New ID Card and Passport

L1 - Secure Credentialing Division is experienced in the production of documents that meet the requirements of various standards bodies such as ICAO, ISO and AAMVA and has implemented identification card projects for twenty-five (25) government customers in the motor vehicle, human service, law enforcement, and election fields. In addition to providing document issuance solutions, L1 - Secure Credentialing Division also designs, manufactures and sells sophisticated document readers for the scanning and authentication of ICAO-9303 documents. Over 4,000 of these units are deployed in border management environments worldwide including Brazil, Oman, Australia and Chile to name a few.

L1 - Secure Credentialing Division is very experienced in meeting all the requirements outlined above. A detailed proposal for accomplishing this is found in Annex 1 and 2. In addition, listed below are a few projects that demonstrate the depth and breadth of L1 - Secure Credentialing Division’s credentialing experience:

- We are the sole producer of all US passports (nearly 15 million/year)
- We have produced over 150 million customized highly secure digital cards in the last 10 years including the US Department of Defense, which at the time of introduction was the world’s most advanced smart ID card.
- We assisted the US Department of Immigration in the design and manufacturing system for the Green Card and other cards issued by INS.
- We currently provide ID solutions for 25 US states. In 16 of those states, L1 - Secure Credentialing Division does the full issuance including enrollment, workflow, database, storage, and ID production; some have L1 - Secure Credentialing Division provided biometrics and document authentication as well. In the other nine states, we provide applications and solutions.
- L1 - Secure Credentialing Division provides the enrollment and capture solutions for the Iceland e-Passport.
- Our database servers support over 3 Tb's of data and we have built many highly robust and redundant database servers.
- Over 18 government customers in the US as well as several in Europe are using the L1 - Secure Credentialing Division facial recognition system. Uganda implemented our face recognition for their Voter ID project (10 million records), and Pakistan implemented the L1 - Secure Credentialing Division face recognition system for their National ID and Passport system (40 million records).
- We have designed over 2,500 styles of ID cards, integrated in multiple legacy systems, ported over 80 million data records from legacy systems to our platform, integrated in all types of network environments, and provided our own networked solutions.

Our abilities are complemented by a dedicated, experienced and diverse team of experts from the Middle East, South America, South Asia, Europe and USA.

In addition L1 - Secure Credentialing Division will be working with American Bank Note for the supply of passport booklets. American Bank Note Company, part of American Banknote Corporation, is a U.S. company based in Trevose, Pennsylvania. It has two manufacturing facilities in Columbia, TN, USA which employ around 200 people. American Banknote Corporation is a world leader in ID, passport, visa, vital records manufacturing productions, secure documents and transaction systems to governments and financial institutions. It employs approximately 4,000 employees worldwide with industry-leading companies located in the United States, Brazil, Argentina, Australia and France. The strength of its franchise locations rests on its proven ability to deliver document security solutions. American Bank Note Company, already well into its third century, maintains traditional presence in the secure printing of stock and bond certificates, car titles, visa labels, traveler checks, social security cards, passports, and other
related security government documents. Its passports are currently being circulated by foreign
governments and its certificates have been produced for over forty US states’ agencies.

Regarding security measures, refer to Annex 1 and 2.

L1 - Secure Credentialling Division is a leader in the production of secure credentials. Through its
work in developing the iA-thenticate document authentication reader, it has extensive knowledge
of adulteration and forgery techniques. It has applied this knowledge in its document issuance
solution to increase document integrity and deter document alteration.

L1 - Secure Credentialling Division will use its Secure Inventory Management System (SIMS) to
track and manage card material throughout fulfillment and during the card manufacturing process.
While many offerers may provide booklets, cards, or printing capabilities, only L1 - Secure
Credentialling Division has an in-house-developed consumable management system to securely
manage all of COUNTRY NAME’s consumables – SIMS: SIMS provides a closed loop system
with the capability to manage and control inventory for all card/passport materials and
consumables from the time the order is placed with the manufacturer or supplier to the point in
time when the consumable is used in production.

SIMS is designed to allow only authorized users to maintain or view inventory information. L1 -
Secure Credentialling Division will determine the minimum/maximum inventory levels required for
the consumables and will enter this information into the SIMS system. SIMS also has the
flexibility to add additional inventory items or styles at any time.

