# CODE READER™ 1500

## Revolutionizing Data Capture in Manufacturing

**code**

**Expect More.**

## More for Your Application:

- *Patented dual-field optics scan more types of barcodes than any other reader*

- *State of the art zero-miss decoding algorithm deciphers the most difficult barcodes*

- *Optional models optimized to read laser etched DPM or high-density codes*

- *IP54 rated to seal out dust and moisture*

- *Visual, audible, and haptic indicators customizable for workflow needs*

- *Powerful JavaScript platform for complete device control*

- *Optional data parsing of driver licenses and ID cards from the US and Canada*

- *Lightweight and compact*

- *Optional stand and mounts*

## Rugged, Durable, and High-Performing

Data collection is embedded in almost every workflow in every industrial activity: manufacturing, quality control, supply chain management, tracking/tracing, and many more. A barcode reader that is capable of reading all barcodes under tough conditions is mission critical in these enterprise processes. Code's CR1500 is designed to overcome, and exceed these challenges with ease by leveraging Code's years of experience in image processing, decoding and optical design.

Whether you need to read poor quality codes printed on varied surfaces, laser etched direct part marks (DPM) during manufacturing processes, or barcodes as small as 2 mil — there is a model of the CR1500 up to your task. And no matter your system requirements, Code's unique JavaScript platform provides unlimited customization options to meet your application needs.

Powered by a proprietary microprocessor specifically designed for super fast image processing and a best-in-class decoder, the CR1500 is the compact yet durable high-performance 2D barcode reader of choice for all your challenging data collection applications.

## Applications

## Features at a Glance

| IMAGER | 1D | 2D | PDF | POSTAL | CortexRM™ | JAVASCRIPT | USB | RS232 | BLUETOOTH | MEMORY | MOUSE & KEYPAD | CODESHIELD |

## Physical Characteristics

| | |
|---|---|
| **Nominal Dimensions** | 5.2" H x 3.0" L x 2.0" W (132 mm H x 77 mm L x 52 mm W) |
| **Nominal Weight** | 4.1 oz (116 g) |
| **Color** | Dark Gray |
| **IP Rating** | 54 |

## User Environment

| | |
|---|---|
| **Operating Temperature** | -20° to 55°C /-4° to 131°F |
| **Storage Temperature** | -30° to 65°C /-22° to 150°F |
| **Humidity** | 5% to 95% non-condensing |
| **Decode Capability** | 1D: BC412, Codabar, Code 11, Code 32, Code 39, Code 93, Code 128, IATA 2 of 5, Interleaved 2 of 5, GS1 DataBar, Hong Kong 2 of 5, Matrix 2 of 5, MSI Plessey, NEC 2 of 5, Pharmacode, Plessey, Straight 2 of 5, Telepen, Trioptic, UPC/EAN/JAN |
| | Stacked 1D: Codablock F, Code 49, GS1 Composite (CC-A/CC-B/CC-C), MicroPDF, PDF417 |
| | 2D: Aztec Code, Data Matrix, Data Matrix Rectangular Extension, Grid Matrix, Han Xin, Maxicode, Micro QR Code, QR Code, QR Model 1 |
| | Proprietary 2D: GoCode® (Optional License Required) |
| | Postal Codes: Australian Post, Canada Post, Itelligent Mail, Japan Post, KIX Code, Korea Post, Post-Net, Planet, UK Royal Mail, UPU ID-tags |
| **Image Output Options** | Formats: JPEG or PGM |
| **Field Selection** | High Density or Wide Field |
| **Advanced Data Editing** | JavaScript |
| **Data Parsing** | GS1, HIBC, Driver's Licenses/ID Cards (Optional license required) |
| **Data Structure Validation** | ISO15418, ISO15434, UDI/HIBC |

