

Doculus Lumus[®]

See the Truth Inside

Tomar Brothers and Company

190 Pratap Nagar, Mayur Vihar Phase-1, Delhi-110091,
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Email : info@tomarbrotherscompany.com, Web. : www.tomarbrotherscompany.com



Authorized Distributors in All India (Govt. & other sectors)
Marketed by Tomar Brothers and Company. Associate with **P.S. Overseas.**

To whom it may concern

Graz, 27.11.2023

**Authorization Letter for Doculus Lumus®
mobile document checking device in India**

We, Doculus Lumus GmbH (Schmiedlstrasse 16, 8042 Graz, Austria), hereby state that company Tomar Brothers & Company (190, Pratap Nagar, Mayur Vihar Phase-1, New Delhi 110091, India) is our authorized distributor for Doculus Lumus, the mobile document checking device, including accessories in India.

Their contact details are as follows:

Tomar Brothers & Company
190, Pratap Nagar, Mayur Vihar Phase-1, New Delhi 110091,
INDIA

1. Shri Manoj Kumar Singh
Aadhar Number: 9721 970 20897

2. Mr. Pankaj Kumar
Aadhar Number: 800267736225

Issued by the Unique Identification Authority of India under the Government of India.

For any enquiries, please feel free to contact Mr. Manoj Singh on mobile number +91 96509 49101, Mr. Pankaj Kumar on mobile number +91 9810600350 or email mksaicc@gmail.com

Signed for and on behalf of Doculus Lumus GmbH



DI (FH) Sandra Slavinec
CEO

Doculus Lumus GmbH

Tel.: +43 664 8818 6990

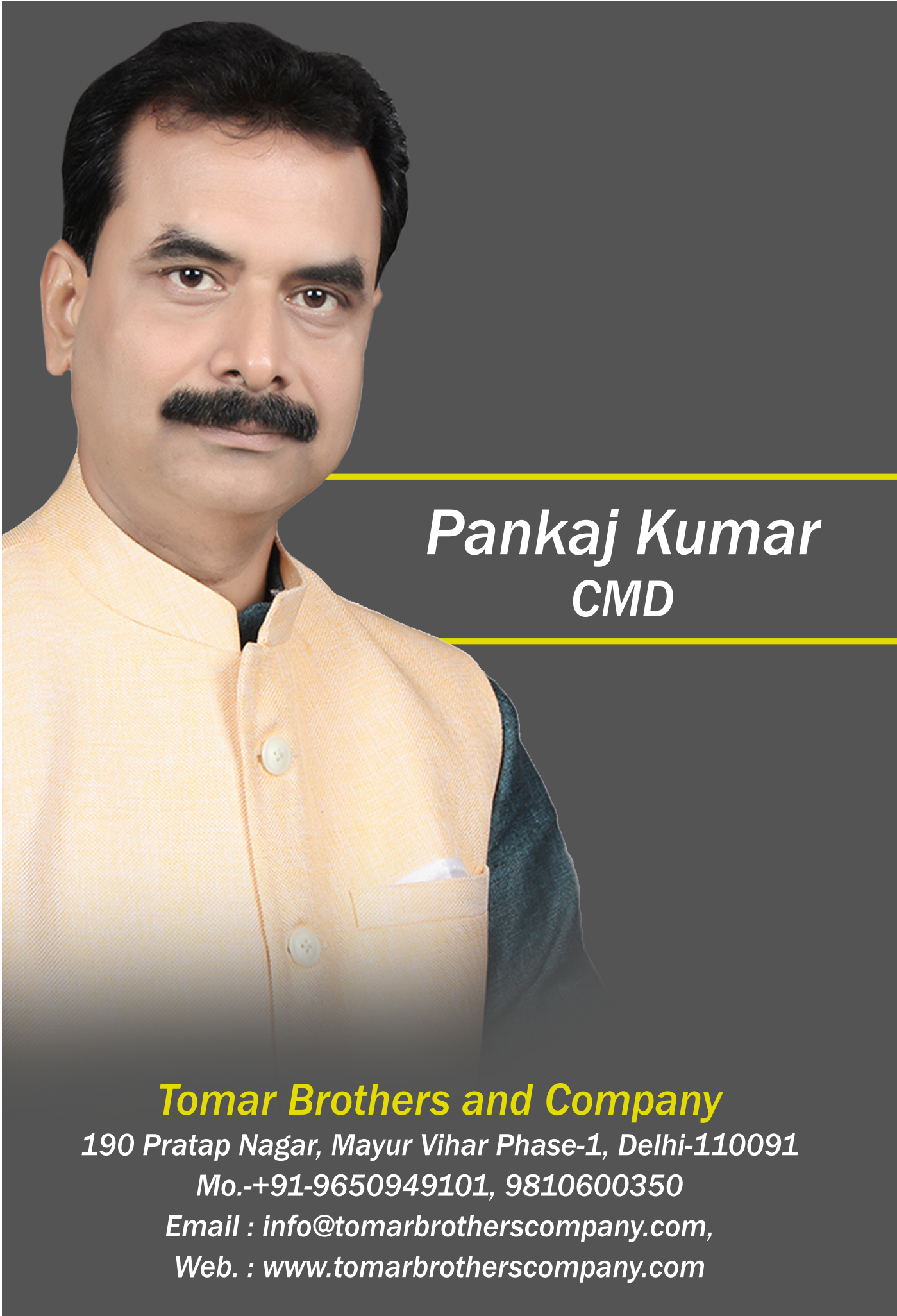
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Doculus Lumus GmbH
See The Truth Inside



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Pankaj Kumar
CMD

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Technical Specifications Frontline Edition



Doculus Lumus[®]

...See the Truth Inside

Fastest
Mobile
Document
Checking



Doculus Lumus® - See the Truth Inside

Mobile Document Checking Device

Doculus Lumus® is a robust mobile document checking device, developed to examine passports, ID cards, visa documents, banknotes and driving licenses as well as other official documents, signatures and seals. It only takes 30 seconds to examine a document and to determine whether a falsification is at hand. Alterations become visible through using the exceptional combination of light and optical features.



Doculus Lumus® - Standard Features

ATTRIBUTES	FIELD OF USE
15x Magnification	Read micro and nano text through a high-quality glass lens system. Only one main lens system to examine the detection area of a document in all different wavelengths.
21 mm Lens Diameter	Largest possible field of view for excellent achromatic document examination.
Robust Housing: Drop-proof 1,5 m	Test it and let it drop, step on it, play football with it... 😊
White Incident Light: 4 LEDs	View security printings homogenously in bright light.
White Torchlight: 4 LEDs	Check watermarks, check documents on a bright, sunny day or at night as a torch.
White Rotating Incident Light: 4 LEDs for manual/automatic rotation	Enlighten OVDs, holograms, identigrams and moving Kinegrams. Use it similar to coaxial light.
White Rotating Oblique Light: 8 LEDs for manual/automatic rotation	Experience 3D visualisation of embossed printings, laser engravings and especially document manipulations.
UV Light 365 nm: 4 extra strong LEDs	View printings in UV 365 nm, homogenous bright illumination also on a sunny day.
Left-/Right-handed mode	Use Incident Light on your thumb of choice to operate the device with just one hand.
Steady Light Mode	No need to keep pressing buttons during checking. Perfect for Photo/Video Documentation via Smartphones and webcams.

Only with Doculus Lumus®

Look for this symbol on the next pages to learn about all unique features you **only** get with Doculus Lumus®.



Colours & Logo

Blue, grey, orange, red, lime, violet, magenta, olive, sand incl. logo option

Lens Diameter

View nanotext with the large 20 mm diameter lens already at 15x magnification

Electronic control (2 patents)

Low energy consumption to operate many months, LEDs keep their brightness even at low energy


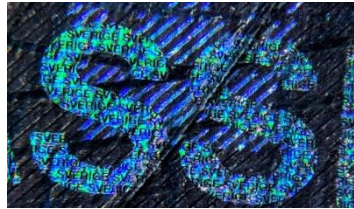



Included individual Doculus Lumus® Features:





Option FUV – Front UV Torch 365 nm to view an entire passport page







Option RFID – RFID ICAO Quick Check to determine ICAO & ISO 14443 Type A/B

Technical Specification

 Only with Doculus Lumus®

Terminology	Technical Description
<p>Magnification and Lens System</p> 	<p>Doculus Lumus® is available with true 15x magnification. The built-in high-quality glass lens system is supplied by one of the three largest global suppliers in this discipline, with achromatic, true-colour and distortion-free quality glass lenses. An excellent magnifier for reading micro and nano text.</p>
<p>Diameter</p> 	<p>2,1 cm inspection diameter</p> <p>Doculus Lumus has the world's largest lens diameters available on the market with 15x magnification (21 mm) for mobile devices. It is possible to read nano text in several passports and ID documents, already with 15x magnification.</p>
<p>Robustness</p> 	<p>Robust housing: Doculus Lumus® is drop-proof from a height of 1.5 meters (tested on concrete) without any functional damages. When dropped, the batteries might fall out due to the impact. Simply insert them back in the device and keep working. The device housing and electronic parts stay intact.</p>
<p>Electronic control</p> 	<p>Low energy consumption: In the frontliner edition, when using 2 AAA batteries, the operating time is approx. 3-5 months, when used in 2 shifts. All LEDs maintain the same brightness even at low battery level.</p> <p>2 patents confirmed in Austria, Germany, and the U.S.</p> <p>No extra on / off button is required with the Doculus Lumus®. If a button is clicked the light will activate. Doculus Lumus® is normally switched off and as soon as a button is pressed, the desired light or function is activated.</p>
<p>Accessibility</p> 	<p>Doculus Lumus has 4 recessed buttons, that are large enough to be pressed while wearing gloves. For easy accessibility, the buttons carry tactile symbols.</p> <p>Through the recessed buttons, Doculus Lumus cannot be switched on accidentally during daily use. If a button is accidentally pressed (in a bag or pocket), the LEDs are automatically switched off after 1 minute to save energy.</p>

<p>4x Incident LED lights</p> 	<p>4x LEDs white incident light to examine micro and nano text.</p> <p>Additional function: Automatic or manual rotating incident light to the left or right. The rotating incident light enables the examination of identigrams and holograms. (see next column for more details)</p> <p>Steady light activates at 3 clicks for 1 minute --> for photo and video documentation with a smartphone.</p>
<p>Rotating Incident Light (similar to coaxial light)</p> 	<p>Automatic or manual rotating incident light to the left or right. The rotating incident light (similar to coaxial light) enables the examination of identigrams and holograms through the main lens of Doculus Lumus under magnification.</p> <p>Switch easily (one button click) between rotating incident and oblique light to examine OVIs under the different light angles through the main lens of Doculus Lumus.</p> <p>Steady light activates at 3 clicks for 1 minute --> for photo and video documentation with a smartphone</p>
<p>Torchlight mode</p> 	<p>Torchlight mode with white LEDs: use as a torch or when examining documents on a very sunny day. With this function, the 4x Incident Light LEDs get a boost.</p> <p>Steady light activates with 3 clicks for 1 minute -> for photo and video documentation with a smartphone.</p>
<p>8x Rotating Oblique light LEDs</p> 	<p>8x LEDs are implemented for automatic and manually rotating Oblique Light to the left or right. Ideally suited for 3D realistic viewing of OVDs, OVIs, embossing, imprints, paper manipulations, holograms and moving Kinegrams with many different features at different angles.</p> <p>Switch easily (one button click) between rotating incident and oblique light to examine OVIs under the different light angles through the main lens of Doculus Lumus.</p> <p>Using electronic control, all LEDs maintain the same brightness even at low battery level. (Patent)</p>

<p>4x UV LED lights 365 nm</p> 	<p>4x strong UV-LEDs 365 nm, with magnification for detection of UV micro and nano security printings. Steady light activates at 3 clicks for 1 minute --> for photo and video documentation with a smartphone.</p> <p>Using electronic control, all LEDs maintain the same brightness even at low battery levels. (Patented)</p>
<p>Left-/Right-handed Mode</p> 	<p>By default, the key assignment of the device is designed for right-handers. In many cases, left-handed people want to operate the incident light, UV and also the torch mode with their thumb. This is possible by simply mirroring all the functions on the buttons for the preferred handling of the device.</p> <p>Switch mode: Switching between right-handed and left-handed mode is done by briefly pressing all 4 buttons simultaneously. After the green and red LEDs light up at the same time, take the device in the respective hand.</p> <p>For left-handed users: If you want to have the incident light on the left thumb, hold down the oblique light button  until all lights go out.</p> <p>For right-handed users: If you want to have the incident light on the right thumb, hold down the incident light button  until all lights go out.</p> <p>(For Doculus Lumus with IR laser, this mode is deactivated for safety reasons).</p>
<p>Steady Light mode for documentation purpose</p> 	<p>With this mode the desired light stays on for 1 minute to give the user time to examine the document and photo and video document what is seen.</p> <p>Doculus Lumus has a flat design so that a smartphone can be placed on it wobble-free. For additional stability, use the Smartphone Clip (See page 10 "Accessories"). The steady light mode is ideal for photo or video documentation purposes with a smartphone or webcam.</p> <p>The unit switches itself off after 1 minute to save energy.</p> <p>The steady light mode is available for all light functions, except Option AS for safety reasons.</p>
<p>Option FUV Front UV Torch (365 nm)</p> 	<p>The integrated front UV torch allows to view an entire passport page at a glance with UV 365 nm.</p> <p>Steady light mode can be activated for 1 minute.</p>

Option RFID
 ICAO & ISO 14443-4 Type
 A/B Quick Check



Ideal option for frontliners who need to quickly identify counterfeit e-documents with destroyed RFID chips.

The RFID ICAO Quick Check enables a fast determination of RFID transponders in passports or ID cards. The RFID transponder is not unlocked at crypto level. The existing file structure is used to detect a passport or ID card transponder, if it is ISO 14443-4 type A or type B and whether the file structure is ICAO conform.

Selectable Options

Customise your Doculus Lumus® to suit your preferences.