The following figure shows a typical SIMS main screen, which will be customized for COUNTRY
NAME.

Sample Screen of Secure Inventory Management System (SIMS)

Security consumables are sent via a trackable shipment carrier such as DHL from the
manufacturer in secure packaging with appropriate identification labels used to control inventory
in the SIMS system. Per COUNTRY NAME’s request, supplies will be sent in multiple shipments at staged intervals. The shipping information is entered into the SIMS system. The shipment is tracked in SIMS as “in transit to supplier” tracking all material information, shipping information including carrier, date and time shipped, with expected delivery date and time. If the expected delivery date is not met, the designated project manager will receive an immediate notification from SIMS prompting to start an investigation on the missing shipment.

**Consumables Security during Shipping and Storage**

All security materials will be tracked by the Secure Inventory Management system at critical points: Shipment from the manufacturer, transport to the Card Production Facility, receipt and storage at the Card Production Facility, and usage for card production.

Upon transfer of the system, COUNTRY NAME will retain full responsibility for maintaining shipping, audit, and perpetual inventory records of all security consumables. Following contract award, we will develop specific procedures for shipping, transporting and receiving security consumables such as customized security laminate. We will submit the procedure to COUNTRY NAME National Police (PNP) for review and approval.

Each item shipped will be labeled with the part number, manufactured date, and a sequentially numbered serial number on a plastic bag. As the item is received at the production facility, the following parameters will be recorded in the database:

- Serial number
- Date of shipment
- Shipment tracking number

All consumables will be shipped to the Card Production Facility under separate cover. By ensuring that the supply streams are never together during transport, we increase the difficulty of an outside party intercepting the supply streams for the purpose of producing counterfeit documents. As an additional security measure, we will ship all security consumables via next day service and track the status using our Secure Inventory Management System (SIMS). SIMS allows real-time online tracking of material from manufacturer to secure shipment to warehouse and consumption. We have provided more information about SIMS on the pages that follow.

We will also be responsible for non-security consumables, such as clear laminate for the card backs and printer supplies. We will store each of these items in the production facility. As an added measure, we will track shipping records and maintain a perpetual inventory record for non-security consumables, if PNP requires.

We will store all consumables for document production at the site. Consumables will include the card stock, security laminate and clear back laminate. All consumables will be kept in a locked stockroom and no one will be allowed to access the secure areas of the stockroom without authority and stockroom personnel escort. No material can be removed by visiting personnel.

PNP personnel will be trained to oversee the operation and to implement security policies to prevent theft or vandalism by employees or subcontractors.

The following figure provides a high-level view of the reconciliation process flow.
Manufacturer ships consumables lots to Central Production Facility and logs shipment into SIMS

Log shipment receipt into SIMS

Shipment received?

Yes

Store in secure area

No

Load material into printer and log usage into SIMS

Process print request

Store data in production server

Analyze and reconcile production data with SIMS data

Overview of Consumables Process Flow

Consumables Security during Card and Passport Production

Once the shipment has been received at the Card/Passport Production Facility, the site supervisor will indicate delivery of the shipment into SIMS, changing status of shipment to "shipment has arrived" (Each unit of consumables shipped will be entered separately into the SIMS and acknowledgement will be necessary for each.) This acknowledgement will automatically update the system as to the date and time of receipt into the office and will mark those serialized items as “ready for production,” releasing the enclosed material for use.

The Card/Passport Production Facility will be locked and protected by an alarm system. Access to the facility will be restricted and only authorized individuals will be allowed to enter. Access logs will be maintained. When the security materials are received at the Production Facility, they will be further protected within a secure locked area.

Inventory control records will be balanced against card production records to account for consumables materials.

We will provide for secure disposal of all used, partially used, and unused supplies in accordance with COUNTRY NAME National Police policies and procedures. For the Central Production Facility, we propose to destroy all rejected documents on site. If PNP requires, we will provide a shredder for document destruction and to eliminate the movement of any scrap material from the production facility.

All cards produced at the facility will be accounted for, including finished cards, reprinted cards, rejected cards, and delivered cards. Card production reports will be provided by the software for use in reconciling materials usage with the Secure Inventory Management.

