OCR310e
Miniature OEM OCR Reading Engine

Ultra-compact, low-power OCR reader designed for integration into third-party portable reading devices
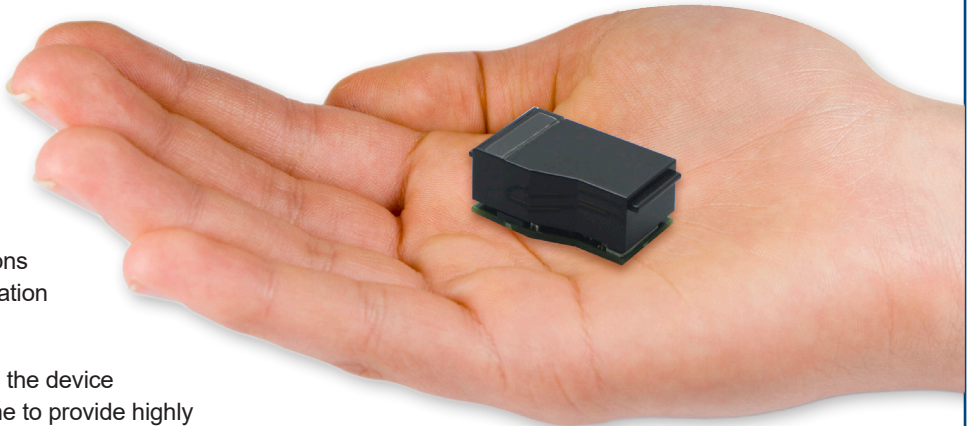
Description

The OCR310e is an optical character recognition (OCR) swipe reader module. Combining ultra-compact size and low-power consumption, the OCR310e is designed to be integrated into third-party, hand-held devices for applications such as portable identification verification devices.

An OCR decoder is integrated within the device using an advanced recognition engine to provide highly accurate and very fast document reading.

The OCR reading engine captures code lines from machine readable passports (MRP), visas (MRV), US and international resident permits as well as European and other national ID cards conforming to ICAO 9303 & ISO/IEC 7501-1 (2 and 3-line MRZ). It will also read the new ISO/IEC 18013-1 driving licences (1-line MRZ), so is future-proofed.

In addition, APACS debit and credit documents (APACS standards 3.1 and 3.2, respectively) can be read together with E13B, OCRB and mixed E13B and OCRB fonts.

OCR310e miniature OCR reading engine

Features

- Miniature package with low power consumption and sleep mode
- Compact footprint
- Rapid and accurate decoding using Access' established OCR decoding technology
- Bidirectional OCR read
    - Reads machine readable passports, visas and travel cards conforming to ICAO Document 9303
    - Reads APACS debit and credit documents, E13B and OCRB fonts
    - Serial or USB interfaces (CDC, HID or keyboard emulation)
    - Developer's kit available.

Applications

Integration into portable devices requiring low-power OCR reading such as:

- Police identification checking
- Queue-busting at airport check-in
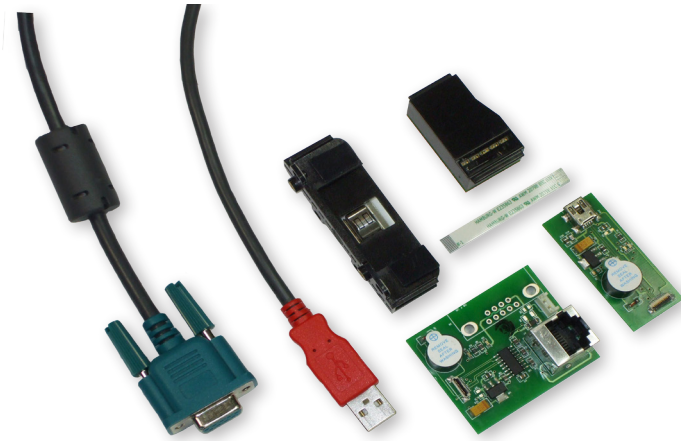- Security checks at airport boarding gates
- AQQ and APIS generation.

Examples of OCR310e integration applications
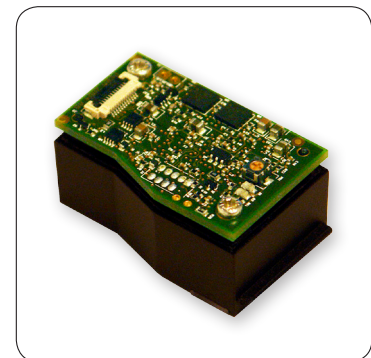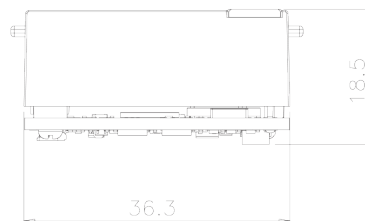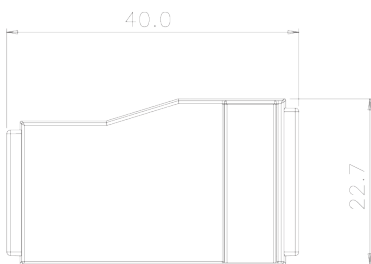
Access IS

www.access-is.com

Developer's Kit

A developer's kit is available to assist in the integration of the OCR310e into OEM equipment.

The kit comprises one OCR310e device, two development boards (one USB and one RS-232), all cables, utilities and documentation.

Dimensions

The OCR310e integrates reading and decoding technologies

Specifications

Read capabilities

Standard OCR fonts: OCR-B and E13B

Machine readable passports (MRP): 2 lines of 44 characters

Machine readable visas (MRV): 2 lines of 44 characters, 2 lines of 36 characters

ID documents: 1 line of 30 characters, 2 lines of 36 characters, 3 lines of 30 characters

MRZ swipe speed: up to 100cm/sec

OCR decoding: up to 0.3 second

Field of view object height: 19.6 mm nominal

Depth of field: 1.5 mm maximum from imager window

General

Overall dimension (excluding flanges): 36.3L x 22.7W x 18.5H mm

Weight: 16 g

Interfaces

Host interface: 3.3V serial, USB HID or USB keyboard output

Connection

Connector: 12-way, 0.5 mm pitch flat flexible ribbon (FFC); mating connector and cable available on request

Electrical specifications

Input voltage: 3.3V +/-5%

Current consumption:

Max: <120mA

Idle: <50mA

Sleep: <30mA

Suspend: <10mA

Environmental

Operating temperature: 0°C to 50°C

Storage temperature: -20°C to 60°C

Approvals

Safety: EN 60950-1: 2006

EMC:

FCC 47CFR Part 15 Class A

EN 55022: 2006 + Amd 1: 2007

EN 55024: 1998 + Amd 1: 2001 + Amd 2: 2003