Colours



Choose your **individual colour** for Doculus Lumus®. Upon request it is also possible to choose your own RAL colour, i.e. to match your corporate or organizational colours. It is also possible to position a logo on the lid of the device if desired.

Available colours: blue, lime, grey, red, magenta, orange, violet, olive, sand

Individual Logo





Individualise your devices by placing the desired logo centered on the Doculus Lumus® lid, i.e. your **corporate or organization logo**.

Please contact our sales team for an offer.



Included Accessories

for your Doculus Lumus®

<p>2 pcs. AAA-Batteries</p>	<p>Operating time of the enclosed 2-pack AAA batteries is for a frontliner edition at least 2-3 months, when used in 2 shifts.</p>
<p>Microfibre cloth</p>	<p>Keep your lens clean at any time with the included microfibre cloth.</p>
<p>Hand strap</p>	<p>Safely secure Doculus Lumus® with the included, adjustable handstrap. If preferred, a neck strap with safety opening mechanism can be provided instead.</p>
<p>Recommendation card</p>	<p>Share your experience of Doculus Lumus® with others.</p>
<p>Quick Guide</p>	<p>The Quick Guide is a short introduction on how to use your Doculus Lumus®. It visualizes all functionalities briefly and how to activate them. It is included in every package in English, other languages can be downloaded as PDF from our website, printed version on request.</p>
<p>Belt Bag</p> 	<p>Specially designed belt bag for Doculus Lumus® (water-repellent, robust bag made of nylon with snap button or velcro fasteners, main device compartment, integrated inner compartment for a microfiber cloth, side compartment for a battery set, belt attachment with adaptable velcro fastener, loop for carabiner). The bag can be attached to a tactical belt with a hook and is compatible with the MOLLE system.</p> <p>The bag carries an NFC transponder. When read with a Smartphone, der user gets directed to our Help-site with short videolinks, our Quick Guides in all 15 available languages for download as well as a helpdesk E-mail and telephone number.</p> <p>Special adaptations can be made on request.</p>
<p>Smartphone Clip</p> 	<p>The Smartphone Clip is a simple click-on tool, to stabilise any smartphone for photo and video documentation.</p> <p>It can be left on and the device will still fit in the bag.</p>
<p>Visa Sticker VDS Specimen for Training</p> 	<p>The specially designed Visa Sticker for training purposes is part of the Doculus Lumus set. The sticker is personalized with a Specimen person and shows all relevant security features found in ID documents. Explanatory brochure available.</p> <p>Material and colors: 248 g/m2 composite material VS: 3 color iris print + 1 color iris print (invisible) + UV Bi FLUO + 5 colors + hologram embossing</p>

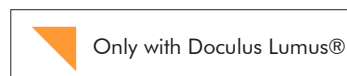
Additional Accessories

for your Doculus Lumus®

<p>Rechargeable AAA batteries eneloop with charger (4-pack)</p> 	<p>Panasonic eneloop, Ready-to-Use Ni-MH rechargeable battery, AAA Micro, pack of 4, min. 750 mAh, 2100 charge cycles, low self-discharge.</p> <p>Within the set an eneloop AAA round cell charger for 4x rechargeable batteries NiMH Micro (AAA), Mignon (AA) is included.</p>
<p>Doculamp 365 nm</p> 	<p>The DOCULAMP 365 is a UV torch at 365 nm with homogenous illumination. The specialized professional projector type combined optical lens enables the torch to achieve uniform projection and ultra-wide lighting range, without any interference of stray light. The electronic control ensures constant brightness, without flicker.</p> <p>USB-C Charger, Belt Bag and Handstrap included in the set.</p>
<p>User Manual</p>	<p>The user manual can be downloaded in multiple languages from our homepage as a PDF file for free. Printed user manual booklets and translations on request.</p>

General Specifications

of Doculus Lumus®



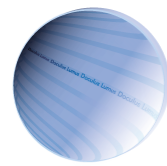
Market penetration	<p>The use of Doculus Lumus® is possible worldwide. In less than 30 seconds, it is possible to identify forgeries of passports, ID cards or ID cards or banknotes and then document the area with a photo on your smartphone.</p> <p>It is a mobile document checking device that can always be carried in a shirt or trouser pocket or in the specially designed belt bag. Due to its robust design, it supports the hard everyday work of the emergency forces on the motorway, in the train or at the airport in the best possible way.</p>
Market situation	<p>Doculus Lumus® has been sold as a series product worldwide since 2015. To date, several thousand devices are in use worldwide at borders, airports, criminal investigation offices, customs, prisons and in various ministries and embassies.</p>
Corporate Social Responsibility	<p>Social commitment is a must for us. Doculus Lumus® has been produced locally since 2015 in a nearby series workshop at the company Team Styria GmbH, which employs more than 75% integrative people with various disabilities.</p>
Made in Austria	<p>With a value added of more than 80%, Doculus Lumus® is a genuine Made in Austria product. We rely on local production and procurement to strengthen our local business location. This enables us to produce just-in-time and just-in-sequence and to implement individual customer requirements.</p>
Technical benchmark	<p>By working closely with document experts from all over the world, Doculus Lumus GmbH has been able to incorporate the most important and useful functions for the rapid detection of forged documents into a handy tool. Using state-of-the-art mechatronics for intelligent energy saving and user safety, two patents have already been approved.</p> <p>The 1st patent on the electronic control ensures the constant brightness of the LEDs, even if the batteries/accumulator runs low on energy.</p> <p>The 2nd patent refers to the automatic change of the energy supply from lithium-ion battery to the standard AAA batteries if inserted for devices with the LI option.</p> <p>This ensures that the user (1) can work with the same brightness of light until the device runs out of energy and (2) that a second energy supply allows to work longer and without interruptions when out in the field.</p>
No extra switch on / off	<p>No extra on / off button is necessary with the Doculus Lumus®.</p> <p>The specially developed electronic switch-off mechanism switches the device on as soon as buttons are pressed. If the button is let go or after 1-minute steady light, the device switches off automatically to save energy.</p> <p>Doculus Lumus has recessed buttons and is designed so that the device cannot be accidentally switched on during daily use and run out of energy. If a button is activated by mistake (in the suitcase or in a pocket), the LEDs are also switched off after 1 minute to save energy.</p>

Operation time & Multiple energy sources	<p>Multiple energy sources in one unit for long operation time in the field:</p> <p>1) Standard AAA batteries: The operating time of the included 2 AAA batteries is estimated at 2-3 months with 2-shift operation.*</p> <p>2) Rechargeable AAA batteries (Additional accessories): When using 2 AAA Panasonic eneloop batteries, the operating time is approx. 3-5 months, when used in 2 shifts. Charger included.</p> <p>3) With integrated Li-ion battery: The operating time with battery is 1 month in 2 shifts. The unit still works with 2 AAA batteries or rechargeable batteries. Use multiple energy sources during operation! As soon as AAA batteries are inserted, the Doculus Lumus LI device automatically switches to battery operation. Simply charge the device when back at the office and keep the spare batteries in the belt bag. A USB-C cable is included. (Included with the Expert Edition)</p> <p>*At average use, previously experienced operation time</p>
Handling	<p>With only 4 buttons, Doculus Lumus® is easy to operate, even with one hand. The functions are placed intuitive, and the device can be used immediately without further training.</p> <p>If wished for, a short session for tips and tricks is available free of charge.</p> <p>The Quick Guide provides a quick familiarisation/reminder of the different functionalities. In the enclosed or downloadable operating instructions, each function and its use can be easily looked up. By switching to left-handed mode, left-handers can also operate this device very easily with one hand and always have the white incident light – most used function - available on their preferred thumb.</p>
Further Training	<p>The Doculus Lumus Team provides a short training session on the device's functions and tips and tricks free of charge. The training can be held via MS Team or in-person. For in-person trainings, travel expenses are charged separately.</p> <p>For training on document security features and/or the document checking, we have a network of globally known document training centres who we can connect you with or offer trainings as a bundle together with the Doculus Lumus devices.</p> <p>For further information, please contact our team under sales@doculuslumus.com.</p>
Climatic conditions	<p>Doculus Lumus® has been used day and night in all regions of the world since 2015, whether on the coast of Norway, throughout Europe, Canada, USA, Tahiti, Iceland, South Korea, India, Japan, Australia, Kenya, Oman all the way to the desert of Iraq.</p>
Environmental conditions	<p>Tested at: -20 to +80 °C (approx. -4 to 176 F) Humidity: ≤ 80 % relative humidity, non-condensing Recommended temperature: -20 bis +55 °C (ca. 0 bis 130 °F)</p>

<p>Splash-proof</p> 	<p>Doculus Lumus® has been designed to be protected against dust and splash water after IP54 standard. The special construction of the housing and the lens carrier are equipped with 2 sealing rings that shield the optical from the electronic area.</p> <p>It is not completely waterproof and should not drown in e.g. sugared coffee ☺</p>
<p>Robust housing</p>	<p>The Doculus Lumus® housing is made of 2 highly durable plastics. For hygienic reasons, no sticky soft touch surface. The design has been chosen so that a user cannot unintentionally destroy the lens or the internal electronics. (not waterproof, no IP76) The device is also quite resistant against dust. The housing design shields the lens from external lighting.</p> <p>Doculus Lumus is drop-proof at 1.5 m heights. (Tested on concrete)</p>
<p>Certifications</p>	<p>Doculus Lumus® has certifications for Europe CE, FCC for USA, as well as for Canada, Australia and New Zealand. Our Manufacturing is certified under ISO 9001 in Graz (Austria) and underlines their social responsibilities by employing 70% people with disabilities.</p>
<p>Dioptric compensation</p> 	<p>Note on the correct use of Doculus Lumus®:</p> <p>At a 15x/22x magnification, it is technically no longer a magnifying glass, as you are already in the microscopic range. For this, it is necessary to bring the eye directly or very close to the lens.</p> <p>The quality glass lens system in the Doculus Lumus® makes it possible to compensate for different diopter strengths. A distance ring is fitted as standard and adjusted so that the visual acuity is optimally set for all corrected (correction by glasses or contact lenses) and uncorrected users (between -4 and +4 dioptres).</p> <p>A survey with test persons with different dioptric strengths from -4 (short-sightedness) to +4 (long-sightedness) proves that additional dioptric compensation with the device and the quality glass lens system used should only be used as a support from a dioptric strength of more than 4 diopters of short-sightedness or long-sightedness. The detailed results of the survey with different visual acuities can be provided on request.</p> <p>Alternatively, 2 additional distance rings for refined visual acuity adjustment can be fitted for strongly farsighted users. Included upon request. For the insertion of the distance rings, please refer to the User Manual.</p>

Illuminance measurement	<p>Measuring device: Digital Lux-Meter RO-1330 Test conditions: CAMPUS 02 laboratory, lights switched off, darkened with closed blinds.</p> <p>Measurements White Incident Light: 3820 lx White Torchlight: 7950 lx White Oblique light (1 LED): 800 lx UV 365: 400 lx UV 254+313: 37 lx (measurement not meaningful because measuring device sensor is made of plastic) AS laser: 940 lx (measurement not meaningful due to laser dot) Front UV 365 nm: - Distance 0 mm (direct contact): 1830 lx - Distance 45 mm (ID card completely evenly illuminated): 1200 lx - Distance 65 mm (passport side completely evenly illuminated): 590 lx</p>
Warranty	<p>Doculus Lumus GmbH grants a warranty of 24 months after the date of purchase on material and production of Doculus Lumus®. After the warranty time has expired, there is a refreshment service offered for Doculus Lumus®!</p> <p>We offer extended warranty for 0,20 € / year per purchased device.</p> <p>This includes cleaning, software updates as well as, if necessary, the repair of the device and a colour cover exchange.</p> <p>In the case of a malfunction or non-function of Doculus Lumus®, please contact your distributor or the manufacturer Doculus Lumus GmbH directly at: sales@doculuslumus.com</p> <p>It is recommended that Doculus Lumus®, as well as any other device made of plastic, should not be exposed to temperatures above 80 degrees (e.g. a dashboard in a car exposed to direct sunlight for a longer period of time in summer).</p>
Service and maintenance "From old to new"	<p>There is a refreshment service available for Doculus Lumus®. This includes cleaning, software updates and, if necessary, repairing the unit and replacement of the cover.</p> <p>It is also possible to upgrade your device with certain new options, depending on the version you currently have. Compatibility assessment upon request.</p>
Customs tariff number	<p>Set Doculus Lumus® with bag Customs tariff number: 9031499000 Declaration of Origin or CE certificate on request.</p>
Size	<p>Doculus Lumus® has the following size and thus fits in any trouser or shirt pocket: 108 mm x 63 mm x 28 mm</p>
Weight	<p>105 g weight of a Doculus Lumus® without batteries 128 g weight of a ready-to-use Doculus Lumus® incl. batteries and wrist strap 265 g weight of a complete Doculus Lumus® with bag</p>

For any remaining questions please contact us under: sales@doculuslumus.com



Doculus Lumus®



Doculus Lumus® User Manual

Doculus Lumus GmbH

“See the Truth Inside ...” in 30 seconds

Doculus Lumus® is designed in cooperation with document specialists from Austria and many other document experts from all over the world.

Border guard officers and all people who have to check official documents use the mobile document checking device Doculus Lumus® to prove the documents authenticity.

Experienced document specialists know what they need to look for. Often the place where fake documents are analysed in more detail is an office far away from the border posts. So fake documents must be identified by the frontlines at the border, on the motorway, on the train or at the airport. Usually only 30 seconds are available for the examination of a document and to decide whether a fake is present or not. Frontline counts!



Your new Doculus Lumus®

Congratulations for purchasing your new mobile document checking device Doculus Lumus® which is available in several unique versions and colours.