All shipments of consumables will be accompanied by shipment papers that itemize the contents. Signed receipt by an authorized PNP official will maintain a closed loop tracking system. All reconciliation data for “pending card production requests” and “completed cards” will be provided in a report form which will enable auditing and tracking of cards made and delivered against orders received. Format of the report will be finalized with PNP during the design phase.

L1 - Secure Credentialling Division has included provision of supplies needed for the manufacture of the documents, such as booklets, pages for personalization, security film, ink, etc. for a period of 6 (six) months as part of its pricing proposal. In the table below is the pricing requested for
consumables (card stock, passport booklets, laminates, ink, mailing materials, etc.) on an annual basis.

<table>
<thead>
<tr>
<th></th>
<th>Qty</th>
<th>Brand</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>COMPUTERS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Server</td>
<td>4</td>
<td>Dell</td>
<td>PowerEdge</td>
</tr>
<tr>
<td>PC and monitor</td>
<td>9</td>
<td>Dell</td>
<td>Optiplex</td>
</tr>
<tr>
<td>Switch, 24-port</td>
<td>2</td>
<td>Dell</td>
<td>2124</td>
</tr>
</tbody>
</table>

Maintenance and support pricing has been estimated, in Section 3.3.4, for 5yrs on an annual basis for the Production Facilities’ hardware and software. Travel associated with any such support will be billed separately under time & materials, and because we have factored in sufficient in-country spares, all equipment is assumed to be return-to-depot for repair or replacement.

Technical and operational features for the proposed printers are included in the appropriate Annex along with a schedule outlining the process for the final design and development of the NID cards and passports, installation of a secure manufacturing facility and the supplies necessary for the manufacturing of the cards and passports.

While the RFP does not specifically request it, our extensive experience in producing identity documents dictates that we factor in to the hardware and software configurations and pricing a disaster recovery scheme so that production can continue in the event of a serious failure such as power, networking, facilities, or equipment failures. Therefore, both the card production and passport production lines have both a primary and secondary production capability, with redundant servers, printers, mailers and laminators. While the secondary line is primarily intended to be used in the event of a disaster (and we recommend that it be located by the government in a different facility), it can supplement the production capability of the primary line if volume spikes. While the secondary line has been cost-effectively configured to produce a volume similar to the country’s average production rates, that secondary line can also be supplemented with equipment (printers and laminators) from the primary line if it is available, to add to backup production capacity.

L1 - Secure Credentialing Division proposes the iA-thenticate document reader with Quality Control software to validate the quality and readability of each passport produced. The iA-thenticate unit is used globally in border management applications to scan and authenticate machine-readable passports. Chile, Brazil, Australia, Canada, Finland and Slovakia are a few of the many countries using this equipment at their borders.

L1 - Secure Credentialing Division recommends the smaller J1000 document authentication unit for quality checks on the ID1-sized National Identity Card. This unit uses the same software that is in use in several US states to verify drivers’ licenses and other identity card-sized documents. Data sheets on both products are included in the appendix.

