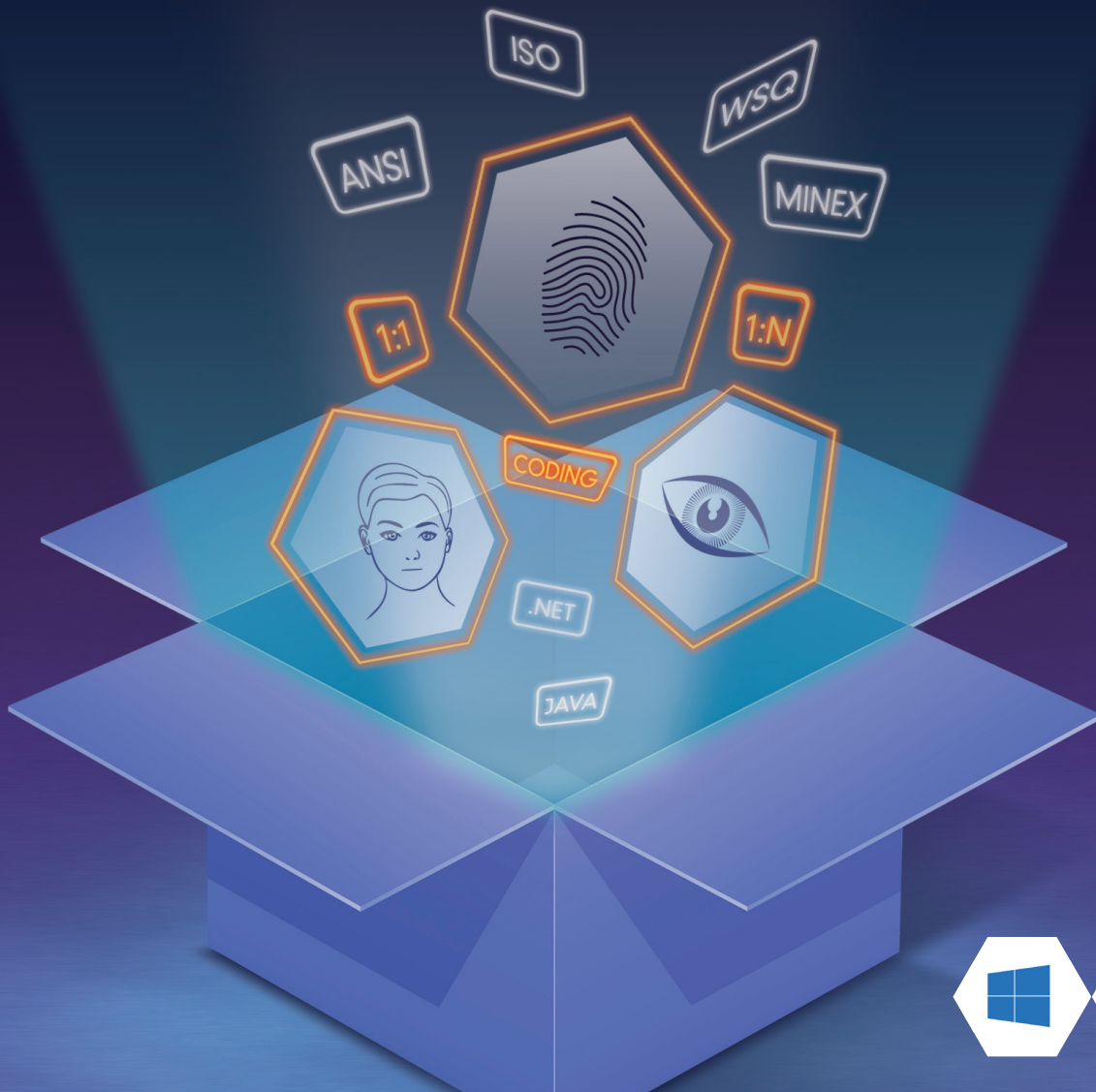# MORPHOKIT™

MULTI–BIOMETRIC SDK FROM THE WORLD LEADER IN BIOMETRIC TECHNOLOGIES

Banking services, welfare provision, network security, access control, time and attendance management or medical record maintenance are all examples where personal identification is critical. With MorphoKit™, all these transactions - and more - can easily benefit from a layer of outstanding Morpho biometric technology.