Package Contents



- Mobile document checking device
- 1 pair of AAA batteries
- 1 hand strap
- 1 lens cleaning cloth
- 1 Doculus Lumus® business card to share
- 1 Quick Guide

Optional Accessories



- Robust belt bag for the device including a side pocket
- Extra pocket for a set of spare AAA batteries
- Extra coloured cover (lime, red, grey, violet, blue, magenta, orange, sand, olive)



- Rechargeable batteries incl. charger

Doculus Lumus® standard functions

- 15x/22x magnification with high quality glass lens system
- Field of view: 15x Ø 20 mm | 22x Ø 15 mm
- Robust housing: drop-proof from a height 1,5m
- 4 LEDs for white incident light with additional rotating oblique light
- 4 UV-LEDs with 365 nm extra strong
- 8 LEDs for automatic or manual rotating oblique light to the left or right
- Torchlight Mode
- Left/right hand mode
- Steady light mode for documentation purpose
- Auto power-off functionality
- Constant LED brightness due to intelligent energy management

Doculus Lumus® options

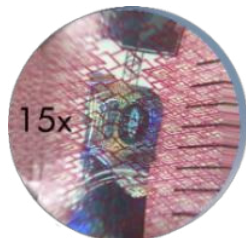
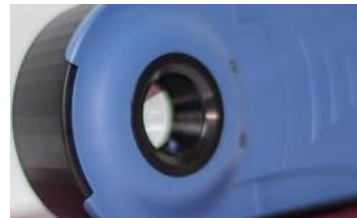
(all functions above are always included)

FUV	Front UV Torch
RFID	RFID Quick Check
AS	IR Laser (980 nm) for Anti-Stokes
IR	IR-LED (870 nm)
UVC	UV for 254 nm features
LI	Lithium-Ion battery

15x Magnification



22x Magnification



Tomar Brothers & Company
Shri Manoj Kumar Singh
190, Pratap Nagar, Mayur Vihar Phase-1,
New Delhi 110091
INDIA

Graz, 26. Jänner 2024

Declaration of origin

Dear Sirs or Madams,

Doculus Lumus GmbH
Schmiedlstraße 16
8042 Graz
Austria

customs authorisation No. AT/701/141
REX: ATREXD5H5KN8
EORI No. ATEOS1000124083

as the manufacturer and exporter of the product

Doculus Lumus® – mobile document checking device – customs tariff No. 9031499000

declares that these products are of European preferential origin according to the rules of origin of the Generalized System of Preferences of the European Union.

Signed for and on behalf of Doculus Lumus GmbH


DI (FH) Sandra Slavinec
CEO

Schmiedlstrasse 16
8042 Graz, Austria
+43 316 424244
www.doculuslumus.com

When and where to use Doculus Lumus®

You are the expert! Doculus Lumus® is a high-quality mobile document checking device with which it is possible to identify falsifications in less than 30 seconds!

The device helps you to check travel documents, driving licenses, banknotes, signatures and similar items for authenticity, whether you are in a train, a car, a plane or even on the countryside. Different light modes reveal the security features very well. Doculus Lumus® is available in different versions which support best all kind of document experts around the world.

1. Safety Instructions

Explanation

DANGER: Indicates a hazardous situation that, if not avoided, will result in death or serious injury.

WARNING: Indicates a hazardous situation that, if not avoided, could result in death or serious injury.

CAUTION: Indicates a hazardous situation that, if not avoided, could result in minor or moderate injury.

NOTICE: Indicates information considered important but not hazard related.

The following safety and danger information is not only for protecting the device, but also your health. You will find specific information in the following chapters of this manual. Doculus Lumus GmbH shall not be held liable for any manual damages. Please read all statements carefully!

General Hazards

WARNING: Endangerment of children and other persons! Improper usage can lead to injuries and damage of property

This product and its package is no toy and may not be used by children. Children cannot assess the hazards that can result from operating electrical appliances and/or packaging material. Always take care to keep the product and the package out of the reach of children. Batteries and accumulators may not be in children hands. Leaked or damaged batteries or accumulators can cause cauterization when touching them.

Optical, Electrical and Mechanical Hazards

Endangerment by optical radiation and UV radiation (explanation of risk group marking and explanation corresponding to norm IEC 62471:2006 and supplementary sheet 1 IEC 62471-2:2009) as well as laser radiation (explanation corresponding to norm IEC 60825-1:2014)

WARNING: Improper handling with LED light and UV radiation can damage your skin and your eyes!

Do not directly look into the LED light. Continuous strong white light can damage your eyes. Direct UV radiation irritates and damages the eyes (danger of blindness) and the skin (danger of burning and/or induction of skin cancer).

WARNING: UV radiation from this product. Exposition can lead to irritation of eyes or skin. Aim light source only to documents or use suitable shielding!

WARNING: Possibly dangerous optical radiation. Do not look into the lamp for a longer period during operation. Can be dangerous for the eyes!

Endangerment can occur through ultraviolet radiation by improper usage of the device, as well as an endangerment of the retina through blue light. For this device the risk group 2 has been determined, if somebody looks directly from a very short distance into the light source from the wrong side (device held upside down and directly in front of the eyes). Always avoid longer glimpses into the light sources as well as longer exposures of the skin without protection. At correct handling the device is photobiologically safe.

UV radiation is not visible for the human eye, even at full power the UV LEDs only shimmer slightly blue violet. A function test and the examination of the light intensity can be done easily by aiming the light at white standard paper (no security paper) or white cloths. The optical lighteners are stimulated strongly by the UV light.

WARNING: Invisible laser radiation (980 nm) – laser class 3R. Avoid direct irradiation of the eyes. Do not expose your eyes or skin to the laser beam!



Optionally, the device has a laser with invisible radiation in the near infrared range (wavelength 980 nm). This laser radiation is dangerous for eyes and skin! Be careful not to look into the aperture on the bottom of the unit. This device may only be used by appropriately trained personnel. Use the device only on flat documents and ID cards, the opening must be completely covered by the document being examined. When the laser is active (red LED on the top of the device lights up permanently), always hold the device horizontally with the opening facing downwards. Never point the bottom of the device at people. The buttons to activate the laser must not be clamped under any circumstances.

Whether you have a device with or without the Anti-Stokes laser in front of you is indicated by the printing on the side of the housing (laser warning symbol) and by the note “IR” on the label in the battery cover and on the packaging.

**WARNING: Endangerment of objects and persons!
Improper usage can lead to a burning glass effect.**

Devices that are not in use have to be covered with a protective cover or have to be kept in a light tight container to prevent the inflammation of objects by focused sunlight.

WARNING: Endangerment by magnetic field!

This device generates a weak magnetic HF field (13.56 MHz) during operation. Please keep some distance to other electronic and especially medical devices. Special caution is necessary at heart pacemakers and implanted defibrillators as well as with hearing aids.

WARNING: Exhaustion of the eyes!

Certain persons may have a feeling of exhaustion or discomfort after longer usage of magnification systems. Please observe the following remarks to prevent your eyes to become exhausted:

Independent from your feeling you should take a break of 10 to 15 minutes each hour.

If you feel some discomfort while using the device or after a longer time, interrupt working with the device and consult a doctor.

CAUTION: Risk of damage by misuse!

Improper usage of the device can lead to damages.

- The device is not water resistant! Do not immerse the device into water and protect it from water (rain or sea water).
- Do not reach into the device while operating it and do not insert anything into the case.
- Do not open the device. Improper intrusion can impair the functionality of the device.
- Use the device only for document checking purposes. Other types of usage can lead to damage of the device.
- Do not expose the device to extreme heat or cold.
- Do not use cleaning sprays, aggressive, alcohol-containing or other inflammable solutions.
- Please remove the batteries when the unit is not in use for a longer period of time to avoid leakage.

CAUTION: Danger of explosion at improper exchange of the batteries!

Pay attention on the correct polarity (plus pole + / minus pole -) of batteries or accumulators. Remove batteries and accumulators if the device is not used for a longer time. Always replace the pair of batteries at a time. Do not short circuit batteries and accumulators.

NOTICE: Disposal of used batteries as directed!

Do not dispose batteries and accumulators through regular household waste, they should be disposed to collecting containers which are available at every battery vendor. If there is no collecting container near your location, you can also dispose batteries and accumulators at the hazardous waste collection centre of your municipality or send them to us.

Environmental Conditions

The device may only be operated within the allowed scope of environmental conditions:

- Surrounding temperature: -20 to +55 °C (approx. 0 to 130 F)
- Humidity: ≤ 80 % relative humidity, non-condensing

Disposal



Within the EU the device and its accessories have to be collected and disposed separately. Devices that are marked with the crossed-out bin on wheels may not be disposed with normal household waste. Please contact your dealer or dispose the products at the electronic waste collection centre of your municipality.

Declaration of Conformity

CE Declaration

Herewith the manufacturer of the device declares that this device conforms to the requirements and all other policies. A copy of the entire declaration can be provided on demand.

RoHS Conformity

The product conforms to the requirements of the RoHS directive on the reduction of hazardous substances.

FCC Notice

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communication. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help

THIS DEVICE COMPLIES WITH PART 15 OF FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS:

(1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE AND

(2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRE OPERATION

WARNING: CHANGES OR MODIFICATIONS NOT EXPRESSLY APPROVED BY THE PARTY RESPONSIBLE FOR COMPLIANCE COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

Industry Canada / Industrie Canada

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

2. Initial Start-Up

Please read the following information to operate Doculus Lumus® for the first time. For your safety, please read the above safety instructions on the usage of the device.

Attaching the hand strap

Take the hand strap out of the packaging box and attach it at the location in the rear part of the device by threading the thin end through the eyelet and then threading the whole strap through the loop.



Insert new batteries

Attention! Make sure that the batteries are inserted correctly in the device battery holder!



The supplied batteries must be properly inserted in the device. Please always insert the batteries with the positive and negative pole in the correct direction. Inserting batteries, the wrong way is dangerous and is not covered by the guarantee.

The device operates with two AAA/LR03 batteries with 1.5 volts each. Always use alkaline batteries! The usage of accumulators or rechargeable batteries is possible but could result in incorrect indication of low batteries.

Slide the battery cover outside and then tilt it upwards.



Insert the two AAA batteries that came with the device. Always pay attention to the correct polarity of the batteries corresponding to the markings within the device. The plus poles of the battery (marked with a “+”) should match the “+” marking near the battery clips.

Do not dispose the old batteries through regular household waste and check your country regulations if batteries must be recycled or dropped off at a designated facility.

Option: LI (Additional Energy Source: Lithium-Ion battery)

Doculus Lumus® with the option LI operates with integrated pre-loaded Lithium-Ion battery and also alternately with two AAA/LR03 batteries with 1.5 volts each. Use the Lithium-Ion battery until it is empty, afterwards you can use standard AAA batteries as described in the chapter above until you can charge the Lithium-Ion battery. More details on how to charge the Lithium-Ion battery are described in the chapter “Energy Management“.



Right/Left Hand Mode

By default, the assignment of keys is prepared for right-handedness. In most cases left-handed persons would like to operate incident light, UV light and torchlight with the thumb. To enable this, please conduct the following steps:

1. Shortly press all 4 buttons simultaneously to activate the test and setup mode
2. Then keep the oblique light button held for a few seconds until the light test has finished. The green LED will be kept on shortly to indicate that the setting has been saved.
3. Now you can use the device with the left hand and can operate the incident light with the former oblique light button. All other buttons are mirrored similarly.



To reset the device to right-handed mode, please conduct the steps again but now keep the original incident light button pressed until the end of the test.

3. Button Functions and Areas of Operation

Always place the device directly onto the document to be checked and move your eye very close to the lens to obtain an optimal and distortion-free image.

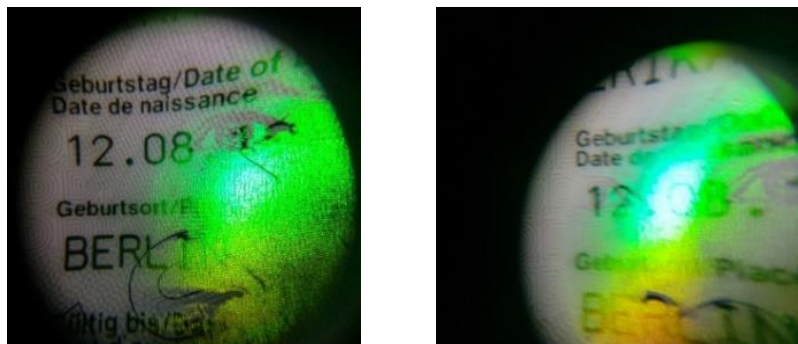
Incident Light Mode

White incident light with 4 strong LEDs (bright field illumination) allows you to check even the finest printed details like microtext or nanotext.



Rotating Incident Light

The rotating incident light allows you to identify identigrams or large-area holograms. With the aid of 4 LEDs that successively shine on the document in 90° steps, light shadows are generated (dark field illumination). Colour changing elements look different depending on the angle of light incidence.



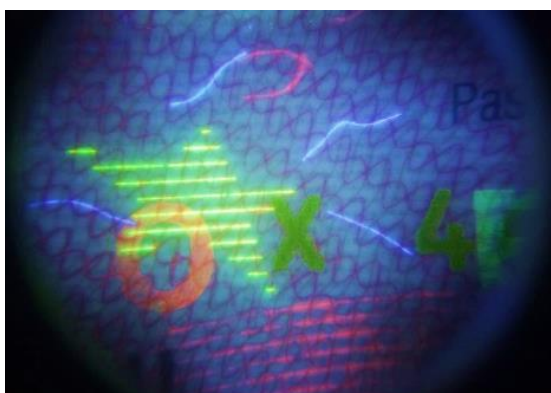
To switch on the automatically or manually rotating incident light, press 3 x the incident light button to activate the steady light mode (Figure 1). A mode change is then performed. To do this, press the button with the curved lines (Figure 2). Press the right or left arrow button once to move the light one position further clockwise or counter clockwise. (Figure 3). Keep the corresponding arrow button pressed to move the light further automatically. By pressing the button with the curved lines again, you can switch back to full incident light mode.



Use your thumb to press the incident light button with the downward pointing rays to activate incident light mode. Check the chapter “Steady Light Mode“ to keep the light on for 1 minute.

UV Light Mode

The UV light mode with its 4 strong UV LEDs (365 nm) allows an optimal depiction of UV security inks through the lens as well as from the side from short distance.



Press the UV light button (sun symbol) with your thumb to activate UV light mode. Check the chapter “Steady Light Mode“ to keep the light on for 1 minute.



