CODE READER™ 1500

Revolutionizing Data Capture in Manufacturing



DATA SHEET



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

























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	$\pm~60^{\circ}$ 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 35 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

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)

Expect More.



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= $\pm\,10\%$. Test conditions may affect working ranges. Measured from the front of the device in metric units and then converted to imperial units.

