



Vispro4 - Product Spec

Vispro4 is a face image quality analysis and normalization engine aligned with the ISO/IEC 39794-5 standard for face image data. It provides quality metrics and scores through a REST API for integration into passport, identity document, and biometric enrollment systems. Vispro4 ensures the face image quality and consistency essential for face recognition accuracy, generation of print and chip images, and efficient manual results adjudication.

Standards Compliance

- ISO/IEC 39794-5
- ISO/IEC 19794-5 (predecessor)

Image Quality Metrics and Characteristics

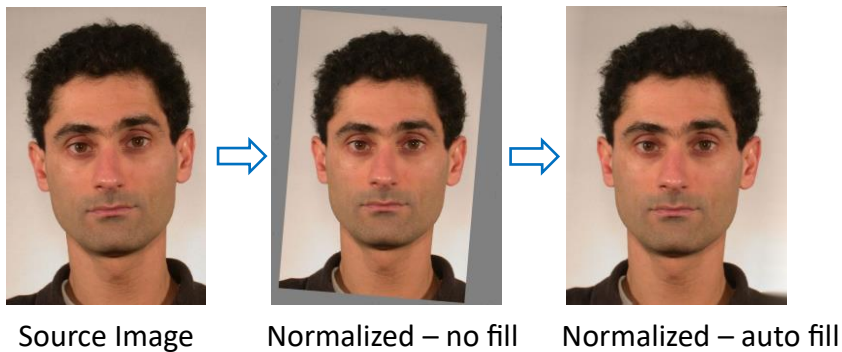
- Unified quality score (overall quality)
- Head size and position
- Head pose angles (pitch, roll, yaw)
- Face over/under exposure
- Face illumination uniformity
- Face contrast and dynamic range
- Compression artifacts
- Face sharpness
- Motion blur
- Face natural color
- Red eye detection
- Ears visible
- Glasses present
- Glasses reflections
- Eyes open, mouth closed
- Eyes/face occlusions
- Neutral face expression
- Background uniformity
- Background color (whiteness)
- Background visibility above head
- Image color vs. Gray or Monochrome
- Image type, color format, size

Metric scores are normalized to a 0–100 range where applicable. Recommended thresholds are provided and can be configured to meet specific application or document requirements.

Image Normalization

Vispro4 can optionally normalize a face image to a specified target format or requirement.

- ISO/IEC 39794-5 Reference Image for MRTD and General Purpose Face Image
- Custom normalization, including image dimensions, head size/position, inter-eye distance
- Automatic image rotation to ensure eye alignment, including filling of background voids
- Output to given specified file size for chip image requirements



Supported Image Types

- JPG, JPG2000, PNG, BMP, TIF, GIF

Integration and Deployment

- REST API for simple integration into any application and platform
- Server, cloud or on-premise deployment
- Operating Systems: Windows 10, Windows 11, Windows Server, Linux (planned)
- Security can be implemented according to application and deployment requirements
- No image data retention

Sample Application

- Web-based sample application provided for testing and configuration
- Supports batch processing and output reports