Oblique Light Mode and Rotating Oblique Light

The oblique light mode allows you to identify intaglios, embossing and colour changing holograms. With the aid of 8 LEDs that successively shine on the document in 45° steps, shadows are created at heightened or deepened features (dark field illumination). Colour changing elements look different depending on the angle of light incidence.



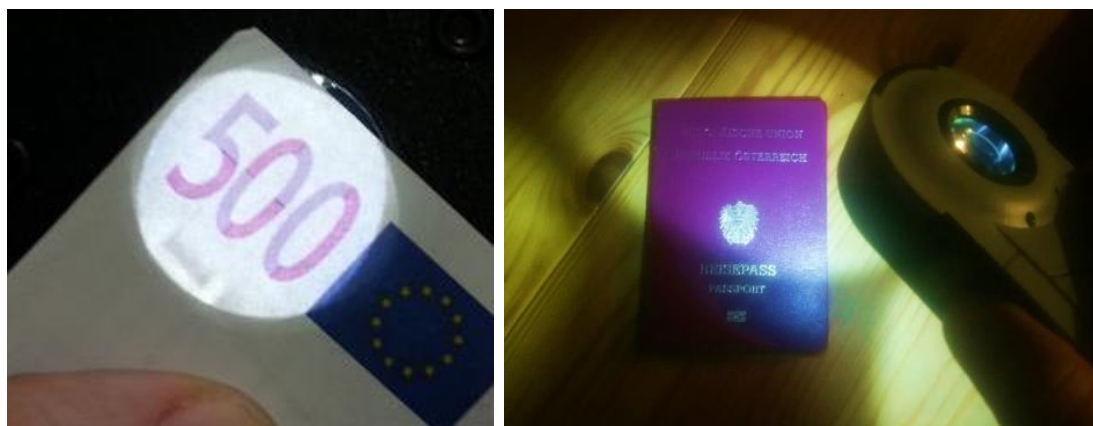
Use your forefinger on the oblique light button marked with a ring to activate the oblique light mode. Oblique light starts “on top” at the 12 o'clock position. To run through all 8 oblique light positions successively additionally press one of the buttons on the other side marked with an arrow. Press the right or left arrow button once to move the light one position further clockwise or counter clockwise. Keep the corresponding arrow button pressed to move the light further automatically.



Check the chapter “Steady Light Mode“ to keep the light on for 1 minute.

Torchlight Mode

In certain situations, e.g. at bright sunshine, the normal incident light mode may be too dark. You will need a higher light intensity to shine through watermarks as well. The torchlight mode allows an optimal illumination even in a very bright surrounding. In dark environment use this mode as a torch replacement for illuminating close objects.



Use your thumb to press both incident light and UV light button. You start with the incident light button and then let your finger slip to the UV light button to activate torchlight mode. Check the chapter “Steady Light Mode“ to keep the light on for 1 minute.



Steady Light

The steady light function is very useful if you want to take a snapshot through the lens with your cell phone or smartphone camera or you do not want to keep the button pressed with your finger.



Press any of the light buttons 3x quickly to activate the steady light function. Steady light stays on for 1 minute if you do not press another button.

Steady Light is available for all light modes except optional Anti-Stokes-Laser:

- Incident light mode
- UV light mode
- Oblique light mode: After you activated the steady light function for oblique light, you can use the left and right arrow buttons as usual to change the illumination angle.
- Torchlight mode: Keep pressing the incident light button and then press the UV light button next to it 3 times rapidly.
- UV-Torch-Mode: Keep pressing the UV light button and then click the incident light button next to it 3 times rapidly.
- IR LED mode
- UVC light mode

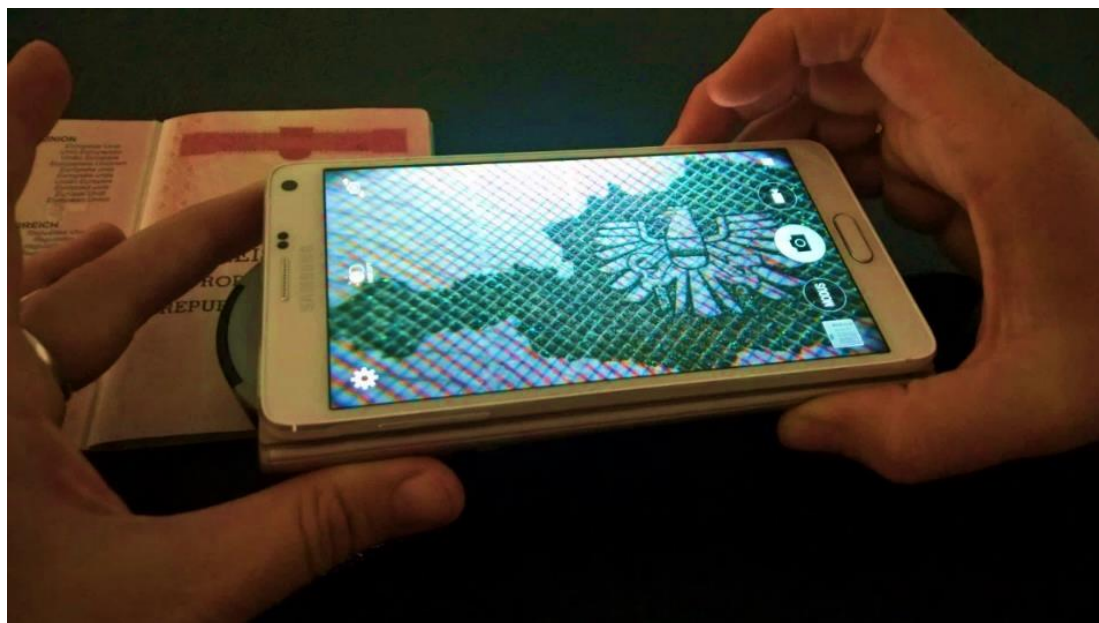
Photo Documentation Mode

Place the battery cover in the documentation position to place your mobile phone horizontally on the Doculus Lumus®.

Firstly, slide the battery cover of the device outwards to open it slightly. Then lift it up a little and push it into the raised position. To do this, push on the middle of the battery cover and push it inwards at the same time to lock the lid in place.



Photo documentation does not require an additional app on your smartphone. Just use the standard camera application on your smartphone.

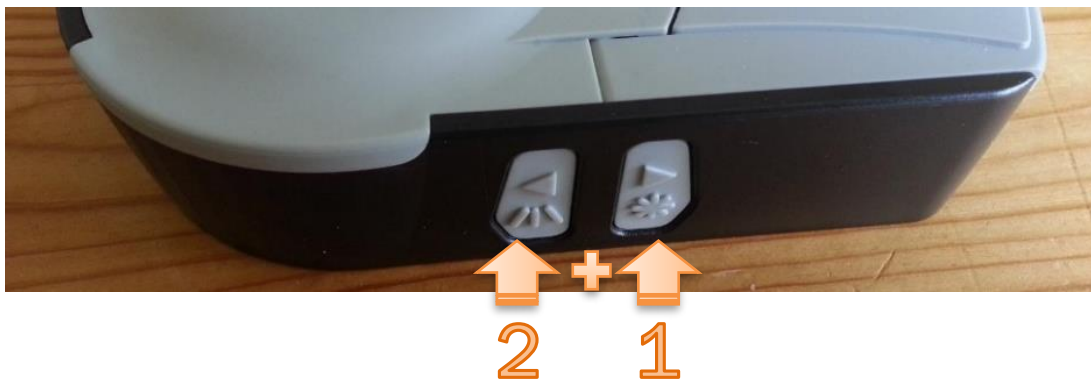


Option: FUV (Front UV Torch)

The Front UV Torch with an extra strong 365nm UV LED in the front of the device allows a quick and easy check of UV security inks and fibres from a distance.



Use your thumb to press both UV light button and incident light button. Start with the UV light button and then let your finger slip to the incident light button to activate UV torchlight mode. Check the chapter “Steady Light Mode“ to keep the light on for 1 minute.



Option: RFID (RFID-Transponder Quick Check)

The RFID transponder quick check allows verifying the transponders that are integrated in passports or ID cards. Therefore you can check authenticity, proper function and transponder type in a second. Please keep in mind that in some passports a shielding prevents reading from outside. Just open the document to check it from the inside.



When you press the button with the symbol of radio waves the electromagnetic field is activated and the red LED blinks rapidly. As long as you keep the button pressed the device searches for RFID transponders near it (distance from device bottom to the document max. 3 cm to 5 cm, about 1 inch to 2 inches). If a transponder is found, the electromagnetic field is turned off to save energy. The result of the check is indicated as long as you keep the button pressed. Press the button with the symbol of radio waves again to start a new search and check.



Explanation of the light codes:

- **Red light blinks rapidly:**
The device searches for a RFID transponder
- **Green light blinks 1 x recurring:**
An RFID ISO 14443 Type A transponder for valid ICAO documents was found
- **Green light blinks 2 x recurring:**
An RFID ISO 14443 Type B transponder for valid ICAO documents was found
- **Red and green light blink 1 x recurring:**
An RFID ISO 14443 Type A transponder for valid ID cards was found
- **Red and green light blink 2 x recurring:**
An RFID ISO 14443 Type B transponder for valid ID cards was found
- **Green and Red lights blink alternately:**
A transponder was found, but it is no valid passport transponder, e.g. a bank card, credit card or employee card
- **Red light blinks 3 x slowly, although the RFID button has not been pressed or released:**
This has nothing to do with RFID, it just shows that battery is low (see subchapter "Battery Level")

Option: AS (IR Laser for Anti-Stokes)



To operate Doculus Lumus® with IR laser (980 nm) for Anti-Stokes features please read this chapter carefully. For your safety **never** look into the laser at the opening on the bottom of the device while the laser is active.

For the Anti-Stokes effect, named after the physicist Sir George Gabriel Stokes, printed fluorescent particles of rare earths are irradiated with a strong light source with higher wavelength. The particles then emit radiation in the range of lower wavelengths, so there is a shift from the infrared to the visible range. In most cases, the particles shine yellow or green, but other colour shades are also possible. It is important for this effect that enough energy is introduced. For this purpose, the laser serves as a coherent radiation source with invisible infrared radiation in the near range at 980 nm.



Activate the laser

Always place the device directly and plane onto the document to be checked. The laser exit opening on the bottom of the device must be completely covered for safety reasons.

Use your index finger and your middle finger to push the oblique light button (circle symbol) and the button with the symbol of radio waves at the same time. This button combination was intentionally elaborately chosen to prevent accidental operation.



When the IR laser is activated, the red LED on the top of the device is active permanently.



The laser radiation itself is invisible to the human eye, so rely on the red LED to check the function and never look into the device from the bottom while the laser is active. In many documents, the particles only apply in a small area or are missing completely. Therefore, inform yourself in detail about the document features or test the function with an already known feature before you accidentally suspect a device defect.

Radiation protection

In the Doculus Lumus® option with IR laser/UVC, a filter glass is implemented to protect the user from radiation that is harmful to the skin and eyes.

Option: IR (Infrared light emitting diode 870 nm)

The IR LED with a center wavelength of 870 nm is perfectly suited to display IR security features in the 830 to 925 nm range. Since wavelengths in the infrared range are invisible to the human eye, an additional camera sensor is needed for visualization. For this, we recommend using a smartphone, a commercially available camera or webcam to take a picture through the lens. Depending on the camera sensor, the image is colourless or has a pink tint. If the latter is the case, simply switch to black and white view of your smartphone for easier recognition (see chapter Photo Documentation Mode). Note: Your camera system cannot be equipped with an infrared filter to use this option. (Not possible with iPhone models including and older than iPhone 7 / 7 Plus, excluding iPhone SE).



Activate the IR LED

Place the device directly and flat on the document you want to check. The permanently lit red LED on top of the Doculus Lumus® signals the active IR LED. The application is not harmful to the eyes. Nevertheless, we recommend not to look into the device from below while the LED is active.

Doculus Lumus® with IR and RFID:

1 x click and hold: RFID Transponder Quick Check

3 x click: IR LED in Steady Light Mode for 1 Minute

Doculus Lumus® with IR, without RFID:

1 x click and hold: Torchlight Mode

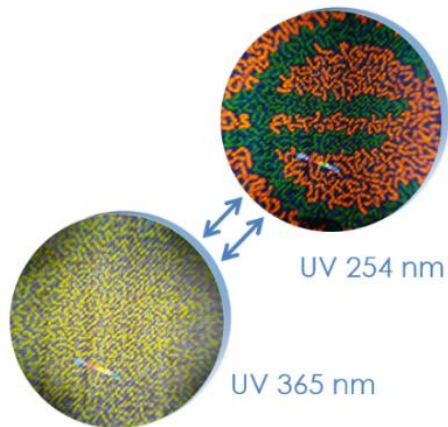
3 x click: IR LED in Steady Light Mode for 1 Minute



The light emitted by the IR LED is not harmful to the eyes or skin. Nevertheless, we do not recommend looking into the device from below while the IR LED is active.

Option: UVC (UV for 254 nm features)

In this option 4 UVC LEDs are integrated, with which security features in the range around 254 nm become visible. Compared to conventional UVC ring tubes, these LEDs offer the advantage of an improved illumination and that they do not break easily even if dropped.



Activate UVC

Switch between UV 365 nm and UV for 254 nm with just one click.

Press and hold the UV light button (sun symbol) to activate the UV light mode (365 nm). Then press the button with the symbol of radio waves once to switch from UV light mode to UVC mode (254 nm). If you want to return to UV light mode (365 nm), simply press the button with the symbol of radio waves again.

Steady light mode UV/UVC

3 x click on the UV light button to activate the UV steady light mode. Now you can easily switch back and forth between UV and UVC using the button with the symbol of radio waves.



Radiation protection

In the Doculus Lumus® option with IR laser/UVC, a filter glass is implemented to protect the user from radiation that is harmful to the skin and eyes.

4. Energy Management

Doculus Lumus® is equipped with intelligent energy saving technology, which allows operating the device for a few months with 1 set of batteries.

