# **REA** VERIFIER

QUALITY CONTROL DEVICES FOR MATRIX- AND BARCODES

### **REA VeriCube**

Quality Control Device For 2D Matrix- and Barcodes



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The REA VeriCube is a state-of-the-art matrix and barcode verification device which can be used across all industry sectors. Whether lying, standing or from top to bottom, virtually any test sample can be measured in the optimum measuring position.

The measurement of optical codes in compliance with ISO standards at defined angles, distances and lighting allows accurate and reproducible measurement results and quality evaluations.

The measuring system is based on a high-precision optical module with a CMOS camera chip. The system is designed to avoid ambient light influences during the measurement process. The measured values are transmitted via a standard network interface to a PC with REA TransWin32 evaluation software installed.

The verification system consists of the measuring head, an optical module (wide selections of field of view see technical data) and the PC evaluation software REA TransWin32.

With REA VeriCube, you can quickly find out how to improve the read rates of the verified codes. Optimize the print quality of the codes with the help of the detailed measurement results.





#### Features:

- Contact-free measurements by a CMOS camera
- Easy exchangeable camera modules to adapt to different code sizes
- Selectable illumination (red or white light, diffused red light, UV light, IR light)
- Capable of measuring DPM codes (direct part marking)
- Designed to operate in 3 positions to meet different measuring requirements: sidewise, in upright position and upside down, optional with tripod
- Darkened measuring chamber to avoid ambient light influences
- Verification according to ISO/IEC 15415 for printed matrix codes
- Verification according to ISO/IEC 29158 (formerly AIM DPM guideline 2006) for direct part marking matrix codes (optional)
- Verification according to ISO/IEC 15416 or ANSI X3.182 for barcodes

- Verification in compliance with GS1 specifications
- Verification of GS1 data structures
- Verification of optional parameters for optimizing the print process
- Multilingual user interface and reports
- For ease of use, settings can be stored in customized profiles for fast evaluation setting selection
- ISO/IEC 15418 / ANS MH10.8.2 data structure analysis
- Specific code selection to meet the pharmaceutical industry demands
- Power supply via network cable (Power over Ethernet)
- Easy removable and exchangeable transparent cover plate
- Network-compatible PC evaluation software TransWin32 for Windows (multi user capable)
- Option Audit Trail for 21 CFR part 11 and CGMP requirements optionally available



### **Code Types**

#### Matrix Codes (2D):

ISO/IEC 16022 Data Matrix, ISO/IEC 18004 QR-Code, ISO/IEC 24778 Aztec Code, ISO/IEC 20830 Han Xin Code, AIM ISS DotCode, ISO/IEC 15438 PDF417, ISO/IEC 24728 MicroPDF417

#### Barcodes (1D):

ISO/IEC 24723 Composite Code, ISO/IEC 15420 EAN/ UPC (EAN-13, EAN-A, UPC-A, UPC-E and Add-On), ISO/IEC 15417 Code 128, ISO/IEC 16388 Code 39 (with PZN and Code 32), ISO/IEC 16390 interleaved 2 of 5 including ITF-14, ISO/IEC 24724 GS1 DataBar

#### **Optional Codes:**

2/5 3 Bars, 2/5 5 Bars, 2/5 IATA, 2/5 Baggage, 2/5 DHL Express (Frachtpost-Code), Code39 Full ASCII, Code93, MSI, Plessey, Codabar Monarch (18), LAETUS Pharmacode, LAETUS Mini Pharma Code, Russian Crypto Code, China Drug Supervision Code, Japan CVS payment Code, UPU-S10 Postal Codes, DPD Parcel Service

#### Data structures and code properties:

- GS1 data structures: GS1 DataMatrix, GS1 QR-Code, GS1-128, GS1 Databar, GS1 Composite Code), Crypto Code (GS1 General Specifications)
- ISO data structures: ISO/IEC 15418 / ANSI MH10.8.2, ISO/IEC 15459 (part 1 to 8), ISO/IEC 15434 used by Issuing agencies and associations: AIAG, Odette, VDA, EDIFICE, HIBC, DOD, UPU, JEISA, JEITA, IFA ...)
- ISO 28219, ISO 22742, ISO 15394
- EFPIA and PPN support for pharmaceutical industry (delegated Act EU 2016/161 and UDI/MDR 2017/745, 2017/746, US DSCSA, Turkey and more, US GUDID alignment (UDI)
- DOD MilStd 130 IUID support, AIT (German Armed Forces)
- Check digit control settings
- Size control settings
- Customizable date verification
- Optional database (item number verification)

#### **Evaluation**:

- ISO/IEC 15416 for barcodes, ISO/IEC 15415 for 2D Codes
- ISO/IEC 29158 and SAE AS 9132 for DPM
- GB/T 14258 (China barcode), ANSI X3.182

#### Technical Data (Focus position 0 mm):

Focal length	Field Of View (FOV)	Typical X-dimension	Minimum X-dimension	Pixel size
8 mm	114 x 71 mm	0.46 mm	0.25 mm	44 µm
12 mm	80 x 60 mm	0.31 mm	0.18 mm	31 µm
16 mm	64 x 47 mm	0.25 mm	0.15 mm	25 µm
25 mm	37.5 x 27.7 mm	0.14 mm	0.09 mm	14.5 μm
35 mm	28 x 21 mm	0,11 mm	0,079 mm	10,4 µm
50 mm	9 x 6 mm	0.042 mm	0.036 mm	3.6 µm

More camera modules with a focus position of +15 mm and +45 mm are available.

- Measuring accuracy compliant to ISO/IEC 15426-2 and ISO/IEC 15426-1
- Windows Software TransWin32 included
- Red LED light 660 nm or white LED light 4.000 °K, optianally IR 840 mm, 950 mm, UV 365 mm
- Illumination angle 45°, red or white light
- Status LEDs for scan and light source selection
- Power supply via PoE (Power over Ethernet)
- Key panel with on/off, Scan and 1 customizablefunction key
- Flip key panel to accomodate to preferred measuring position

- Exchangeable camera module, resolution 2592 x 1944 pixel
- Camera focus and aperture pre-adjusted by factory
- Size: 200 x 150 x 150 mm (w/l/h), with key panel 210 mm width
- Weight: 2.600 g
- Windows 10 and 11, 64-bit



RJ45 Ethernet port for TCP/IP communication

## **REA** VERIFIER



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