

# Thales Gemalto Document Reader QS2000

## Identity & Biometric Solutions



## Product Use

The Thales Gemalto Document Reader QS2000 is designed to capture data from driving licences, electronic travel and identity documents quickly and reliably in a wide variety of commercial applications. Automatically capturing the data from identity documents leads to:

- Reduced customer queues and happier customers
- More accurate data input and automated form filling
- Faster registration process leading to reduced costs
- No need to photocopy documents providing higher security and compliance to GDPR
- Compatible with local applications connected to cloud services

## Functions include:

- Optional support for biometrically enabled travel documents and driving licences containing contactless integrated circuit chips (eIDs, eDLs and ePassports)
- Accurate, IR and true-color visible images at 400dpi
- Reads 1D and 2D barcodes from driving licences
- China NID card RFID reading option

## Reading Capability

The Gemalto Document Reader QS2000 reads the following documents:

- ICAO compliant documents
- One line driving licences per ISO18013 part 2 specification
- 1D barcodes (2 of 5 interleaved, 2 of 5 industrial, Code 128, Code 39, UPC-A, EAN-8 and EAN-13)
- 2D barcodes used on driving licences and other documents (PDF 417, QR Code®, DataMatrix™ and Aztec formats)
- AAMVA parser decodes North American driver license barcodes

# Thales Gemalto Document Reader QS2000

## Identity & Biometric Solutions

### KEY FEATURES & FUNCTIONALITY

- Multiple document reading and imaging using true-colour image matching
- Dual wavelength illumination : IR and Visible
- Anywhere placement of ID cards
- OCR data capture of the Machine Readable Zone (MRZ)
- Complete access to OCR data and images captured via Software Development Kit (SDK)
- Access to images as BMP, PNG or JPEG format
- Auto-triggering of document capture – presence of document is automatically detected using visible light
- Windows® 7, Windows® 8.1, Windows® 10, macOS and Linux® compatible
- USB 2.0 or USB 3 high speed compatible via SuperSpeed USB 3.2 Gen1 Type-C™ host port
- Rugged design, no moving parts and internally sealed optical chamber to prevent dust ingress
- Chemically Strengthened Glass for advanced durability
- Powered from a single USB 500mA port

### Comprehensive Software Features

- Uses the same API interface as other Thales document readers using Gemalto Document Reader SDK
- Flexible software interface allows host application to select image type, image compression, photo extraction, reflection or ambient light elimination, color enhancement, which data groups to read, etc.
- Configuration via file or api, can be configured in field and saved
- Simple high level API for quick program development or detailed low level API for fine control of all reader functions. SDK provides full configuration API
- Contactless IC reading for ePassports (LDS 1.7 & 1.8) including basic access control (BAC)
- Contactless IC reading for eDL & iDL (electronic driving licences) up to DG14 including basic access control (BAP v1)
- ICAO 9303 checksum validation
- Full SDK including DLLs, code examples, utilities and demonstration programs. Can be used with Visual C++®, Java® and Microsoft® .NET Framework for Visual Basic® .NET and Visual C#®
- Interfaces to standard hotel software, Oracle PMS, Amadeus, etc

### ePassport (RFID) Option

Reads from and writes to contactless chips and eID according to:

- ISO 14443 13.56MHz Type-A and Type-B
- ePassport support for ICAO 9303 LDS 1.7 & 1.8 and PKI using included SDK
- Dual antennas capable of reading shielded passports
- iDL & eDL reading and access control for driving licences to ISO 18013 parts 2&3 and ISO/CEI TR 19446 using included SDK
- All standardized rates, up to 848 Kbps, read-out times depend on RFID tag, operating system and amount of data stored in the chip

# Thales Gemalto Document Reader QS2000

---

## Identity & Biometric Solutions

### HRZ Data Capture Option

Additional software can identify a document type and capture the human readable information for fast data entry. Customisable to fill forms in local and enterprise applications. Interfaces include:

- XML and JSON
- TCP/IP
- DLL
- HTTP/HTTPS
- Java
- Keyboard emulation

HRZ Data Capture options include multi-font including Asian, Arabic and Chinese character sets.