Battery Level

The red LED blinks 3 times slowly after releasing a button if battery is low. Please plan to change batteries soon and carry a set of replacement batteries with you. If the energy in the batteries is too low for proper function of the device, the red LED starts to blink at a button press and the light functions remain switched off.

Charging the Lithium-Ion battery



To charge the lithium-ion battery plug a micro-USB cable into the socket. During the charging process the red LED inside the device is on. The LED is off when the Li-Ion battery is fully charged.



To extend the life of the lithium-ion battery and prevent premature aging, the battery should be charged regularly.

Therefore, please fully charge the battery at least every 2-3 months (for about 6 hrs. or until the red LED goes off) to maintain the warranty claim.

Automatic Power-Off

If some button is pressed inadvertently (e.g. in a case) or the steady light function has been activated, the device turns off after 1 minute to prevent the batteries from being drained.

Constant brightness

By using state-of-the-art microprocessor technology and an electronic current regulation system, the brightness of the LEDs remains constant, regardless of battery level (patent pending).

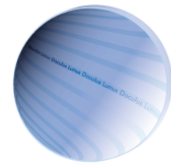
5. Service and Maintenance

- Clean the device only with a soft moist cloth. Do not use any detergents or solvents since they could damage the device or leave stains on the plastics.
- Clean the lens system only with the accessory lens cleaning cloth or a lint-free soft cloth. You can remove fingerprints or fatty stains with a cotton bud soaked with isopropyl alcohol.
- If you move your device from the cold into a warm room, condensate water can blur the lens. Please wait until the lenses are free again before operating the device.
- If the device got moistly or wet, please remove the batteries and let the device dry at least for a day before operating it.

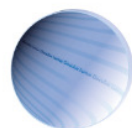
Service and Warranty

You purchased a high-quality product of Doculus Lumus GmbH that is produced under a strict quality inspection. If there are still some problems with the product or if you have some questions about the usage of the product you will find all contact information on the homepage www.doculuslumus.com.

Doculus Lumus GmbH grants a warranty of 24 months after the date of purchase on material and production of Doculus Lumus®. The customer has the right to get rework. Doculus Lumus GmbH may, instead of reworking, deliver replacement devices. Exchanged devices pass into the ownership of Doculus Lumus GmbH. Warranty is void if the device is opened by the buyer or other non-authorized third parties. Damages caused by improper handling, operation, storage (e.g. leaking batteries) as well as by force majeure or other external influences (e.g. water damage, extreme humidity, heat or cold) are not covered by the warranty.



Doculus Lumus®



Doculus Lumus®



May your days be as bright as confetti and
your moments as joyous as a New Year's celebration!

Here's to a year filled with laughter, love, and
all the good vibes life has to offer.

Doculus Lumus

Technical Specifications Expert Edition

Doculus Lumus[®]

...See the Truth Inside



Check Passports, ID-Cards,
Driving Licences,
Banknotes
& more!



Doculus Lumus® - See the Truth Inside

Mobile Document Checking Device

Doculus Lumus® is a robust mobile document checking device, developed to examine passports, ID cards, visa documents, banknotes and driving licenses as well as other official documents, signatures and seals. It only takes 30 seconds to examine a document and to determine whether a falsification is at hand. Alterations become visible through using the exceptional combination of light and optical features.



Doculus Lumus® - Standard Features

ATTRIBUTES	FIELD OF USE
15x	Read micro and nano text through a high-quality glass lens system. Only one main lens system to examine the detection area of a document in all different wavelengths.
21 mm	Largest possible field of view for excellent achromatic document examination.
Robust Housing: Drop-proof 1,5 m	Test it and let it drop, step on it, play football with it... 😊
White Incident Light: 4 LEDs	View security printings homogenously in bright light.
White Torchlight: 4 LEDs	Check watermarks, check documents on a bright, sunny day or at night as a torch.
White Rotating Incident Light: 4 LEDs for manual/automatic rotation	Enlighten OVDs, holograms, identigrams and moving Kinegrams. Use it similar to coaxial light.
White Rotating Oblique Light: 8 LEDs for manual/automatic rotation	Experience 3D visualisation of embossed printings, laser engravings and especially document manipulations.
UV Light 365 nm: 4 extra strong LEDs	View printings in UV 365 nm, homogenous bright illumination also on a sunny day.
Left-/Right-handed mode	Use Incident Light on your thumb of choice to operate the device with just one hand.
Steady Light Mode	No need to keep pressing buttons during checking. Perfect for Photo/Video Documentation via Smartphones and webcams.

Only with Doculus Lumus®

Look for this symbol on the next pages to learn about all unique features you **only** get with Doculus Lumus®.



Colours & Logo

Blue, grey, orange, red, lime, violet, magenta, olive, sand incl. logo option

Lens Diameter

View nanotext with the large 20 mm diameter lens already at 15x magnification

Electronic control (2 patents)

Low energy consumption to operate many months, LEDs keep their brightness even at low energy

Included individual Doculus Lumus® Features:

Option FUV – Front UV Torch 365 nm to view an entire passport page

Option RFID – RFID ICAO Quick Check to determine ICAO & ISO 14443 Type A/B

Option AS – IR Laser 980 nm for Anti-Stokes particles with slight background light for orientation


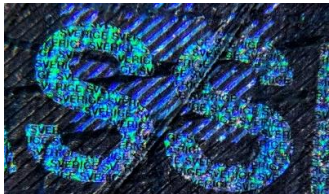



Option IR – IR LED 870 nm IR active ink visible in combination with a smartphone





Option UVC or UVB/C – 4 UV LEDs for 254 nm and 313 nm features | switch with only one button







Option LI – Multiple energy sources | use built-in Lithium-Ion AC (Micro-USB charging) or switch to AAA batteries or rechargeables

Technical Specification

 Only with Doculus Lumus®

Terminology	Technical Description
<p>Magnification and Lens System</p> 	<p>Doculus Lumus® is available with true 15x magnification. The built-in high-quality glass lens system is supplied by one of the three largest global suppliers in this discipline, with achromatic, true-colour and distortion-free quality glass lenses. An excellent magnifier for reading micro and nano text.</p>
<p>Diameter</p> 	<p>2,1 cm inspection diameter</p> <p>Doculus Lumus has the world's largest lens diameters available on the market with 15x magnification (21 mm) for mobile devices. It is possible to read nano text in several passports and ID documents, already with 15x magnification.</p>
<p>Robustness</p> 	<p>Robust housing: Doculus Lumus® is drop-proof from a height of 1.5 meters (tested on concrete) without any functional damages. When dropped, the batteries might fall out due to the impact. Simply insert them back in the device and keep working. The device housing and electronic parts stay intact.</p>
<p>Electronic control</p> 	<p>Low energy consumption: In the frontliner edition, when using 2 AAA batteries, the operating time is approx. 3-5 months, when used in 2 shifts. All LEDs maintain the same brightness even at low battery level.</p> <p>2 patents confirmed in Austria, Germany, and the U.S.</p> <p>No extra on / off button is required with the Doculus Lumus®. If a button is clicked the light will activate. Doculus Lumus® is normally switched off and as soon as a button is pressed, the desired light or function is activated.</p>
<p>Accessibility</p> 	<p>Doculus Lumus has 4 recessed buttons, that are large enough to be pressed while wearing gloves. For easy accessibility, the buttons carry tactile symbols.</p> <p>Through the recessed buttons, Doculus Lumus cannot be switched on accidentally during daily use. If a button is accidentally pressed (in a bag or pocket), the LEDs are automatically switched off after 1 minute to save energy.</p>

<p>4x Incident LED lights</p> 	<p>4x LEDs white incident light to examine micro and nano text.</p> <p>Additional function: Automatic or manual rotating incident light to the left or right. The rotating incident light enables the examination of identigrams and holograms. (see next column for more details)</p> <p>Steady light activates at 3 clicks for 1 minute --> for photo and video documentation with a smartphone.</p>
<p>Rotating Incident Light (similar to coaxial light)</p> 	<p>Automatic or manual rotating incident light to the left or right. The rotating incident light (similar to coaxial light) enables the examination of identigrams and holograms through the main lens of Doculus Lumus under magnification.</p> <p>Switch easily (one button click) between rotating incident and oblique light to examine OVIs under the different light angles through the main lens of Doculus Lumus.</p> <p>Steady light activates at 3 clicks for 1 minute --> for photo and video documentation with a smartphone</p>
<p>Torchlight mode</p> 	<p>Torchlight mode with white LEDs: use as a torch or when examining documents on a very sunny day. With this function, the 4x Incident Light LEDs get a boost.</p> <p>Steady light activates with 3 clicks for 1 minute -> for photo and video documentation with a smartphone.</p>
<p>8x Rotating Oblique light LEDs</p> 	<p>8x LEDs are implemented for automatic and manually rotating Oblique Light to the left or right. Ideally suited for 3D realistic viewing of OVDs, OVIs, embossing, imprints, paper manipulations, holograms and moving Kinegrams with many different features at different angles.</p> <p>Switch easily (one button click) between rotating incident and oblique light to examine OVIs under the different light angles through the main lens of Doculus Lumus.</p> <p>Using electronic control, all LEDs maintain the same brightness even at low battery level. (Patent)</p>

<p>4x UV LED lights 365 nm</p> 	<p>4x strong UV-LEDs 365 nm, with magnification for detection of UV micro and nano security printings. Steady light activates at 3 clicks for 1 minute --> for photo and video documentation with a smartphone.</p> <p>Using electronic control, all LEDs maintain the same brightness even at low battery levels. (Patented)</p>
<p>Left-/Right-handed Mode</p> 	<p>By default, the key assignment of the device is designed for right-handers. In many cases, left-handed people want to operate the incident light, UV and also the torch mode with their thumb. This is possible by simply mirroring all the functions on the buttons for the preferred handling of the device.</p> <p>Switch mode: Switching between right-handed and left-handed mode is done by briefly pressing all 4 buttons simultaneously. After the green and red LEDs light up at the same time, take the device in the respective hand.</p> <p>For left-handed users: If you want to have the incident light on the left thumb, hold down the oblique light button  until all lights go out.</p> <p>For right-handed users: If you want to have the incident light on the right thumb, hold down the incident light button  until all lights go out.</p> <p>(For Doculus Lumus with IR laser, this mode is deactivated for safety reasons).</p>
<p>Steady Light mode for documentation purpose</p> 	<p>With this mode the desired light stays on for 1 minute to give the user time to examine the document and photo and video document what is seen.</p> <p>Doculus Lumus has a flat design so that a smartphone can be placed on it wobble-free. For additional stability, use the Smartphone Clip (See page 10 "Accessories"). The steady light mode is ideal for photo or video documentation purposes with a smartphone or webcam.</p> <p>The unit switches itself off after 1 minute to save energy.</p> <p>The steady light mode is available for all light functions, except Option AS for safety reasons.</p>
<p>Option FUV Front UV Torch (365 nm)</p> 	<p>The integrated front UV torch allows to view an entire passport page at a glance with UV 365 nm.</p> <p>Steady light mode can be activated for 1 minute.</p>

<p>Option RFID ICAO & ISO 14443-4 Type A/B Quick Check</p> 	<p>Ideal option for frontliners who need to quickly identify counterfeit e-documents with destroyed RFID chips.</p> <p>The RFID ICAO Quick Check enables a fast determination of RFID transponders in passports or ID cards. The RFID transponder is not unlocked at crypto level. The existing file structure is used to detect a passport or ID card transponder, if it is ISO 14443-4 type A or type B and whether the file structure is ICAO conform.</p>
<p>Option AS IR laser 980 nm for Anti-Stokes particles with slight background light</p> 	<p>The certified class 3R invisible infrared laser allows to view special Anti-Stokes particles in security printings. The spot size is approximately 2 mm and the colours seen range mostly from green to at times orange.</p> <p>Examination through one main lens The laser is seen through Doculus Lumus®' singular viewing field. This enables the user to view the Anti Stokes particles without having to move the document or device.</p> <p>Background light for orientation Slight background light ensures the easy navigation around the inspection area. The laser can also be used while standing up with Doculus Lumus® at an angle. Safety of other persons is granted.</p> <p>Examine Anti-Stokes particles with 15x and 22x magnification It is possible to examine Anti-Stokes particles with 15x and 22x magnification in detail.</p> <p>Examine on the move Activate the Anti-Stokes Laser even while standing and being on the move. Doculus Lumus® does not need to be placed on a desk or other flat surface.</p> <p>Safety precaution Through the constant red LED on the lid of the device you always know when the IR laser is active. For safety reasons there is no steady light mode. The laser beam is divergent to increase safety. (The IR laser for anti-stokes detection cannot be installed together with the IR LEDs).</p> <p>IR / UVC Filter: Radiation protection In the Doculus Lumus® versions with IR laser / UVC, a filter glass is implemented to protect the user from harmful rays to the skin and eyes. Please find the details in the user manual.</p>
<p>Option IR IR-LED for 830-925 nm and IR2</p> 	<p>By using an IR LED (category 1M), security features in the range of 830 to 925 nm can be made optimally visible.</p> <p>Thanks to the permanently red LED on the cover, you always know when the IR LED, which is invisible to the naked eye, is active.</p> <p>The details only become visible through your smartphone camera (possible with iPhones newer than iPhone 7, Samsung and Huawei devices) or standard webcams.</p> <p>The steady light is activated by clicking 3 times (RFID light button) for 1 minute -> for photo and video documentation with a smartphone.</p>

