REA VERIFIER

REA VeriCube DPM (Direct Part Marking)

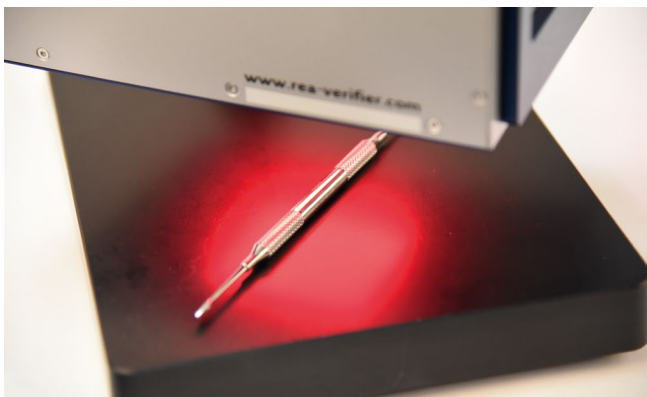Code verification on very glossy surfaces

REA VeriCube DPM
with DOME Illumination

A high first read rate is of outstanding importance for barcodes. Non-readable barcodes force manual entries and increase the risk of errors. In addition to time delays, this leads to disruptions in the operating process.

The REA VeriCube DPM (Direct Part Marking) verifies the code quality of 2D codes. With the modern code verification device, you will quickly find out how you can improve the reading rates of the tested codes. With the help of the detailed measurement results the code quality can be optimized.

REA VeriCube DPM is designed for parts with high-glossy surfaces and is used in all industries, both in the medical product sector, such as surgical instruments, and in the automotive and electronics sectors.

Whether lying, standing, or from top to bottom, virtually any test sample can be measured contact-free in the optimum measuring position.

The measuring system is based on a high-precision optical module with a CMOS camera chip. During the measuring process, ambient light influences are avoided. The measurement of optical codes in compliance with defined angles, distances and illumination allows accurate and reproducible measurement results and quality evaluations.

The measured values obtained are transferred to a PC with the REA TransWin32 Evaluation Software for evaluation and processing.

Verification of surgical instruments

Verification of surgical instruments

Features

- **DOME Illumination**
- Contact-free measurements by a CMOS camera
- Matte white tube insert in the measuring room for extremely diffuse illumination
- Easy exchangeable camera modules to adapt to different code sizes and measuring distances
- Different focus positions (0, +15mm, +45mm) above the glass pane to measure parts where the code cannot be placed on the pane with distance 0
- Selectable diffuse illumination (red or white light)
- Designed to operate in 3 positions to meet different measuring requirements: sidewise, in upright position and upside down. For complex 3D geometry parts the REA VeriCube diffuse is mounted in a stand.
- Verification according to ISO/IEC 15415 for printed matrix codes
- Verification according to ISO/IEC TR 29158 (formerly AIM DPM guideline 2006) for direct part marking matrix codes
- Verification in compliance with GS1 specifications

- Verification of GS1 data structures, ISO/IEC 15459-x series of standards and ISO/IEC 15418 / ANSI MH10.8.2 data structure analysis
- 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 selection
- Specific code selection to meet the pharmaceutical industry demands
- Power supply via network cable (Power over Ethernet)
- Easy removable and exchangeable glass 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 Code Types (2D):

Data Matrix, DPM-Matrix Codes, QR-Code, Dotcode, Micro QR-Code, Aztec Code, PDF 417, MicroPDF, HanXin Code, Composite Codes, more under development

Barcodes (1D):

EAN-13, UPC-A, UPC-E ohne/mit Add-On, EAN-8, 2/5 Interleaved, ITF-14, Frachtpost, Code 39, PZN-Code, Code 32, Code 128, GS1 Databar, GS1 Databar Composite

Optional Codes:

2/5 3 Bars, 2/5 5 Bars, 2/5 IATA, 2/5 Baggage, 2/5 DHL Express (Frachtpost-Code), Code 39 Full ASCII, Code 93, MSI, Plessey, Codabar Monarch (18), LAETUS Pharmacode, LAETUS Mini Pharma Code

Options:

REA VeriCube stand, optional Symbologies, ScanLink, Article Look up Software, Data Analysis

Data structures and properties:

- GS1 data structures (GS1 DataMatrix, GS1 QR-Code, GS1-128, GS1 Databar, Composite)
- ISO/IEC 15418 / ANSI MH10.8.2 data structures (AIAG, Odette, VDA, EDIFICE, HIBC, DOD, UPU...)
- EFPIA and PPN support for pharmaceutical industry
- Check digit control settings
- Size control settings
- Customizable date verification

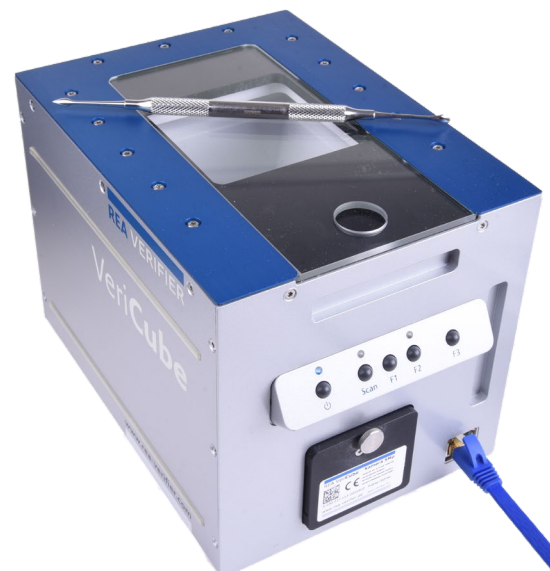## Technical Data

Measuring Distance 0						
Focal Length	**Field of View (FoV)**	**Typical X-dimension**		**Minimum X-dimension**		**Pixel size**
35 mm	24 x 18 mm	0.094 mm	4 mil	0.070 mm	3 mil	9.4 µm
50 mm	9 x 6 mm	0.042 mm	2 mil	0.036 mm	1 mil	3.6 µm

Measuring Distance +15						
Focal Length	**Field of View (FoV)**	**Typical X-dimension**		**Minimum X-dimension**		**Pixel size**
35 mm	26 x 20 mm	0.104 mm	4 mil	0.075 mm	3 mil	10.4 µm
50 mm	10 x 7 mm	0.050 mm	2 mil	0.040 mm	2 mil	3.9 µm

The camera modules are available for measuring plane directly on the glass pane (0 mm), with a distance of 15 mm to the device top plane. The 15 mm distance is required for measuring of complex 3D parts in the REA VeriCube stand. The focal distance tool will help to set the correct distance.

- Measuring accuracy compliant to ISO/IEC 15426-2 and ISO/IEC 15426-1
- Red LED light 660 nm or white LED light, 4.000 °K
- Exchangeable camera module, resolution 2592 x 1944 pixel
- Camera focus and aperture pre-adjusted by factory
- Flip key panel to accomodate to preferred measuring position
- RJ45 Ethernet port for TCP/IP communication and PoE Power supply
- Key panel with on/off, Scan and customizable function keys
- Size: 200 x 150 x 150 mm (w/l/h), with key panel 210 mm width
- Weight: 2.600 g
- Windows 10 or later, 64bit support. The Audit Trail option requires a 64-bit Windows version.

Specifications and features explained here are subject to change without notice.

REA VERIFIER