Originally designed for fingerprint-based systems, MorphoKit™ has been enriched with our world-renowned algorithms for 2D facial and iris recognition. **Fingerprint, Face and Iris:** MorphoKit™ now gives access to three biometric modalities acknowledged worldwide for their high levels of accuracy and performance.

User enrollment and matching procedures are so simple to implement that system developers can learn in minutes how to enhance client security and identification systems with the power of biometrics.
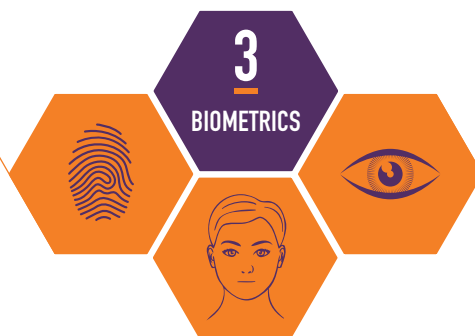
MORPHOKIT™

MULTI–BIOMETRIC SDK FROM THE WORLD LEADER IN BIOMETRIC TECHNOLOGIES

3 BIOMETRICS

FINGERPRINT

KEY FEATURES

- **Fingerprint Image Quality Optimization** during acquisition and pre-processing: automatic finger positioning control, live quality check, quality threshold tuning, consolidated enrollment over multiple images
- **Image Compression/Decompression:** WSQ algorithm from FBI/NIST
- **MINEX and FIPS 201** certified Feature Extractor and Matcher
- **Feature Extraction:** generation of ISO 19794-2, ANSI/INCITS 378 standard templates and Morpho proprietary ones
- **Management of User Records** including de-duplication check
- **One-to-One Authentication**
- **One-to-Many Identification** up to 1:50,000 users
- **CBEFF** exchange format generation
- **Fake Finger Detection** interface

COMPATIBLE DEVICES:

MorphoSmart™ 300, 1300 and FINGER VP DESKTOP Series, BTO 500 and MorphoWave™ DESKTOP

FACE

KEY FEATURES

- **Portrait image quality check**
- **Image coding**
- **One-to-One Authentication**
- **One-to-Many Identification** up to 1:50,000 users

TYPICAL USE CASES:

- Comparison between a live portrait capture and a photo extracted from an ID document by the B5000 reader
- 1:N identification of a live portrait capture against portraits stored in a database

IRIS

KEY FEATURES

- **Iris image coding**
- **One-to-One Authentication**
- **One-to-Many Identification** up to 1:50,000 users

TYPICAL USE CASES:

- Comparison between irises captured by Morpho IAD™ (Iris At a Distance) and iris images stored in a ID document
- 1:N identification between irises captured by Morpho IAD™ against a watch list of iris images

SYSTEM INTEGRATION

- **Development Environments:**
  - Visual Studio,
  - MSDN,
  - Eclipse
- **Coding Languages:**
  - .NET (C#, C++.NET, J#),
  - COM (VB, C, C++)
- **Interfaces:**
  - Native C/C++,
  - .NET wrapper,
  - Java wrapper
- **Operating Systems:**
  - Windows XP, 7, 8/8.1 (32 and 64 bits) and Server
  - Linux

LICENSING MODEL

The following licenses are required to activate MorphoKit™ features:

	FINGERPRINT	FACE	IRIS
ENROLLMENT, CODING, 1:1 AUTHENTICATION	VERIF	VERIF_FACE	VERIF_IRIS
IDENTIFICATION UP TO 1:5,000 USERS(*)	IDENTLITE	IDENTLITE_FACE	IDENTLITE_IRIS
IDENTIFICATION UP TO 1:10,000 USERS(*)	IDENT10K	IDENT10K_FACE	IDENT10K_IRIS
IDENTIFICATION UP TO 1:20,000 USERS(*)	IDENTPLUS	IDENTPLUS_FACE	IDENTPLUS_IRIS
IDENTIFICATION UP TO 1:50,000 USERS(*)	IDENT50K	IDENT50K_FACE	IDENT50K_IRIS

(*) up to 10 fingers, 1 portrait or 2 irises per user