L1 - Secure Credentialing Division has priced and will provide the final artistic design for 4,000 trifold brochures for ID cards, 2,000 for passports and 2,000 posters for ID cards and 600 for passports.
<table>
<thead>
<tr>
<th>Primary ID &amp; CPC</th>
<th>Qty</th>
<th>Brand</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRINTING SYSTEM</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Card Printer (incl. integrated barcode reader)</td>
<td>8</td>
<td>Datacard</td>
<td>SP-75</td>
</tr>
<tr>
<td>Spare Printers</td>
<td>2</td>
<td>Datacard</td>
<td>SP-75</td>
</tr>
<tr>
<td>Passport printer</td>
<td>2</td>
<td>Diletta</td>
<td>600i</td>
</tr>
<tr>
<td>Passport laminator</td>
<td>2</td>
<td>Diletta</td>
<td>CPL90</td>
</tr>
<tr>
<td>Spare Passport laminator</td>
<td>2</td>
<td>Diletta</td>
<td>CPL90</td>
</tr>
<tr>
<td>Spare Printers</td>
<td>2</td>
<td>Diletta</td>
<td>600i</td>
</tr>
<tr>
<td>MAILING SYSTEM – Inserter</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mailing System- cards</td>
<td>1</td>
<td>Datacard</td>
<td></td>
</tr>
<tr>
<td>Label printer - passport mailing</td>
<td>2</td>
<td>Dymo</td>
<td>400</td>
</tr>
<tr>
<td>QA/INSPECTION</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>iA-thenticate B4000 RFID</td>
<td>6</td>
<td>L1</td>
<td>B-4000B</td>
</tr>
<tr>
<td>2D barcode scanner, serial</td>
<td>6</td>
<td>Welch Allyn</td>
<td>IT4710LR-131CK</td>
</tr>
<tr>
<td>PC and monitor</td>
<td>6</td>
<td>Dell</td>
<td>Optiplex</td>
</tr>
<tr>
<td>COMPUTERS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Server</td>
<td>3</td>
<td>Dell</td>
<td>PowerEdge</td>
</tr>
<tr>
<td>PC and monitor</td>
<td>5</td>
<td>Dell</td>
<td>Optiplex</td>
</tr>
<tr>
<td>Switch, 24-port</td>
<td>1</td>
<td>Dell</td>
<td>2124</td>
</tr>
<tr>
<td>PRINTING SYSTEM</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Card Printer (incl. integrated barcode reader)</td>
<td>5</td>
<td>Datacard</td>
<td>SP-75</td>
</tr>
<tr>
<td>Passport printer</td>
<td>2</td>
<td>Diletta</td>
<td>600i</td>
</tr>
<tr>
<td>Passport laminator</td>
<td>2</td>
<td>Diletta</td>
<td>CPL90</td>
</tr>
<tr>
<td>MAILING SYSTEM – Inserter</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mailing System- cards</td>
<td>1</td>
<td>Datacard</td>
<td></td>
</tr>
<tr>
<td>Label printer - passport mailing</td>
<td>1</td>
<td>Dymo</td>
<td>400</td>
</tr>
<tr>
<td>QA/INSPECTION</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>iA-thenticate B4000 RFID</td>
<td>3</td>
<td>L1</td>
<td>B-4000B</td>
</tr>
<tr>
<td>PC and monitor</td>
<td>3</td>
<td>Dell</td>
<td>Optiplex</td>
</tr>
<tr>
<td>2D barcode scanner, serial</td>
<td>2</td>
<td>Welch Allyn</td>
<td>IT4710LR-131CK</td>
</tr>
</tbody>
</table>
Datacard SP75 Plus

DATA CARD®
SP75 PLUS CARD PRINTER

PROTECT YOUR ENTERPRISE WITH ADVANCED SECURITY TECHNOLOGY

Engineered to produce highly secure IDs, the Datacard® SP75 Plus card printer enables government agencies, high-tech corporations, universities and other security-minded organizations to protect people, facilities and critical assets.

- **Intense security.** The SP75 Plus card printer offers one standard laminator and a second optional laminator, both of which can apply Datacard® Duragard® virtual edge-to-edge laminates that cover 93% of the card. These laminators extend card life and help defend against tampering. Ultraviolet fluorescence printing capability comes standard. Additional security features include theft deterrent software, a hardware lock本月 that secures active supplies, blank card stock and rejected cards, and a Kensington® lock that secures the printer itself.

- **High durability.** The SP75 Plus card printer delivers the durability and reliability that colleges, universities and others need to maximize card quality and efficiency. With fewer moving parts and a significantly higher duty cycle, the SP75 printer offers exceptional reliability for the most demanding applications.

- **Diverse functionality.** Use the SP75 Plus card printer to laminate cards printed by another printer or print cards without lamination. You can apply the same security laminate to both sides of the card or apply different laminates to each side to improve cost-efficiency. The printer also offers field-upgradable options for smart card, proximity card and magnetic stripe encoding.

Datacard Group
SECURE ID AND CARD PERSONALIZATION SOLUTIONS
DATACARD®
SP75 PLUS
CARD PRINTER

Standard Features
- Print capabilities
  - Color or black/white
  - Edge-to-edge printing
  - Full-color or monochrome
  - Ultraviolet fluorescent printing
  - Continuous tone, full-color, black-and-white photos
  - Alphanumeric, text logos, and digital signatures
  - Variety of bar codes
- Background patterns
  - Preconfigured patterns

Advanced Imaging Technology™
- Full color, print speed:
  - Up to 175 cards per hour (uncoated print and laminate)
  - Up to 150 cards per hour (coated print and laminate)
- Up to 150 cards per hour (uncoated print and laminate)