<p>Option UVC 4x LEDs UVC for 254 nm</p> 	<p>The option UVC equips your Doculus Lumus® with 4x UVC LEDs to view security printings at 254 nm. Compared to the commonly used UVC ring tubes, these LEDs offer the advantage that they provide improved illumination and are not damaged when the device has been dropped (drop-proof 1,5 m).</p> <hr/> <p>IR / UVC Filter: Radiation protection</p> <p>In the Doculus Lumus® version with IR laser / UVC, a filter glass is implemented to protect the user from harmful rays to the skin and eyes. Please find the details in the user manual.</p>
<p>Option UVB/C 2x LEDs UVC for 254 nm and 2x LEDs UVB for 313 nm</p> 	<p>The option UVB/C is an upgrade to the regular UVC option. It equips your Doculus Lumus® with 2x UVC LEDs to view security printings at 254 nm as well as 2x UVB LEDs to inspect 313 nm printings. They are activated simultaneously, creating a gradient to view bi- and tri-fluo colours. This option also enables to view UVC security features on polycarbonate better and more brightly through the additional UVB LEDs.</p> <p>Compared to the commonly used UV ring tubes, our LEDs offer the advantage of higher illumination and that they are very robust to withstand also when the device is being dropped (drop-proof 1,5 m).</p> <hr/> <p>IR / UVC Filter: Radiation protection</p> <p>In the Doculus Lumus® version with IR laser / UVC, a filter glass is implemented to protect the user from harmful rays to the skin and eyes. Please find the details in the user manual.</p>
<p>Multiple energy sources in one device:</p> <p>Option LI Use integrated Lithium-Ion accumulator with the innovative battery change mode</p> 	<p>Use the integrated Lithium-Ion battery and continue with 2 standard AAA batteries when the accumulator runs low.</p> <p>Doculus Lumus® versions with Lithium-Ion battery have an operation time of approx. 1 month in 2 shifts. If this optional feature is chosen, the device still also works with 2 AAA batteries or rechargeables. As soon as batteries are inserted, the power consumption of the Doculus Lumus automatically switches to battery mode. (Patented)</p> <p>Multiple energy sources in one unit for long operation time in the field:</p> <ol style="list-style-type: none"> 1) Standard AAA batteries: The operating time of the included 2 AAA batteries is estimated at 2-3 months with 2-shift operation.* 2) Rechargeable AAA batteries (Additional accessories): When using 2 AAA Panasonic eneloop batteries, the operating time is approx. 3-5 months, when used in 2 shifts. Charger included. 3) With integrated Li-ion battery: The operating time with battery is 1 month in 2 shifts. The unit still works with 2 AAA batteries or rechargeable batteries. Use multiple energy sources during operation! As soon as AAA batteries are inserted, the Doculus Lumus LI device automatically switches to battery operation. Simply charge the device when back at the office and keep the spare batteries in the belt bag. A USB-C cable is included. <p>*At average use, previously experienced operation time</p>

Selectable Options

Customise your Doculus Lumus® to suit your preferences.

Colours



Choose your **individual colour** for Doculus Lumus®. Upon request it is also possible to choose your own RAL colour, i.e. to match your corporate or organizational colours. It is also possible to position a logo on the lid of the device if desired.

Available colours: blue, lime, grey, red, magenta, orange, violet, olive, sand

Individual Logo






Individualise your devices by placing the desired logo centered on the Doculus Lumus® lid, i.e. your **corporate or organization logo**.

Please contact our sales team for an offer.



Included Accessories

for your Doculus Lumus®

<p>2 pcs. AAA-Batteries</p>	<p>Operating time of the enclosed 2-pack AAA batteries is for a frontliner edition at least 2-3 months, when used in 2 shifts.</p>
<p>Microfibre cloth</p>	<p>Keep your lens clean at any time with the included microfibre cloth.</p>
<p>Hand strap</p>	<p>Safely secure Doculus Lumus® with the included, adjustable handstrap. If preferred, a neck strap with safety opening mechanism can be provided instead.</p>
<p>Recommendation card</p>	<p>Share your experience of Doculus Lumus® with others.</p>
<p>Quick Guide</p>	<p>The Quick Guide is a short introduction on how to use your Doculus Lumus®. It visualizes all functionalities briefly and how to activate them. It is included in every package in English, other languages can be downloaded as PDF from our website, printed version on request.</p>
<p>USB cable for Option LI</p>	<p>When purchasing a Doculus Lumus® with the Option LI (integrated Lithium-Ion battery), a USB cable type USB-C is included.</p>
<p>Belt Bag</p> 	<p>Specially designed belt bag for Doculus Lumus® (water-repellent, robust bag made of nylon with snap button or velcro fasteners, main device compartment, integrated inner compartment for a microfiber cloth, side compartment for a battery set, belt attachment with adaptable velcro fastener, loop for carabiner). The bag can be attached to a tactical belt with a hook and is compatible with the MOLLE system.</p> <p>The bag carries an NFC transponder. When read with a Smartphone, the user gets directed to our Help-site with short videolinks, our Quick Guides in all 15 available languages for download as well as a helpdesk E-mail and telephone number. Special adaptations can be made on request.</p>
<p>Smartphone Clip</p> 	<p>The Smartphone Clip is a simple click-on tool, to stabilise any smartphone for photo and video documentation.</p> <p>It can be left on and the device will still fit in the bag.</p>
<p>Visa Sticker VDS Specimen for Training</p> 	<p>The specially designed Visa Sticker for training purposes is part of the Doculus Lumus set. The sticker is personalized with a Specimen person and shows all relevant security features found in ID documents. Explanatory brochure available.</p> <p>Material and colors: 248 g/m2 composite material VS: 3 color iris print + 1 color iris print (invisible) + UV Bi FLUO + 5 colors + hologram embossing</p>

Additional Accessories

for your Doculus Lumus®

<p>Rechargeable AAA batteries eneloop with charger (4-pack)</p> 	<p>Panasonic eneloop, Ready-to-Use Ni-MH rechargeable battery, AAA Micro, pack of 4, min. 750 mAh, 2100 charge cycles, low self-discharge.</p> <p>Within the set an eneloop AAA round cell charger for 4x rechargeable batteries NiMH Micro (AAA), Mignon (AA) is included.</p>
<p>Doculamp 365 nm</p> 	<p>The DOCULAMP 365 is a UV torch at 365 nm with homogenous illumination. The specialized professional projector type combined optical lens enables the torch to achieve uniform projection and ultra-wide lighting range, without any interference of stray light.</p> <p>The electronic control ensures constant brightness, without flicker.</p> <p>USB-C Charger, Belt Bag and Handstrap included in the set.</p>
<p>User Manual</p>	<p>The user manual can be downloaded in multiple languages from our homepage as a PDF file for free. Printed user manual booklets and translations on request.</p>

General Specifications of Doculus Lumus®

 Only with Doculus Lumus®

Market penetration	<p>The use of Doculus Lumus® is possible worldwide. In less than 30 seconds, it is possible to identify forgeries of passports, ID cards or ID cards or banknotes and then document the area with a photo on your smartphone.</p> <p>It is a mobile document checking device that can always be carried in a shirt or trouser pocket or in the specially designed belt bag. Due to its robust design, it supports the hard everyday work of the emergency forces on the motorway, in the train or at the airport in the best possible way.</p>
Market situation	<p>Doculus Lumus® has been sold as a series product worldwide since 2015. To date, several thousand devices are in use worldwide at borders, airports, criminal investigation offices, customs, prisons and in various ministries and embassies.</p>
Corporate Social Responsibility	<p>Social commitment is a must for us. Doculus Lumus® has been produced locally since 2015 in a nearby series workshop at the company Team Styria GmbH, which employs more than 75% integrative people with various disabilities.</p>
Made in Austria	<p>With a value added of more than 80%, Doculus Lumus® is a genuine Made in Austria product. We rely on local production and procurement to strengthen our local business location. This enables us to produce just-in-time and just-in-sequence and to implement individual customer requirements.</p>
Technical benchmark	<p>By working closely with document experts from all over the world, Doculus Lumus GmbH has been able to incorporate the most important and useful functions for the rapid detection of forged documents into a handy tool. Using state-of-the-art mechatronics for intelligent energy saving and user safety, two patents have already been approved.</p> <p>The 1st patent on the electronic control ensures the constant brightness of the LEDs, even if the batteries/accumulator runs low on energy.</p> <p>The 2nd patent refers to the automatic change of the energy supply from lithium-ion battery to the standard AAA batteries if inserted for devices with the LI option.</p> <p>This ensures that the user (1) can work with the same brightness of light until the device runs out of energy and (2) that a second energy supply allows to work longer and without interruptions when out in the field.</p>
No extra switch on / off	<p>No extra on / off button is necessary with the Doculus Lumus®.</p> <p>The specially developed electronic switch-off mechanism switches the device on as soon as buttons are pressed. If the button is let go or after 1-minute steady light, the device switches off automatically to save energy.</p> <p>Doculus Lumus has recessed buttons and is designed so that the device cannot be accidentally switched on during daily use and run out of energy. If a button is activated by mistake (in the suitcase or in a pocket), the LEDs are also switched off after 1 minute to save energy.</p>

Operation time & Multiple energy sources	<p>Multiple energy sources in one unit for long operation time in the field:</p> <p>1) Standard AAA batteries: The operating time of the included 2 AAA batteries is estimated at 2-3 months with 2-shift operation.*</p> <p>2) Rechargeable AAA batteries (Additional accessories): When using 2 AAA Panasonic eneloop batteries, the operating time is approx. 3-5 months, when used in 2 shifts. Charger included.</p> <p>3) With integrated Li-ion battery: The operating time with battery is 1 month in 2 shifts. The unit still works with 2 AAA batteries or rechargeable batteries. Use multiple energy sources during operation! As soon as AAA batteries are inserted, the Doculus Lumus LI device automatically switches to battery operation. Simply charge the device when back at the office and keep the spare batteries in the belt bag. A USB-C cable is included.</p> <p>*At average use, previously experienced operation time</p>
Handling	<p>With only 4 buttons, Doculus Lumus® is easy to operate, even with one hand. The functions are placed intuitive, and the device can be used immediately without further training.</p> <p>If wished for, a short session for tips and tricks is available free of charge.</p> <p>The Quick Guide provides a quick familiarisation/reminder of the different functionalities. In the enclosed or downloadable operating instructions, each function and its use can be easily looked up. By switching to left-handed mode, left-handers can also operate this device very easily with one hand and always have the white incident light – most used function - available on their preferred thumb.</p>
Further Training	<p>The Doculus Lumus Team provides a short training session on the device's functions and tips and tricks free of charge. The training can be held via MS Team or in-person. For in-person trainings, travel expenses are charged separately.</p> <p>For training on document security features and/or the document checking, we have a network of globally known document training centres who we can connect you with or offer trainings as a bundle together with the Doculus Lumus devices.</p> <p>For further information, please contact our team under sales@doculuslumus.com.</p>
Climatic conditions	<p>Doculus Lumus® has been used day and night in all regions of the world since 2015, whether on the coast of Norway, throughout Europe, Canada, USA, Tahiti, Iceland, South Korea, India, Japan, Australia, Kenya, Oman all the way to the desert of Iraq.</p>
Environmental conditions	<p>Tested at: -20 to +80 °C (approx. -4 to 176 F) Humidity: ≤ 80 % relative humidity, non-condensing Recommended temperature: -20 bis +55 °C (ca. 0 bis 130 °F)</p>

<p>Splash-proof</p> 	<p>Doculus Lumus® has been designed to be protected against dust and splash water after IP54 standard. The special construction of the housing and the lens carrier are equipped with 2 sealing rings that shield the optical from the electronic area.</p> <p>It is not completely waterproof and should not drown in e.g. sugared coffee ☺</p>
<p>Robust housing</p>	<p>The Doculus Lumus® housing is made of 2 highly durable plastics. For hygienic reasons, no sticky soft touch surface. The design has been chosen so that a user cannot unintentionally destroy the lens or the internal electronics. (not waterproof, no IP76) The device is also quite resistant against dust. The housing design shields the lens from external lighting.</p> <p>Doculus Lumus is drop-proof at 1.5 m heights. (Tested on concrete)</p>
<p>Certifications</p>	<p>Doculus Lumus® has certifications for Europe CE, FCC for USA, as well as for Canada, Australia and New Zealand. Our Manufacturing is certified under ISO 9001 in Graz (Austria) and underlines their social responsibilities by employing 70% people with disabilities.</p>
<p>Dioptric compensation</p> 	<p>Note on the correct use of Doculus Lumus®: At a 15x/22x magnification, it is technically no longer a magnifying glass, as you are already in the microscopic range. For this, it is necessary to bring the eye directly or very close to the lens.</p> <p>The quality glass lens system in the Doculus Lumus® makes it possible to compensate for different diopter strengths. A distance ring is fitted as standard and adjusted so that the visual acuity is optimally set for all corrected (correction by glasses or contact lenses) and uncorrected users (between -4 and +4 dioptres).</p> <p>A survey with test persons with different dioptric strengths from -4 (short-sightedness) to +4 (long-sightedness) proves that additional dioptric compensation with the device and the quality glass lens system used should only be used as a support from a dioptric strength of more than 4 diopters of short-sightedness or long-sightedness. The detailed results of the survey with different visual acuities can be provided on request.</p> <p>Alternatively, 2 additional distance rings for refined visual acuity adjustment can be fitted for strongly farsighted users. Included upon request. For the insertion of the distance rings, please refer to the User Manual.</p>

Illuminance measurement	<p>Measuring device: Digital Lux-Meter RO-1330 Test conditions: CAMPUS 02 laboratory, lights switched off, darkened with closed blinds.</p> <p>Measurements White Incident Light: 3820 lx White Torchlight: 7950 lx White Oblique light (1 LED): 800 lx UV 365: 400 lx UV 254+313: 37 lx (measurement not meaningful because measuring device sensor is made of plastic) AS laser: 940 lx (measurement not meaningful due to laser dot) Front UV 365 nm: - Distance 0 mm (direct contact): 1830 lx - Distance 45 mm (ID card completely evenly illuminated): 1200 lx - Distance 65 mm (passport side completely evenly illuminated): 590 lx</p>
Warranty	<p>Doculus Lumus GmbH grants a warranty of 24 months after the date of purchase on material and production of Doculus Lumus®. After the warranty time has expired, there is a refreshment service offered for Doculus Lumus®!</p> <p>We offer extended warranty for 0,20 € / year per purchased device.</p> <p>This includes cleaning, software updates as well as, if necessary, the repair of the device and a colour cover exchange.</p> <p>In the case of a malfunction or non-function of Doculus Lumus®, please contact your distributor or the manufacturer Doculus Lumus GmbH directly at: sales@doculuslumus.com</p> <p>It is recommended that Doculus Lumus®, as well as any other device made of plastic, should not be exposed to temperatures above 80 degrees (e.g. a dashboard in a car exposed to direct sunlight for a longer period of time in summer).</p>
Service and maintenance "From old to new"	<p>There is a refreshment service available for Doculus Lumus®. This includes cleaning, software updates and, if necessary, repairing the unit and replacement of the cover.</p> <p>It is also possible to upgrade your device with certain new options, depending on the version you currently have. Compatibility assessment upon request.</p>
Customs tariff number	<p>Set Doculus Lumus® with bag Customs tariff number: 9031499000 Declaration of Origin or CE certificate on request.</p>
Size	<p>Doculus Lumus® has the following size and thus fits in any trouser or shirt pocket: 108 mm x 63 mm x 28 mm</p>
Weight	<p>105 g weight of a Doculus Lumus® without batteries 128 g weight of a ready-to-use Doculus Lumus® incl. batteries and wrist strap 265 g weight of a complete Doculus Lumus® with bag</p>

