

IDA Recognition

Market-leading OCR accuracy – “Made in Germany”

IDA Recognition delivers market-leading OCR and ICR results even in the most demanding scenarios. The patented PerceptionMatrix technology processes distorted scans, poor image quality, and difficult-to-read handwriting with exceptional accuracy. The result: Significantly fewer manual corrections, higher straight-through processing rates, and high-quality data for downstream AI processes.

KEY FEATURES

Patented PerceptionMatrix

PLANET AI's PerceptionMatrix captures even the most complex documents without information loss. Unlike conventional OCR methods, this approach preserves all possible transcriptions of a text. It delivers superior accuracy validated in a benchmark against commercial and open-source providers.

Wide scope of scenarios

IDA Recognition captures machine-printed and handwritten text, checkboxes, tables and historical scripts, even in poor-quality scans with rotated, skewed print. No prior binarization is necessary.

Automatic language detection

IDA Recognition offers language models for Western languages (Latin script) that have been refined over years. It can automatically recognize multiple languages and autonomously apply the appropriate language model.

CONFIGURATIONS

Advanced OCR:

- Western languages (Latin script)
- **Input:** PDF (incl. AcroForm fields, images, OCR, plain text), various image formats (.jpeg, .png, .tiff, .tif, ...)
- **Output:** PDF, PDF/A, JSON, hOCR, .tiff

Add-on options:

- Barcode Recognition
- Entity Finder (highlighting, redaction)
- Historical Scripts
- Non-Latin Script Languages^{BETA}
- Table Recognition

IDA Recognition is available as a client-server application and as a Software Development Kit (SDK).

Comprehensive PDF capabilities

OCR results can be stored as PDFs with text layers containing the generated transcriptions. IDA Recognition supports PDF and all PDF/A conformance levels for efficient document archiving. Additionally, the output PDFs can be searched using the PerceptionMatrix.

Versatile JSON output format

By capturing documents using IDA Recognition, you can easily access them for subsequent tasks in downstream processing any time. This is made possible by a versatile JSON format.

Easy deployment and integration

IDA is deployed either on-premises or in a (private) cloud as a Java application or containerization using Docker. The gRPC API facilitates swift integration – IDA alternatively offers a REST API. IDA Recognition can be utilized as a client-server application or integrated as an SDK. For more information, please contact us or refer to the software documentation.

TECHNOLOGY THAT ENSURES DATA QUALITY FROM THE START

Neural networks

IDA Recognition utilizes multiple specialized neural nets for automatic rotation detection, text finding, and character recognition. Trained on large datasets over many years, they generate Perception Matrices, a lossless, abstract representation of all possible transcriptions

Decoding

The PerceptionMatrix is converted into **human-readable transcriptions** through intelligent decoding methods. IDA Recognition offers three options:

1. **Raw reading** returns the highest-scored transcription from the PerceptionMatrix (“best path”), making it the fastest decoding method suitable for machine-printed text.
2. **Language models**, trained neural networks, perform especially well on handwriting. They have been refined for years and represent the second-fastest decoding method.
3. **Dictionaries** process results based on a weighted list of words, sorted by their frequency in a language. A dictionary is ideal for identifying specific terms in handwritten text.

AVAILABLE LANGUAGES

IDA Recognition offers character recognition for Western languages that use the Latin script. Pre-trained language models to further enhance the recognition results are

IDA RECOGNITION

provided for the following languages:

- Czech
- Dutch
- English
- French
- German
- Italian
- Latin
- Norwegian
- Portuguese
- Slovene
- Spanish
- Swedish
- Swiss German
- Turkish

Arabic and Chinese (simplified) are available as an add-on (Non-Latin Script Languages^{BETA}).

Additional languages available by request

ADD-ONS

Barcode Recognition

Supported codes:

1D		2D
CodaBar	EAN8	Aztec
Code39	EAN13	DataMatrix
Code93	ITF	PDF417
Code128	UPC-E	QR

Historical Scripts

Support of historical blackletter scripts (also referred to as Gothic) and historical handwriting styles (e. g. the German Kurrent and Sütterlin) for the following languages: English, French, German, Latin, Italian.

Entity Finder

Allows for the highlighting and the redaction of information based on either a list of words or regular expressions.

Non-Latin Script Languages^{BETA}

- Arabic
- Chinese (simplified)

Table Recognition

Interpretation of table structures on documents.



Test IDA Recognition yourself with our [OCR Trial](#).
Want to test IDA Recognition's performance with your documents, in your environment?

[Book a demo](#)