## Performance Characteristics

| | |
|---|---|
| **Field of View** | High Density Field: 30° horizontal by 20° vertical; Wide Field: 50° horizontal by 33.5° vertical |
| **Focal Point** | Approximately 100 mm (Standard Focus) |
| **Sensor** | CMOS 1.2 Megapixel (1280 x 960) gray scale |
| **Optical Resolution** | High Density Field: 960 x 640; Wide Field: 960 x 640 |
| **Pitch** | ± 65° (from front to back) |
| **Skew** | ± 60° from plane parallel to symbol (side-to-side) |
| **Rotational Tolerance** | ± 180° |
| **Symbol Contrast** | 15% minimum reflectance difference |
| **Target Beam** | Single, blue targeting bar, 470 nm |
| **Ambient Light Immunity** | Up to 9,000 foot-candles/96,890 lux |
| **Shock** | Withstands multiple drops of 6' (1.8 Meters to concrete) |
| **Power Requirements** | Reader @ 5 VDC (mA): Typical = less than 350 mA; Idle = 75 mA |
| **Communication Interfaces** | RS232, USB 2.0 (Generic HID, HID Keyboard, Virtual COM Port) |
| **Warranty** | www.codecorp.com/warranty |

## Accessories

- Various Cable Options Available. Visit www.codecorp.com/cables.php for a list of compatible cables
- Stand
- Wall Mount Bracket
- Universal Clamp Mount

## Typical Working Ranges

| | CR1500-K2XX (Standard) | CR1500-L2XX (DPM) | CR1500-M2XX (XHD) |
|---|---|---|---|
| **Test Barcode** | Min Inches (mm) / Max Inches (mm) | Min Inches (mm) / Max Inches (mm) | Min Inches (mm) / Max Inches (mm) |
| 3 mil Code 39 | 3.3" (85 mm) / 4.2" (107 mm) | | 0.6" (14 mm) / 1.5" (39 mm) |
| 5.8 mil PDF417 | | | 0.4" (9 mm) / 1.7" (44 mm) |
| 7.5 mil Code 39 | 0.7" (18 mm) / 6.6" (167 mm) | 0.9" (24 mm) / 6.7" (170 mm) | 1.4" (35 mm) / 2.3" (58 mm) |
| 10.5 mil GS1 DataBar | 0.2" (5 mm) / 8.1" (205 mm) | 0.2" (5 mm) / 6.1" (155 mm) | 0.6" (15 mm) / 2.8" (71 mm) |
| 13 mil Code 128 | 0.5" (13 mm) / 10.4" (265 mm) | 0.7" (17 mm) / 9.6" (245 mm) | 1.2" (31 mm) / 3.3" (83 mm) |
| 3.3 mil Data Matrix | | | 0.4" (11 mm) / 1.1" (29 mm) |
| 4.2 mil Data Matrix | | 1.0" (25 mm) / 2.4" (60 mm) | 0.4" (9 mm) / 1.2" (31 mm) |
| 5 mil Data Matrix | 1.1" (28 mm) / 3.9" (100 mm) | 0.8" (20 mm) / 2.8" (70 mm) | 0.4" (9 mm) / 1.5" (38 mm) |
| 6.3 mil Data Matrix | 0.7" (18 mm) / 5.3" (135 mm) | 0.5" (12 mm) / 3.6" (92 mm) | 0.3" (7 mm) / 1.6" (41 mm) |
| 10 mil Data Matrix | 0.2" (5 mm) / 6.5" (165 mm) | 0.2" (5 mm) / 5.9" (150 mm) | 0.3" (7 mm) / 2.1" (54 mm) |
| 20.8 mil Data Matrix | 0.5" (13 mm) / 12.9" (328 mm) | 0.4" (10 mm) / 10.4" (265 mm) | 0.3" (7 mm) / 3.6" (92 mm) |

Note: Working ranges are a combination of both the wide and high density fields. All samples were high quality barcodes, ead along a physical center line at a 10° angle. Default automatic gain control settings were used with regular office lighting. Accuracy= ± 10%. Test conditions may affect working ranges. Measured from the front of the device in metric units and then converted to imperial units.

## Expect More.

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