milan, IT

COMAS
Treviso, IT

GF
Parma, IT

EMMECI
Florence, IT

SYSTEM Ceramics
Modena, IT

85 PRODUCTION PLANTS

34 COUNTRIES

~8,300 EMPLOYEES

20 COMPANIES WITH HEADQUARTERS IN 8 COUNTRIES

■ COESIA Company Headquarter   ● COESIA in the World

COESIA is a group of innovation-based industrial and packaging solutions companies operating globally, headquartered in Bologna, Italy.

Coesia's companies are leaders in the sectors of:
- **Advanced automated machinery**
- **Industrial process solutions**
- **High-performance transmissions**

Coesia's customers are leading players in a broad range of industries, including Aerospace, Ceramic Tiles, Consumer Goods, Electronics, Energy Storage Systems, Healthcare & Pharma, Luxury Goods, Next-generation products, Racing & Automotive, Semiconductors, and Tobacco.

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