

# **DMR210**

### **Data Matrix Reader**

Difficult codes read with ease

The DMR210 reader is a robust and compact system for reading directly marked DataMatrix and QR codes.

An excellent feature of this system is its modular design with respect to the optical and lighting components therefore the system is capable to interact with any reading condition. It makes no difference whether the directly marked codes are microscopically small or large or whether the surfaces are curved, reflected or coated. The multichannel, freely programmable LED lighting and suitable optics combined with easy teach-in produce the perfect solution for whatever difficult reading conditions you encounter.

#### **High Speed and High Resolution Version**

With a high speed processor and a high resolution image sensor the system is able to decode even faster and more reliable. Tried-and-tested algorithms ensure fast and reliable decoding.

#### 2-D Code Verification with DMR210

The DMR210 reader also includes the software for an inline and offline verification based on ISO/IEC 29158 standard for DPM codes (Direct Part Marking). The codes are detected with a standardised lighting scenario and the criteria evaluated individually according to ISO/IEC 29158. An overall score is determined with the inclusion of all criteria. The system is calibrated when delivered. For needleembossed data matrix codes, we recommend the evaluation according to our own "rated reading" validation standard.

The DMR210 reader is the ideal system for codes on challenging surfaces in automotive, electronics, automation, medical device, semiconductor and solar industries.

## **DMR210** Technical Data



Application	Reading Data Matrix codes according to ECC200; in particularly directly marked codes
Sensor technology	Progressive scan CCD, 640 x 480 or 1024 x 768 pixels
Reading speed	Up to 20 scans/second
Motion speed	Up to 5 m/s
Reading distance	5 – 1500 mm, depending on lens and lighting conditions
Image size	1-150 mm, depending on lens and lighting conditions
Smallest module size	Down to 20µm, depending on lens
Code grid size	Data Matrix: Up to 48 x 48 square or 16 x 48 rectangular grid (larger on demand)
Data capacity	Data Marix:Up to 348 numerical characters, up to 259 ASCII- characters (larger capacities on demand) QR Code: Up to 552 numerical characters, up to 335 alphanumerical characters, up to 230 bytes (larger capacities on demand)
Quality rating	According to ISO/IEC 29158 or "Rated Reading" for dot peening codes
Orientation of code	Any
Marking method	All typical markings such as laser, dot peening, inkjet, drilled
Interfaces	<ul> <li>Ethernet</li> <li>RS232</li> <li>3 PLC lines for triggers, good/bad and busy-signals</li> <li>Optional: Profibus/Profinet</li> </ul>
Teach In	Simple configuration via graphical user interface
Dimensions	70 x 81 x 142 mm
Weight	Approx. 860 g
Power supply	24 V DC
Temperature range	0 – 40° C
Protection rating	IP54
Housing	Aluminium

Subject to change without prior notice. If you require additional information, please contact us.



THE SENSOLUTION COMPANY

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