Laminator and topcoat capabilities
- Topcoat or laminate
- Superior laminate patch coverage
- Laminate without printing

Connectivity
- Direct connect: 10/100 Base-T Ethernet
- Bi-directional USB

Capacity
- Input hopper: 100 cards, 0.03 in. (0.76mm)
- Output hopper: 40 cards, 0.03 in. (0.76mm)

Operating system support
- Bi-directional USB supported on Windows® XP and XP Professional (or equivalent)

Print driver support
- Various operating systems
- Datacard® Open Platform printer driver for Windows® platforms

Printer driver
- Upgradable image and color controls
- Stand-alone driver diagnostics

Specifications
- Color image and text card preview
- Online user help
- Add card, pattern or image to topcoat
- Supply usage tab
- User-friendly operation
- Backlit LCD panel
- Menu and visual menus for operation of menus
- Automatic card feed
- Quick-change ribbon and laminator cartridges
- Datacard® Certified Supplies featuring Intelligent Supplies Technology™
- Automatic densification and validation for thermal laminates and topcoats
- Automatic printer settings and offsets
- Ribbon wear indication
- Ribbons:
  - 24-month standard shelf warranty
  - 24-month standard warranty (no power restrictions)

Options
- Second lamination
- Magnetic encoding
- UV/IR or NTI
- Dual high-frequency reader
- Smart card reader
- Contact or contactless
- Contactless reader
- Contactless reader
- Prox card reader
- CFI card reader
- Magnetic stripe and smart card readers
- Input hopper empty alert
- Prox card software
- Hardware lockout
- 20 card input hopper
- 20 card output hopper

Datacard Group
1111 New Road West
Minnetonka, MN 55343-3005
Tel: 855-630-1225
Fax: 952-963-0168
www.datacard.com

Datacard Group and its related companies are either authorized dealers or Datacard® Certified Suppliers. Datacard® SP75 Plus card printers require the use of Datacard Certified Supplies in order to print and laminate properly.

© 2016 Datacard Corporation. All rights reserved. 27-06-16
DILETTA CPL90

Professional Passport Laminator

Simple to operate and efficient, this machine will process all machine readable passports (MRPs) requiring hot lamination inside the front or rear covers to protect and secure the variable data and photographs.

Passport

- Compact and stylish, with high performance design features
- Produce quality results over extended periods of professional use
- Bult in high specification hot roller technology
- 8 bit microprocessor controlling pre-set functions for ease of use
- Perfect results in passport lamination

Technical Specification

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Width</td>
<td>400 mm</td>
</tr>
<tr>
<td>Depth</td>
<td>270 mm</td>
</tr>
<tr>
<td>Height</td>
<td>130 mm</td>
</tr>
<tr>
<td>Weight</td>
<td>9.5 kg</td>
</tr>
</tbody>
</table>

Temperature

Laminating Temperature: 0 - 180 °C
Temp. Control: Thermostatic & time rate by 8 bit PC
Control System: Steady voltage circuit, DC control
Heating System: Infra-red heater

Documents

- Width: max. 175 mm
- Thickness: max. 3.5 mm

Power Supply

- Voltage: 100, 110, 115, 220, 230, 240 V/50, 60 Hz
- Power Consumption: 850 / 2.9 A

Design and specifications are subject to change without notice. DILETTA does not assume any liability for completeness or accuracy in form and contents.
1) DILETTA 530i & 550i

**High Speed Passport Printers**

High speed colour inkjet passport printing systems with convenient front operation

A new colour solution for passport offices

At DILETTA, our job is to make colour passport printing ever more convenient and fast. With this foremost in mind, we have designed a revolutionary passport printer that opens up a totally new realm for passport office colour printing - the new DILETTA 530i & 550i passport printers.

Despite its remarkably low price and compact size, it has various functions that meet or exceed all expectations. It features super high-speed printing with the utilization of a wide one-inch print head for a maximum 2400 dpi, high-quality image, plus space-saving design with convenient...
front operations. It also provides super low running costs and maintenance-free operation. The DILETTA 530 & 550i are fully expressive and able to meet on-demand needs quickly and effortlessly.

This is truly the colour passport solution for today's passport printing office.

