

# *alpha one*

## Laser ID Card Personalization System

- Compact and modular
- Consecutive processing of short and long runs with no interruption
- Simultaneous visual inspection of both card faces
- Scalable chip programming of up to 40 stations
- Up to 12 output magazines



# alpha one

## Industry-proven mid-range laser ID card personalization system

**ALPHA One is a compact and modular personalization system for mid-volume ID card production at up to 3000 cards per hour. It offers contact or contactless electrical personalization with laser marking capabilities, including MLI images, and is ideal for handling many short runs and long-term production orders as well.**

The compact and modular ALPHA One system combines mid-range production speed, proven reliability, and a high degree of application flexibility. Different configuration options make it possible to process virtually any ID application. Thanks to the flexible software architecture, multiple input feeders and output stackers, many consecutive batches of cards can be personalized securely and efficiently at very low cost per card.

All ALPHA One system modules are separate functional units that can be linked in flexible configurations, allowing easy field upgrades and retrofits to protect your investment. Optical verification units can be integrated to adjust laser-marked images to level out card-punching tolerances and verify the optical personalization process. Combined with different card-feeding modules and an expandable card-sorting module, the ALPHA One is a truly versatile, user-configurable system.



Card Feeding

### Card Feeding

With up to four feeder magazines, the card feeding module has a capacity of up to 1600 cards.

The high feeding capacity permits long operation intervals.



Visual Inspection

### Visual Inspection

Placed directly after the card feeding module, the visual inspection module verifies card identification and orientation of the incoming card body and detects print offsets.

### Chip Programming

Scalable chip programming module features

- up to 40 readers (contact)
- up to 24 readers (contactless) and allows flexible configuration of contact and contactless programming heads.

### Magstripe Encoding

Reliable and accurate personalization of up to 3 ISO tracks with LoCo or HiCo.

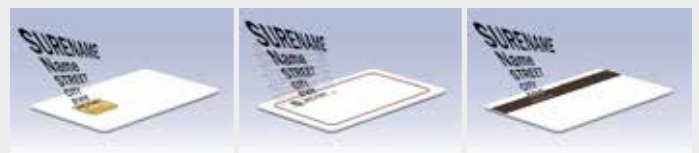
Coercivity from 300 Oe to 4000 Oe.

Supports ISO and AAMVA standards.

# alpha one

## Your Competitive Edge

- Compact and modular
- Consecutive processing of short and long runs with no interruption
- Up to 12 output magazines
- Simultaneous visual inspection of both card faces
- Scalable chip programming of up to 40 stations
- High quality gray-scale laser marking including MLI capabilities



Contact Chip

Contactless Chip

Magstripe



Diode-pumped Laser

Visual Inspection

MLI



Chip Programming



Laser Marking



Print Verification



Stacking, Sorting and Diverting

### Laser Marking

Different laser systems can be integrated – from an economic fiber-laser system for binary markings, to high-power gray-scale laser systems enabling the marking of ID cards with gray-scale photographs, fingerprints, signatures, TrueType and OCR fonts, 1D and 2D bar codes.

The laser can also apply special security elements such as microprinting (up to 1000 dpi) or swivel pictures (MLI). Both sides of the card can be personalized using one or more successive laser units.

### Flipping

Allows inline processing of both card faces at full speed.

### Print Verification

Placed after the laser marking module, the presence of optical elements can be verified: Text elements (TrueType and OCR), 1D or 2D bar codes, photographs, fingerprints, signatures, logos.

Two-sided inspection allows simultaneous verification of the front and back side of each card.

### Stacking and Sorting

The finished cards are stacked into up to 12 magazines.

The sorting scheme is freely definable, for instance by company branch or optimized for further processing.

At least one of the magazines is predefined as reject bin.

### Modularity

Flexible, expandable configuration for quick and easy interchangeability and upgradability.

### PMP Personalization Management Platform

PMP-production is a holistic approach for managing the entire card production and fulfillment process throughout your factory.