For any remaining questions please contact us under: sales@doculuslumus.com



Generalzolldirektion



Generalzolldirektion, Postfach 12 73, 53002 Bonn

Doculus Lumus GmbH
Schmiedlstrasse 16

8042 Graz
Austria

Zentrale Beschaffungsstelle der
Bundesfinanzverwaltung

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DATUM: 07.11.2023

BETREFF Referenzschreiben

BEZUG Ihre E-Mail vom 02.11.2023

ANLAGEN

GZ O 1088 B - 262/21 - DI.B.331.14
331-2021-0252 (bei Antwort bitte angeben)

Sehr geehrte Damen und Herren,

die Generalzolldirektion, Zentrale Beschaffungsstelle der Bundesfinanzverwaltung, erteilt als Auftraggeberin für die von Ihnen im Jahr 2022 gelieferten Multifunktionslupen das nachstehende Referenzschreiben. Die Referenz dient zur Vorlage bei der Ausschreibung der Europäischen Agentur für die Grenz- und Küstenwache Frontex (Aktenzeichen: Frontex/2023/OP/705/DT) und ist ausschließlich auf den konkret angefragten Einzelfall anzuwenden. Eine allgemeine Veröffentlichung der erteilten Referenz zu Werbezwecken ist nicht gestattet.

Ansprechperson:

Herr Schönrock (Tel.: 0228-303-41251; E-Mail: wolfgang.schoenrock@zoll.bund.de)

Der Auftrag umfasste die Lieferung von 1.219 Stück Multifunktionslupen inkl. einer Tasche mit Gürtelbefestigung und wurde zu unserer Zufriedenheit termingerecht abgeschlossen.

Für die kompetente und vertrauensvolle Zusammenarbeit bedanke ich mich und wünsche Ihrem Unternehmen weiterhin viel Erfolg.

Mit freundlichen Grüßen
Im Auftrag

Ritter

Dieses Schriftstück wurde elektronisch erstellt und ist ohne Unterschrift gültig



Generalzolldirektion

Directorate General of Customs, P.O.
Box 12 73, 53002 Bonn

Doculus Lumus GmbH
Schmiedlstrasse 16

8042 Graz
Austria



Central Procurement Centre of
the Federal Finance
Administration

EDITED BY:
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SERVICE LOCATION:
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SUBJECT Letter of reference

BEZUG Your e-mail from 02.11.2023

ATTACHMENTS

GZ O 1088 B - 262/21 - DI.B.331.14

331-2021-0252 (please specify when answering) DATE: 07.11.2023

Ladies and Gentlemen,

The Directorate General of Customs, Central Procurement Office of the Federal Finance Administration, issues the following letter of reference as the contracting authority for the multifunctional magnifiers supplied by you in 2022. The reference is for submission to the European Border and Coast Guard Agency Frontex (reference number: Frontex/2023/OP/705/DT) and is to be applied exclusively to the specific individual case requested. General publication of the reference provided for advertising purposes is not permitted.

Contact person:

Mr Schönrock (Tel.: 0228-303-41251; e-mail: wolfgang.schoenrock@zoll.bund.de)

The order comprised the delivery of 1,219 multifunctional magnifiers including bags with belt attachment and was completed on time to our satisfaction.

I would like to thank you for your competent and trusting cooperation and wish your company continued success.

Yours sincerely, By order
of

Ritter

This document was created electronically and is valid without a signature



EC Declaration of Conformity

Manufacturer: Doculus Lumus GmbH
Address: Schmiedlstrasse 16, 8042 Graz, Austria
Product: Mobile document checking device
Model: Doculus Lumus

This product complies with the requirements of the following European directives:

2014/30/EU	Electromagnetic Compatibility Directive (EMC)
2014/35/EU	Low Voltage Directive (LVD)
2014/53/EU	Radio Equipment Directive (RED)
2006/25/EC	Artificial Optical Radiation Directive (AORD)
2011/65/EU + 2015/863	Restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)

The compliance with the requirements of the European directives was proved by the application of the following harmonized standards:

EMC, LVD and RED:	ETSI EN 302 291 V1.1.1 ETSI EN 301 489-1 V2.2.3 ETSI EN 301 489-3 V2.1.1 EN 60950-1:2006 + A11:2009 + A12:2011 + A1:2010
AORD:	EN 62471:2006 EN 60825-1:2014
RoHS:	EN 63000:2019

Sole responsibility for the conformity of the product and the issuance of this declaration of conformity lies with the manufacturer.

Graz, 01st of May 2022

Doculus Lumus GmbH
See The Truth Inside



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8042 Graz, Austria
+43 316 41111

www.doculuslumus.com

Sandra Slavinec, CEO
Name, Position

List of Contracts Performed

LOT 1 (Doculus Lumus®)				
Customer	Tender number	Duration/Delivery	Quantity	Evidence
ICMPD International Centre for Migration Policy Development Contact details: Frederic Brimbali Tel: +43 1 504 4677246 E-Mail: ICMPD@icmpd.org Gonzagagasse 1, 5th floor 1010 Vienna Austria	ICMPD/19.039/SUB/IBM/SHC/LEB	November 2020	320 pcs. Doculus Lumus incl. bags	Delivery Proof File: 2021_ICMPD Ghana Delivery Proof.pdf 2021_ICMPD Ghana Notification Letter.pdf
Swiss Customs and Border Security BAZG Contact details: Fabian Padrutt Email: Fabian.padrutt@bazg.admin.ch Tel: +41 58 48563 77 Remark: In a bidding consortium with Projectina AG	WTO Ausschreibung Handprüfgeräte	2020 - 2025	3.000 pcs. Doculus Lumus incl. accessories	Reference Letter File: 2020_Reference Letter Swiss Border Police orig.pdf 2020_Swiss Border Police.pdf

www.doculuslumis.com

See The Truth Inside

Steiermarkische Sparkasse | IBAN: AT08 2081 5000 4405 7198 | BIC: STSPAT2GXX | office@doculuslumis.com | Tel.: +43 316 424244
 Fax: +43 316 424244-15 | Commercial Register: FN 571158 p - Regional Court for Civil Matters Graz | VAT: ATU 77849401

Doculus Lumus GmbH | Schmiedlstrasse 16 | A-8042 Graz

Bundespolizei der Bundesrepublik Deutschland English: Federal Police of the Federal Republic of Germany Contact details: Daniel Richter Tel: +49 331 97997-6243 E-Mail: bpolp.referat.62@polizei.bund.de Heinrich-Mann-Allee 103 14473 Potsdam Germany Remark: in a bidding consortium with Diagramm Halbach GmbH & Co. KG	2021/S 139-369493	Start of contract July 1 st , 2021, until June 30 th , 2024	5.000 pcs.Doculus Lumus incl. bags and logo print In 2021 delivered: 1.700 pcs.Doculus Lumus incl. bags and logo print In 2022 delivered: 2.900 pcs.Doculus Lumus incl. bags and logo print In 2023 delivered: 100 pcs.Doculus Lumus incl. bags and logo print	Reference Letter File: 2021_Reference Letter_Federal Police Germany.pdf
FRONTEX – European Border and Coast Guard Agency Contact details: Claudio Kavrecic Head of Centre of Excellence for Combatting Document Fraud Operational Response Division Tel: +48 22 205 9819 Mobile: +48 667 667 327 Email: claudio.kavrecic@frontex.europa.eu	Frontex/NP1-2021-0132	October 2021	40 pcs. Doculus Lumus incl. bags, logo print and rechargeable batteries	Reference Letter File: 2021_Reference letter Frontex.pdf

www.doculuslumis.com

See The Truth Inside

Steiermarkische Sparkasse | IBAN: AT08 2081 5000 4405 7198 | BIC: STSPAT2GXX | office@doculuslumis.com | Tel.: +43 316 424244
 Fax: +43 316 424244-15 | Commercial Register: FN 571158 p - Regional Court for Civil Matters Graz | VAT: ATU 77849401

<p>Generalzolldirektion, Zentrale Beschaffungsstelle der Bundesfinanzverwaltung Deutschland</p> <p>English: Directorate General of Customs, Central Procurement Office of the Federal Finance Administration Germany</p> <p>Contact person: Mr. Wolfgang Schönrock E-Mail: wolfgang.schoenrock@zoll.bund.de Tel: +49 228 303-41251 Friedrichsring 35 63069 Offenbach am Main Germany</p>	331-2021-0252	During September and October 2022	1.219 pcs. Doculus Lumus devices incl. bags and logo print	Reference Letter File: 2022_Reference Letter_Directorate General of Customs_Germany.pdf
<p>IOM Ukraine</p> <p>Contact person: Mrs. Anna KOZACHENKO National Supply Chain Officer International Organization for Migration Kyiv – Ukraine (GMT +3) T. +380 44 568 50 15 akozachenko@iom.int</p>	UA1-2022-1313	December 2022	400 pcs. Doculus Lumus	Act of Acceptance File: 2022_IOM Ukraine Act of Acceptance.pdf

<p>DCPAF Division de l'Expertise en Fraude Documentaire et à l'Identité Ministère de l'Intérieur et des Outre-mer</p> <p>English: DCPAF Document Fraud and Identity Expertise Division Ministry of the Interior and Overseas France</p> <p>Contact details: Dider Martin Chef de la Division DCPAF Tel: +33 160371729 didier.martin1@interieur.gouv.fr</p>	2021/S 240-630901	Start of contract October 2021, duration 4 years	2.800 pcs. Doculus Lumus incl. bags and rechargeable eneloop batteries So far delivered: 1.480 Doculus Lumus incl. bags and rechargeable eneloop batteries	Reference Letter file: 2023_Reference Letter France Tender Ministry of Interior.pdf
<p>Polish Border Guard Headquarter Test of devices</p> <p>Contact details: Sebastian Zwoliński Colonel, BG The Polish Border Guard Headquarters Office +48 22 500 4257 Mobile +48 721 960 024 sebastian.zwolinski@strazgraniczna.pl</p>	Testing at the Frederic Chopin International Airport Warsaw	September 2022 to January 2023	1 pc. Doculus Lumus incl. bag	Test report file: 2023_Test report Polish Border Guard HQ.pdf

Landespolizeidirektion Oberösterreich	OZ 001	May 2023	10 pcs. Doculus Lumus incl. bags	Reference Letter File: 2023_Reference Letter LPD Upper Austria en.pdf 2023_Reference Letter LPD Upper Austria ori.pdf (original)
English: Upper Austria Border Police Department				
Contact: Manfred Wiesinger Document State Coordinator Tel: +43/664 2813613 Email: Manfred.Wiesinger@polizei.gv.at				

LOT 2 (DOCULAMP 365) – introduced to market 01.01.2022				
Customer	Tender number	Duration/Delivery	Quantity	Evidence
Diagramm Halbach GmbH & Co. KG Exclusive partnership Contact details: Matthias Oelenberg Sales Director Tickets and Security Printing Am Winkelstück 14 58239 Schwerte, Germany Tel: +49 2304 75930 Mobil: +49 172 2370754 Mail: matthias.oelenberg@halbach.com	Ongoing cooperation	Ongoing cooperation since product introduction in 2022	200 pcs. DOCULAMP 365	Reference Letter file: Reference Letter Diagramm Halbach.pdf
MRG Export-Import d.o.o. Contact details: Tijana Grbović-Kröpfl Managing Director Tel.: +381 11 2433 – 705 Email: tijana.grbovic@mrg.rs Ustanička 25/5, 11000 Beograd, Srbija)	Ongoing cooperation	Ongoing cooperation since product introduction in 2022	28 pcs. DOCULAMP 365	Reference Letter File: Reference Letter MRG Exprt-Import doo Serbia.pdf

<p>United States Department of Homeland Security Investigations Forensic Laboratory U.S. Immigration and Customs Enforcement</p> <p>Contact details: Darlene Morin Quality Manager (703) 891-4831 Office (703) 864-6211 Mobile darlene.morin@hsi.dhs.gov</p>	<p>Purchase</p>	<p>May 2022 September 2023</p>	<p>25 pcs. DOCULAMP 365 45 pcs. DOCUAMP 365</p>	<p>Reference File: 2022-240043 Invoice Homeland Security USA.pdf 2023-240311 Invoice United States Homeland Security.pdf Note: The Department is not allowed to give out letters of reference, but can be contacted directly by you for confirmation.</p>
<p>Keesing Technologies</p> <p>Contact details: Maickel van Oijen Senior Document Expert Keesing Technologies Hogehilweg 17 1101 CB AMSTERDAM The Netherlands T: +31 (0)20 7157 838 M: +31 (0)611126705 E: m.vanoijen@keesingtechnologies.com</p>	<p>Ongoing cooperation</p>	<p>Purchased November 2022 for training purposes worldwide</p>	<p>12 pcs. DOCULAMP 365</p>	<p>Reference Letter File: Reference Letter_Keesing Technologies.pdf</p>