Exceptional speed

The DILETTA 530 & 550i produce mono and colour passport prints at outstanding speeds, using innovative technology that combines bi-directional printing, high speed passport feeding for passports up to 128 pages and state-of-the-art print head design. Standard IC&O passport pages are printed at up to 12 seconds in 'high quality' mode and 8 seconds in 'standard' mode.

With precision comes quality

The DILETTA 530 & 550i use a revolutionary 1-inch wide print head to fire ink droplets only 4 picolitres in size, with remarkable precision. With a high-density design that uses 4499 individual ink nozzles for colour printing, the 530i & 550i produce consistent, high quality results. The printer automatically selects optimal image resolutions (maximum of 1200 x 800 dpi for mono and 2400 x 1200 dpi for colour), making it simple to get exceptional print quality every time. Bright, fade resistant inks are also used to ensure prints last longer.

Maintenance-Free

Gone are the days when the passport office experienced downtime due to periodic printer maintenance and parts replacement. Thanks to its revolutionary design, the 500i series is the worldwide first passport printer with a complete passport surface contactless and maintenance-free passport transport system.

The advantages are:

- No reduced print quality after a period.
- No additional service and maintenance costs.
- No ink stained or damaged documents.
- No misaligned imprint.
Both the main printer unit and print head are incredibly durable, so changing one of the individual ink tanks is all you will ever likely need to do. However, telephone support is included in the price while optional return to base service and on-site support is also available when you need it – if you need it.

Network Compatible

The DILETTA 650i & 550i are versatile enough to be quickly and easily connected to passport office networks and computers. USB2.0 is supported as standard. A 10/100BASE-TX Ethernet Interfaces is also available as standard (DILETTA 550i) or as an option (DILETTA 650i). High quality colour business printing has never been so simple or accessible.

Once fitted with Dilettas's optional TCP/IP, IPX/SPX Ethernet network card, the 600i series is ready to be plugged into a range of network systems. It is also compatible with NetSpot, a handy application that allows the status of all DILETTA printers connected to the network to be remotely monitored.

Perfect For The Passport Office Environment

Designed with the passport office in mind, the 600i series take up very little vertical space. Thanks to flat construction and a small, easily accessible control panel, it makes very effective use of limited office space. Even noise levels have been taken into consideration. Electrical consumption has also been addressed with the energy-saving design cutting usage to 40W or less during operation and 13W or less during standby.

Cost saving Individual high-capacity Ink tanks

The DILETTA 600i series comes standard with 370ml high capacity Ink tanks (130ml for black and 240ml for each colour Ink tank), allowing them to easily cope with large volume printing demands. The individual tanks eliminate Ink wastage and make running costs extremely economical for both mono and colour prints.

Options:

- **RFID Contactless Chip Reader and Writer**
  You can equip your DILETTA 500i & 550i passport printer with an optional integrated contactless chip reader / writer. So you can write in one-pass the holders information during the print process. This avoids writing of wrong information into the passport during a two step process, may caused by an operator mistake. The module supports all ISO 14443 type A and ISO 14443 type B chips with a transfer rate up to 134.4 Kbps on Air Interface.

- **Camera System**
  A camera system (camera and LED lighting) is optionally integrated into the DILETTA 550i & 550i passport printer. This enables to print the machine readable lines exactly to the page edge and the holders data to the existing pre-printed fields. Against common systems the DILETTA 550i & 550i camera system DO NOT require an expensive frame grabber card inside the PC – it is connected via the printers USB cable. Accuracy of positioning : < 0.1 mm.

- **Barcode Reader**
To avoid mixing passport numbers you can integrate a barcode reader software module for one dimensional or 2D barcodes inside your DILETTA 530i & 550i passport printer. Before starting the print job the system captures the pre-printed passport number and transfers it to the PC.

- **OCR Reader**
  To avoid typing wrong passport serial numbers into your system you can integrate an OCR reader software module inside your DILETTA 530i & 550i passport printer. Before starting the print job the system automatically recognizes and captures the pre-printed passport number with the OCR (optical character recognition) module and transfers it to the connected PC.