- Flexible and secure chip personalization
- Automatic data handling for order input and machine management
- Production optimization by intelligent job distribution and production planning
- General material management
- Flexible reporting and audit functionalities



<b>Technical Specifications ALPHA One</b>		
System Facts	Cycle speed Card types	Up to 3000 cards/hour ID-1/CR80 format according to ISO/IEC 7810 Thickness: 0.5 – 1.00 mm      19.7 – 39.4 mil Length: 86 mm      3.4 inches Width: 54 mm      2.1 inches
Card Feeding	Number of feeders Feeder capacity	Up to 4 magazines 400 cards each
Contact Chip Encoding	Number of encoding stations Protocols	Up to 40 stations ISO 7816, T=0/T=1
Contactless Chip Encoding	Number of encoding stations Protocols	Up to 24 stations ISO 14443 A/B, MIFARE, 13.56 Mhz UHF reading optional (on request)
Magstripe Encoding	Coercivity	HiCo, LoCo (300/2750/4000 Oe, ISO, AAMVA standard)
Laser Marking	Number of lasers Inscription types Elements  Print-offset compensation Swivel picture Resolution Two-sided marking	Up to 4 Vector/raster scan, tactile/non-tactile marking TrueType and OCR text, micro printing, 1D and 2D bar codes, photos, fingerprints, signatures, logos, other graphics In combination with visual inspection module MLI 300 – 1000 dpi In one or two successive modules
Visual Inspection	Layout check  Identification of optical elements  Two-sided inspection	Verification of card body and orientation, detection of print offset and rotation Text elements (TrueType and OCR), 1D and 2D bar codes; presence of photos, fingerprints, signatures, logos Front and back of card simultaneously
Stacking, Sorting and Diverting	Number of magazines Magazine capacity	Up to 12 Up to 500 cards each
Dimensions	Depending on configuration	
Power Supply	400 VAC ± 5% / 50 Hz or 60 Hz / 3 phases + N + PE	
Power Consumption	Depending on configuration	
Ambient Temperature	10 – 30 °C	
Relative Humidity	20 – 80% at 25 °C – non-condensing	
Compressed Air Supply	No compressed air needed	
Exhaust	Depending on configuration	

ATLANTIC ZEISER Germany · Bogenstrasse 6-8 · 78576 Emmingen · Phone +49 7465 291-0 · Fax +49 7465 291-166 · sales@atlanticzeiser.com  
 ATLANTIC ZEISER Americas · 15 Patton Drive West Caldwell · New Jersey 07006 · Phone +1 973 228-0800 · Fax +1 973 228-9064 · sales@atlanticzeiserUSA.com  
 ATLANTIC ZEISER GB · 53 Central Way · Andover, Hants. SP10 5AN · Phone +44 1264 324-222 · Fax +44 1264 324-333 · sales@atlanticzeiserUK.com  
 ATLANTIC ZEISER Italy · Via Varesina 174 · 20156 Milano · Phone +39 02 33497740 · Fax +39 02 33401413 · az@atlanticzeiser.it  
 ATLANTIC ZEISER France · 1 rue du Bulloz · PAE des Glaisins · 74940 Annecy le Vieux · Phone +33 4 50 23 95 65 · Fax +33 4 50 23 95 81 · info@atlanticzeiser.fr  
 ATLANTIC ZEISER Iberica · C/ Manuel Pombo Angulo, 12 - 3ª - 6ª · 28050 Madrid · Phone +34 91 4336661 · Fax +34 91 5528916 · az\_spain@atlanticzeiser.es  
 ATLANTIC ZEISER South East Asia · 17, Jalan PJS 7/19 · Bandar Sunway · 46150 Petaling Jaya – Malaysia · Phone +60 3 56210906 · sales@atlanticzeiser-asia.com  
 ATLANTIC ZEISER China · Rm.203, 2.Floor · Unit C, Building D XinYuan Tech.Park · No.97 ChangPing Rd. ChangPing District · 102206 Beijing · Phone +86 10 82893051 · baz@beijingaz.com