### Identity Document Verification Option

Additional software can authenticate an identity document using optical pattern matching to:

- Identify documents based on the type and country of origin
- Match visible optical features captured from a document against a database of trusted security features at level
- Verify that areas are blank, devoid of patterns, text or printed matter
- Check photo in chip against photo on data page

### Chinese NID RFID Option

- Supports reading of new China NID documents using RFID protocols with crypto module inside reader<sup>1</sup>

### Illumination

The reader illuminates documents:

- White visible LEDs, 430-700nm
- Near Infrared (IR) B900: 860nm peak

### Resolution

- Standard 400 DPI image resolution
- RGB 24 bit color system

### Status Indicators

The Gemalto QS2000 provides user feedback via the following status indicators:

The reader provides user feedback via the following status indicators:

- Red - Read Error LED
- Green - Valid Read LED
- Yellow - Busy LED, progressing document
- Blue - Ready LED

The API provides for audible feedback via the computer speaker.

The reader performs a power-up self-test and indicate failure using status LEDs.

### Minimum PC Specification

Software must be installed on a customer-supplied PC, some aspects of the read speed may be affected by PC specification. The following minimum configuration is recommended:

- 2 GHz Pentium® 4 CPU (Intel Core 2 Duo recommended)
- 1 GB DRAM
- USB 2.0
- 60 MB of Hard Drive space for software
- Windows® 7, Windows® 8.1 or Windows® 10 operating systems, 32 or 64 bit
- Builds for Ubuntu and CentOS LTS, 32 & 64 bit
- macOS (limited SDK functionality)

### Security

- Kensington® Security Lock

### Smartcard Option

- Contact smartcard to ISO 7816 Class A and AB (T0/T1)
- Internal to reader
- Factory fit only

<sup>1</sup> Subject to Chinese government use rules

# Thales Gemalto Document Reader QS2000

---

## Identity & Biometric Solutions

### Standard Dimensions

- Length: 18.5 cm (7.3")
- Width: 15.3 cm (6.0")
- Height with light shield: 13.2 cm (5.2")
- Weight: 0.8 kg (1.7 lbs)
- Window size 125 x 90 mm

### Regulatory

- FCC Part 15 Class A
- UL, UL-C
- CB Certificate
- CE - RED, LVD & EMC
- EU WEEE, REACH & RoHS Directives
- China RoHS

### Environment

- Humidity: 10 to 95% (R.H. non-condensing)
- Temperature operating: -10° to 55° C (-14° to 131° F); storage: -20° to 60° C (-4° to 140° F)
- IP54 rating for dust and water ingress protection (pending)
- Shock and vibration to IEC60068-2-27 and IEC60068-2-64

### Firmware Upgrade

- Upgradeable firmware via USB interface
- Non-volatile memory for configuration and calibration accessed via USB interface

### Power

Powered from a single USB 2.0 port:

- Power consumption: 5 volts DC, keeping within USB port power limit, 500mA for USB 2.0, 900mA for USB 3.2 Gen 1 Type A and 1.5A for USB-C
- Optional power injection cable if PC cannot supply stable USB power

### Service & Maintenance

- Two year warranty
- Annual maintenance agreement available

Microsoft, Windows, Windows Vista, Visual C++, Visual C# and Visual Basic are registered trademarks of Microsoft Corporation in the United States and other countries. Java is a registered trademark of Oracle and/or its affiliates. Pentium and Intel are trademarks of Intel Corporation in the U.S. and/or other countries. Data Matrix is a trademark of Robotic Vision Systems, Inc. (RVS). Ubuntu is a registered trademark of Canonical Ltd. Linux is a registered trademark of Linus Torvalds. Kensington is a registered trademark of ACCO Brands. QR Code is a registered trademark of DENSO WAVE INCORPORATED. MIFARE is a trademark of NXP Semiconductors. macOS is a trademark of Apple Inc., registered in the U.S. and other countries.

This document is subject to change without notice.