<p>NORITEK in cooperation with the Czech Republic Police</p> <p>Contact details: Mgr. Petr Kučera Head of Department POLICE OF THE CZECH REPUBLIC Regional Police Directorate of the South Bohemian Region Department of Foreign Police Department of documents and special activities Tel: +420 974 221 850 Mobile :+420 725 575 055 Email: petr.kucera@pcr.cz</p>	<p>Ongoing cooperation</p>	<p>Ongoing cooperation since product introduction in 2022</p>	<p>Ongoing cooperation, so far 4 units</p>	<p>Reference File: Reference Letter NORITEK.pdf</p>
<p>Landespolizeidirektion Oberösterreich</p> <p>English: Upper Austria Border Police Department</p> <p>Contact: Manfred Wiesinger Document State Coordinator Tel: +43/664 2813613 Email: Manfred.Wiesinger@polizei.gv.at</p>	<p>OZ 001</p>	<p>May 2023</p>	<p>10 pcs. DOCULAMP 365 nm</p>	<p>Reference Letter File: 2023_Reference Letter LPD Upper Austria en.pdf 2023_Reference Letter LPD Upper Austria ori.pdf (original)</p>



Doculus Lumus®

See the Truth Inside

Product Portfolio

Frontex Tender FRONTEX/2023/OP/705/DT



Doculus Lumus GmbH
Headquarter in Graz, AUSTRIA



Small in-house production and finishing



Doculus Lumus®



Globally supported by over
50 official distributors and
11 document examination training centres

90%
Export Rate

~ 40.000 devices so far



Banking Sector



Police and Customs
Authorities



Government Bodies



Security Printers



Border Protection



Document Experts
and Trainers

Company Overview



FH-Prof. Dipl.-Ing.
Dieter Lutzmayr
CTO



Doculus Lumus GmbH & charismaTec OG Management

DI (FH)
Sandra Slavinec
CEO

Doculus Lumus® the mobile document checking device



Doculus Lumus® - the mobile document checking device



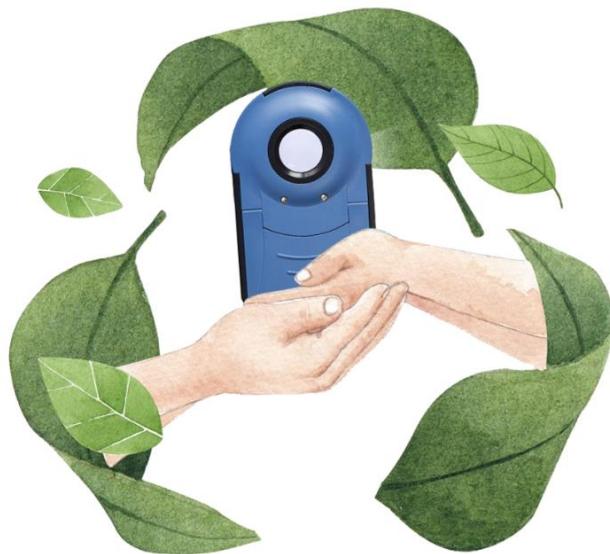
Experienced document specialists know how to detect a falsified document. There is a variety of security features which protect a national document against forgery.

No matter if you are a border guard, security printer, customs official or document trainer – Doculus Lumus is the reliable, robust tool to examine passports, id cards, bank notes or other official document.

With Doculus Lumus® it only takes 30 seconds to examine a document and to determine whether a falsification is at hand.



30 seconds is all it takes.



Plastic Free Packaging
Local Production
Made in Austria
Refreshment Service
After Warranty Time



Certifications of Doculus Lumus®



- o CE tested and approved compliance with the requirements of the following European directives and standards:
 - o 1999/5/EG Radio and Telecommunications Terminal Equipment (R&TTE)
 - o 2011/65/EU Restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)



- o IEC 60950-1 Information technology equipment
 - o Safety



- o FCC (Federal Communications Commission of the United States): Grant of Equipment Authorization, FCC IDENTIFIER 2ACVI-DL



Industry Canada

- o IC (Federal Communications Commission of the United States): Grant of Equipment Authorization, FCC IDENTIFIER 2ACVI-DL



- o ACMA (Australian Communications and Media Authority, also valid for New Zealand): Regulatory Compliance Mark (RCM)



Doculus Lumus®

FRONTEX/2023/OP/705/DT | LOT 1

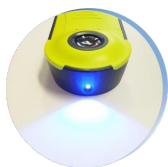
CONFIDENTIAL – DO NOT SHARE PUBLICLY

Standard Features

- 15x / 22x Magnification with High Quality Glass Lenses
- 4 Incident Light LEDs with Torchlight and Coaxial Mode
- 4 Extra strong UV LEDs 365 nm
- 8 LEDs for Rotating Oblique Light
- Steady Light Mode for Photo Documentation
- Left- / Right-handed Mode (may be deactivated with option AS for security reasons)



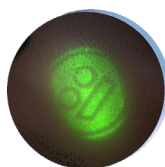
Optional Features



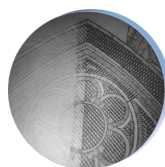
FUV Front UV Torch
365 nm



RFID ICAO Check
for ePassports



AS Anti Stokes Laser
980 nm



IR LED 870 nm



UVC for 254 nm
and bifluo inks










LI Additional
Lithium-ion Battery



Doculus Lumus®

FRONTEX/2023/OP/705/DT | LOT 1

CONFIDENTIAL – DO NOT SHARE PUBLICLY

- 9 Colours  Logo option
- 15x / 22x magnification 
- Optical & light functions combined 
- 6 features to individualise 
- Developed in-house 
- 2 patents – electronics | EU and USA
- Local manufacturer 
- ISO 9001, 75% people employed with disabilities
- Just-in-Time / Just-in-Sequence production 



FRONTEX/2023/OP/705/DT | LOT 1

CONFIDENTIAL – DO NOT SHARE PUBLICLY

Choose from 9 vibrant colours



FRONTEX/2023/OP/705/DT | LOT 1

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Recent projects



FRONTEX
EUROPEAN BORDER AND COAST GUARD AGENCY
Standard
ALDO training
equipment



FRONTEX/2023/OP/705/DT | LOT 1



German
Federal Police
BUNDESPOLIZEI



osce
Organization for Security and
Co-operation in Europe

CONFIDENTIAL – DO NOT SHARE PUBLICLY

Doculus Lumus Sustainability Goal

Since 2023 the Doculus Lumus® packaging is **plastic-free**.

Made from 100% recycled materials.



FRONTEX/2023/OP/705/DT | LOT 1



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Manufacturing partner TEAM STYRIA Werkstätten GmbH in Graz, AUSTRIA



ISO 9001
certified

<https://www.teamstyria.at/>

Integrative serial
manufacturer
hiring
75% handicapped
people



Contact Details: **Michael Staffaneller**
Head of Department
T : +43/316/295546-1022
M : +43/664/802951022
E : m.staffaneller@teamstyria.at
Team Styria Werkstätten GmbH
Triesterstraße 388-394b
A-8055 Graz
AUSTRIA



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Injection Molding partner MC Kunststofftechnik GmbH in Graz, AUSTRIA



ISO 9001
certified

<https://www.mc-kunststofftechnik.com/index.html>



Contact Details: **Christoph Leimüller**
CEO
Tel. +43 664 8847 5025
E-Mail Christoph.leimueller@mc-kunststofftechnik.com
MC Kunststofftechnik GmbH
Auer-Welsbach-Gasse 35
A-8055 Graz
AUSTRIA



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DOCULAMP 365

Introduced to Market in January 2022

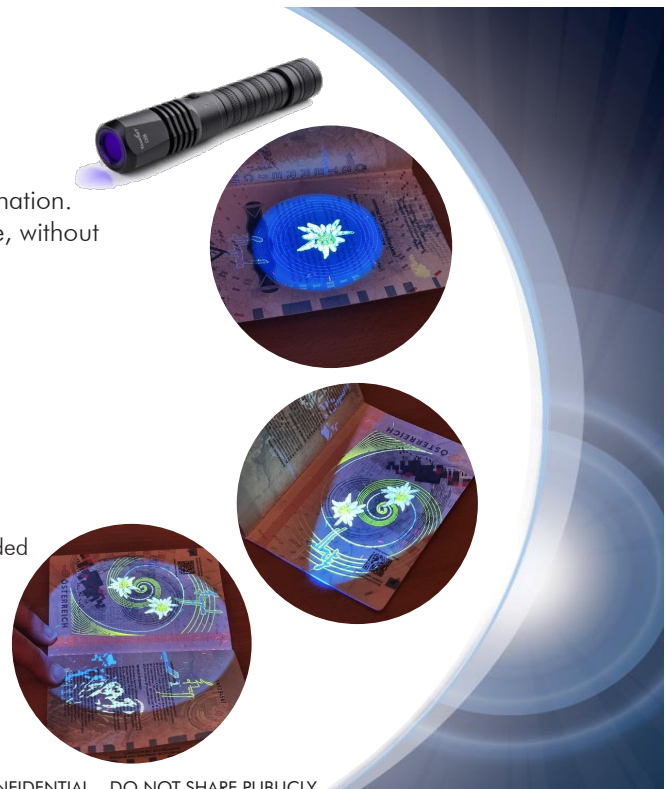
The strong UV torch at 365 nm with homogenous illumination. Achieve uniform projection and ultra-wide lighting range, without any interference of stray light.

- Durable Aircraft grade Aluminium alloy T6061
- Optical projector system + specialized UV black filter
- Waterproof: IPX8 | Drop-proof: 1,5 m
- Charging: USB Type-C
- Constant brightness, without flicker
- Nylon bag, clip, hand strap and UV blocking goggles included



FRONTEX/2023/OP/705/DT | LOT 2

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Train the Trainer on the use of Doculus Lumus® and DOCULAMP

We provide one training session on the use of Doculus Lumus® and DOCULAMP **free of charge in Europe.**

Within the training, the participants will go through all device features and learn useful tips and tricks to see all kind of security features in ID documents with Doculus Lumus.

We recommend a group of 16 persons.

Additional trainings on request (online or in person).

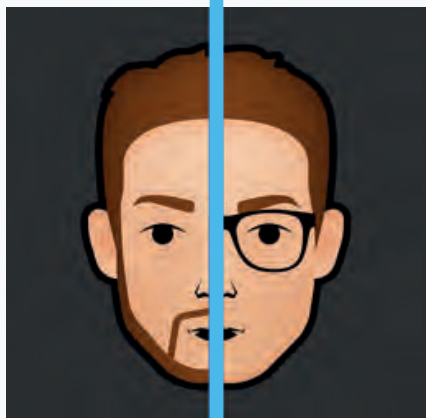


FRONTEX/2023/OP/705/DT | LOT 1

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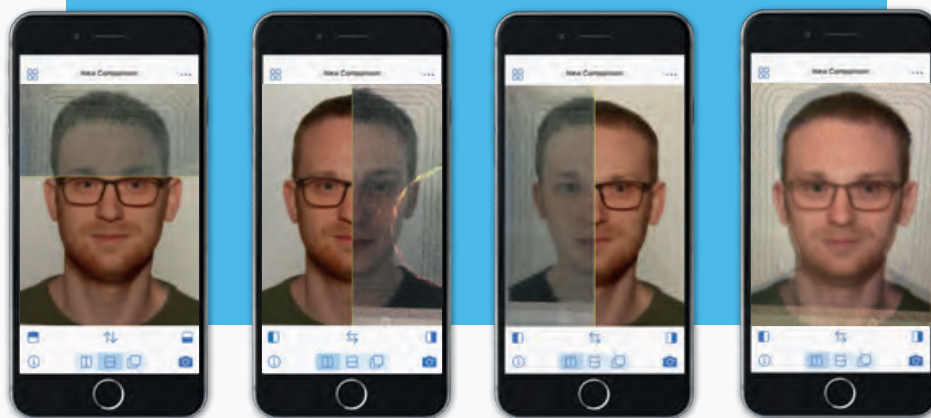
Smart FACE MATCH App



Do you often check ID cards and passports in your job? How do you make sure that the person in front of you and the face on the card are actually identical?

Smart FACE|MATCH helps border guards to identify whether the person in front of them is the same as on the ID document. Because the distances of eyes, nose and chin are characteristic for a person, whether wearing a beard or a different hairstyle, you can easily tell if something seems amiss.

**Match a person
to their ID**



Slide division
horizontally & vertically

Adjust cross-fade
transparency



www.doculuslumus.com/facematch

See the Truth Digitally

Doculus Lumus®

The mobile document checking device that lets you see the truth inside in only 30 seconds! Doculus Lumus® is your reliable, robust tool to examine passports, ID cards, bank notes and other official documents.



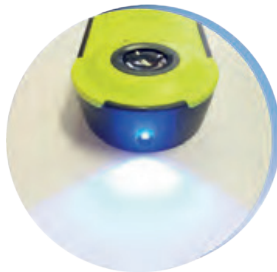
Drop-proof
1,5 m

STANDARD FEATURES

- 15x / 22x Magnification with High Quality Glass Lenses
- 4 Incident Light LEDs with Torchlight and Coaxial Mode
- 4 Extra strong UV LEDs 365 nm
- 8 LEDs for Rotating Oblique Light
- Steady Light Mode for Photo Documentation
- Left- / Right-handed Mode
(Except Devices with Option AS)



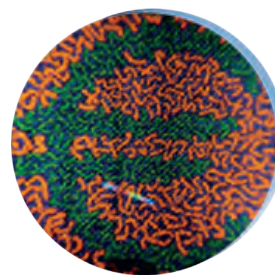
OPTIONAL FEATURES



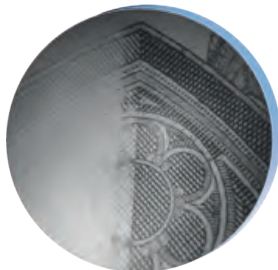
FUV Front UV Torch



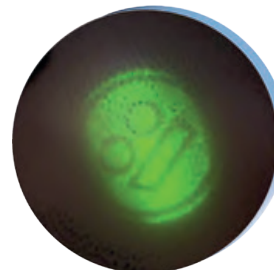
RFID ICAO Check



UVC for 254 nm



IR LED



AS Anti Stokes Laser



LI Lithium-Ion Battery



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