### Technical Specification

<table>
<thead>
<tr>
<th>Configuration</th>
<th>DILETTA 530i / 530iW</th>
<th>DILETTA 550i / 550iW</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dimensions</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Width x Depth x Height (530i / 550i)</td>
<td>488 x 504 x 269 mm³</td>
<td></td>
</tr>
<tr>
<td>Width x Depth x Height (530iW / 550iW)</td>
<td>805 x 540 x 209 mm³</td>
<td></td>
</tr>
<tr>
<td>Weight (530i / 550i)</td>
<td>approx. 14 kg</td>
<td></td>
</tr>
<tr>
<td>Weight (530iW / 550iW)</td>
<td>approx. 18 kg</td>
<td></td>
</tr>
<tr>
<td><strong>Printer driver</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Windows 2000, 2003 &amp; XP</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td>MacOS 8.6 - X</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td>Linux</td>
<td>on request</td>
<td></td>
</tr>
<tr>
<td><strong>PDL / Language</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FCL5c, Bi-directional PJL</td>
<td>no</td>
<td>yes</td>
</tr>
<tr>
<td>GARO (Graphic Arts language with Raster Options)</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td><strong>Interfaces</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>USB 2.0 (Universal Serial Bus)</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td>Ethernet Network 10Base-T / 100-TX Base</td>
<td>optional</td>
<td>yes</td>
</tr>
<tr>
<td><strong>Electronic</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CPU</td>
<td>SH7709B - 133MHz</td>
<td>64bit RISC - 264MHz</td>
</tr>
<tr>
<td>RAM</td>
<td>16MB / 24MB (530iW)</td>
<td>128MB</td>
</tr>
<tr>
<td>ROM</td>
<td>4MB</td>
<td>16MB</td>
</tr>
<tr>
<td><strong>Media</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Machine Readable Passports (MRP)</td>
<td>yes, up to 128 pages</td>
<td></td>
</tr>
<tr>
<td><strong>Printing time per MRP</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Standard print mode (plain paper mode)</td>
<td>5 - 8 sec.</td>
<td></td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>-----------</td>
<td></td>
</tr>
<tr>
<td>High quality mode (plain paper mode)</td>
<td>9 - 12 sec.</td>
<td></td>
</tr>
</tbody>
</table>

### Graphic print

<table>
<thead>
<tr>
<th>Resolution</th>
<th>2400 x 1200 dpi max.</th>
</tr>
</thead>
</table>

### Print head

<table>
<thead>
<tr>
<th>Nozzles for black</th>
<th>640 nozzles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nozzles for each colour (cyan, magenta, yellow)</td>
<td>1280 nozzles</td>
</tr>
</tbody>
</table>

### Ink tank capacity

<table>
<thead>
<tr>
<th>Black</th>
<th>130 ml</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour (cyan, magenta, yellow)</td>
<td>80 ml each</td>
</tr>
</tbody>
</table>

### Noise

| Printing (HQ) | 46dB |
| Stand-by | 36dB |

### Operating Environment

| Temperature | 5 to 35°C (41 to 95°F) |
| Humidity | 10 to 90% RH with no cond. |

### Consumption

| Stand-by | 13W or less | 25W or less |
| Printing mode | 40W or less | 55W on average |

### Available Cartridges

**DC-120 Bk OCR-Black Colour Ink Cartridge:**

| Type | Pigmented Ink |
| Capacity | 120 ml |

**DC-120 UVBk OCR-Black + UV-Blue Colour Ink Cartridge:**

| Type | Pigmented Ink |
| Capacity | 120 ml |

**DC-120 Y / Yellow Colour Ink Cartridge:**

| Type | Dye Ink |
| Capacity | 80 ml |

**DC-120 M / Magenta Colour Ink Cartridge:**

| Type | Dye Ink |
| Capacity | 80 ml |

---

All Diletta inks are compliant with following standards:

- ISO 1073/II-1976
- ISO 1831 - 1980
- DIN 86008
- DIN 86009
- DIN 86223
- ICAO 9303 Part 1-3

Diletta inks has been tested and approved by established security.
**DC-120 C / Cyan Colour Ink Cartridge:**
- Type: Dye Ink
- Capacity: 80 ml

**DC-120 UVR / UV Red Colour Ink Cartridge:**
- Type: Dye Ink
- Capacity: 80 ml

**DC-120 UVG / UV Green Colour Ink Cartridge:**
- Type: Dye Ink
- Capacity: 80 ml

**DC-120 UVB / UV Blue Colour Ink Cartridge:**
- Type: Dye Ink
- Capacity: 80 ml

For more information, e-mail us at info@cillette.com.