



## **Betaface SDK**

Betaface offers its cutting edge facial recognition software for integration into your project or product.

The software was designed to be seamlessly integrated into existing applications as well as completely new application development.

Our algorithms are trained to return best results even at low quality photos.

Our suite performs number of operations starting with face detection through face recognition to biometric measurements and facial features tracking on video.

## **SDK Features at a glance**

Betaface's computer vision technology comprises:

- state of the art face recognition on static pictures and video
- precise face and facial features detection
- smart face cropping
- head position detection
- multiple facial points location
- face and facial features tracking on video
- built in and custom video capturing from files and live video streams
- support for enrollment, verification and identification operations
- statistical and morphing functions

Additional components are available on special request.

## **SDK technical and system requirements**

Operating system:

Our SDK requires Windows platform. It is tested on Windows Vista, Windows XP, Windows 2003 Server and Windows 2000.

SDK runtime can be accessed via:

- direct call to Betaface runtime DLL
  - call via Betaface COM object interface installed directly or as COM+ application (polling is supported)
- C headers, C# - DLL, C# - COM interfaces and sample applications in VC and C#.Net are included in SDK package.

Additional interfaces and samples can be provided on request.

Our customers using SDK in different development environments, such as C/C++, VC, VB, C#.Net, VB.Net, Java, PHP, ASP/ASP.Net, Javascript.

**SDK Editions features table**

<b>Feature</b>	<b>Betaface SDK Standard</b>	<b>Betaface SDK Pro</b>	<b>Betaface SDK Xtreme</b>
Face detection	Precise 360 degree rotational-invariant parameterized face detector. Minimum detected face size is 25x25 pixels.		
Face features detection	8 points	86 points	
Face detection on video (Face tracker)	not supported		Tracking detected face(s) and facial features in video file or from real-time video streams
Face recognition	Standard face comparison functionality. Include function to generate face "keys", and functions to perform 1-1 or 1-N keys comparison	Advanced face recognition with greatly improved accuracy	Face recognition based on video samples extracted from the video stream, further improved accuracy
Faces cropping	Rectangular parameterized face cropping functions with optional de/rotating or smart face area selection		
Faces morphing	Basic transitional morphing	High quality morphing as transition between 2 faces or distortion (warping) to a new shape	
Static image files input	- image files: JPEG, JPG, JPE, JP2, BMP, DIB, PNG, PBM, PGM, PPM, SR, RAS, TIFF, TIF, EXR - pixel fields loaded directly from RAM.		
Video input	not supported		internal or custom capturing via callbacks.