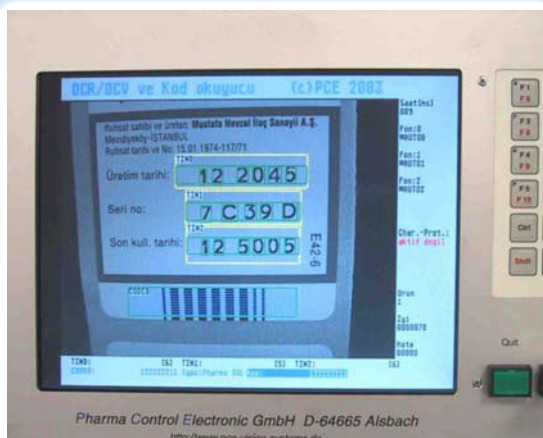


ALS[®]

OCR/OCV Mini-Smart Camera System

Intelligent image processing camera for optical character recognition & verification.



- Variable Data
- Symbols, Icons & Logos
- 4 lines x 20 Characters
- Reading Under 90° Angle
- Code Reading
 - Pharma Binary Code
 - Code 39
 - Interleaved 2/5
 - EAN/UPC
- Control of Print Marks
- Short Evaluation Period
 - 4ms per character
 - 40ms per barcode
- Teach-In Function or Manual Input of Reference
- Format / Product Database
- CFR 21 Part II Option

World Class Labelling Solutions

www.als-eu.com

OCR/OCV Mini-Smart Camera System

Intelligent image processing camera for verification of printed characters and barcodes.

Description

The intelligent camera system is designed for the fast and safe reading of printed characters, logos and icons, as well as for controlling of Pharma Binary Code, Code-39, Interleaved 2/5 and EAN/UPC barcodes plus additional print marks.

Applications

Reading on different packaging materials is possible, e.g.

- Tubes
- Cans
- Vignettes
- Cartons
- Leaflets
- Labels

The most important faults of stamp, hot stamp block, thermal transfer, laser or ink-jet printers can be monitored. The system has a training function for specific characters and therefore provides a very broad tolerance range.

Character sets and reading window positions, once taught in, can be stored and reused as "fonts" and "formats". Up to 4 lines (windows) with up to 20 characters per line can be controlled. An additional window is available for code control. The windows can be positioned perpendicular to each other.

Presence of printing colours and marks can also be monitored.

Operation

Automatic teach-in is possible by a simple push-button step. In addition, manual input can be done via mini keypad, laptop or LAN.

Optics are easily and simply focussed by two spot LEDs.

(...operation cont'd)

A manual trigger is integrated.

The camera system can be networked together with other code reading units from ALS. The Datamatrix camera is addressable without restrictions.

Fault Analysis

The camera reads all characters within the interested area of the label. The result of the reading process is compared with the reference text, e.g. label number, expiry date, batch number, etc., entered at the begin of a batch or at the start of the production. The label is released only if correspondence is detected. Statistics including fault analysis are recordable:

Fault Recognition:

- Reversed characters
- Smeared characters
- Eroded characters
- Contact between characters
- Missing characters

System Components

The small camera head includes all essential parts, including illumination, optics and video unit, in a compact housing that meets GMP standards. Therefore the camera can be installed even in areas with restricted space.

The control unit is separated from the camera head and also has a very small foot-print.

Interfaces to the camera system include; the operator terminal with flat LCD monitor and keyboard, additional code reader input devices, laptops and other options.

Technical Data

OCR/OCV

- Characters & figures
- Icons, logos, symbols
- Control of print marks
- Up to 4 lines of text
- Up to 20 characters per line
- 90° angle between lines
- Eval period 4ms / character
- Reading distance 50 - 150mm

Code Reading

- Pharma binary code
- Code 39
- Interleaved 2/5
- EAN/UPC
- Eval period 40ms / code
- Reading distance 50 - 150mm

Illumination

- 48 super bright white LEDs

Input/Output

- Power supply
- 2 inputs 24V DC for
 - trigger
 - confirmation
- 2 outputs 24V DC for
 - OK pulse/ECC level
 - system active
- Digital interface RS232
- Display output SVGA analog

Power Supply

- +24V DC current ca. 250mA

Dimensions

- Camera head
 - W x H x D 60 x 61 x 40mm (with cable outlet H = 79mm)
- Camera connector cable
 - Standard = 1.5m
- Camera control unit
 - W x H x D 160 x 67 x 80mm

Technical data is subject to change.

ALS is a leading European supplier and manufacturer of high-quality, competitively priced labelling systems, consumables and accessories. In addition to the Mini-Smart Camera, the company offers a comprehensive range of label applicators, print & apply systems and thermal transfer printers, to meet labelling requirements across an extensive range of industries and applications.

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The logo for ALS, consisting of the letters 'ALS' in a bold, blue, sans-serif font. The 'A' and 'S' are connected at the top. A registered trademark symbol (®) is located at the top right of the 'S'.