

BIOthentIC® Evolution

High quality & High security biometric Smartcard reader
For multi-application based on Match On Card

The Orcanthus BiothentIC® Evolution is a high reliability smartcards reader combined with a high performances fingerprint reader. Thanks to its unique algorithm for image reconstruction, the images resulting are generated with an exceptional contrast, a good resolution, and a low distortion. An embedded proprietary cryptoprocessor performs the extraction, encryption of ISO templates and direct transfer to the smartcard, granting a high level of security and privacy. The BiothentIC® Evolution and the Match-On-Card technology offer the best security solution for strong authentication.



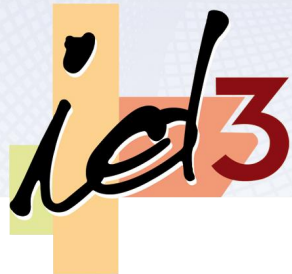
Typical Applications

- Logical access control (logon, SSO)
- Biometric digital signature
- E-banking, E-commerce, any Secured transactions
- ID cards

Key features & benefits

- **Outstanding fingerprint capture**
Even the most difficult fingers (Dry or wet fingers, disease or old people) are perfectly detected and accurately reproduced even in harsh environments (humidity, drought, dust, high temperatures, and high brightness).
- **Security**
No biometrics operations are performed outside the BiothentIC. The Fingerprint are securely acquired and sent by an encrypted way to the smartcards. The sensor doesn't leave any residual fingerprint, giving no chance to any mechanical copy of your finger.
- **Reliability**
The smartcard reader used a landing contact connector allowing 500 000 insertion/withdrawal cycles. The swipe thermal fingerprint sensor supports more than 1 million of finger scans.
- **Privacy**
Match-On-Card (MOC) Technology ensure that users' biometrics data are stored and used in a highly secured environment (a Smart Card) and will never been read or extracted.





Enrolment

The user's fingerprints, for one or more fingers, must be first registered and stored inside the smart card. This is done by using "Biometric ID Card enrolment station". The chosen finger must be swept at least three times on the sensor. After an ISO template extraction, the reference template is directly and securely stored inside the user's smartcard thanks to a specific embedded cryptoprocessor. All the process is completely performed in closed circuit.

Authentication

When authentication is needed, the user inserts his smart card into the reader, sweeps his finger on the sensor, the cryptoprocessor extracts the live template and directly and securely sends it to the smart card where the comparison is performed with the reference template stored.

Biometric ID Card enrolment station

It provides authorized operator authentication, biometrics enrolment, biographic data acquisition and facial image capture.

Software Development Kit

BiothenTIC® SDK allows an easy and simple integration of the BiothenTIC to secure any applications.

Biometrics

Sensor Technology	thermal
Resolution	500 dpi fingerprint image
Fingerprint size	300×428 pixels
Grey levels	256
Sweeping speed	up to 20 cm/s
Finger rotation	+ - 15°
Biometrics technology	Minex II certified Match On Card
Template format	ISO/IEC 19794-2 or Proprietary
Status indicator	Bicolor LED for biometric operations

Smart Cards Reader

Smart Cards Interface	ISO7816 compliant for 3V/5V smartcards
Protocols	T=0, T=1
Status indicator	Bicolor LED for smartcards operations
Additional Connector	GSM11-11 for optional SAM

Host Interface:

Host Interface	USB 1.1
Power Supply	USB Bus powered
Power consumption	< 300mA @ 5V
Cable length	1 m or 3 m

Other features:

Size	84 x 133 x 40 mm
Weight	Approx.150 gr. / 5.29 oz
Operating Temperature	0 to 50° C
Storage temperature	-10 to +70 ° C
Composition	PC
Standards compliance	CE, FCC, RoHS

Operating systems:

Windows® 2000, XP home edition, XP pro, XP 64, Vista®, Seven (32-64bits), Windows 8