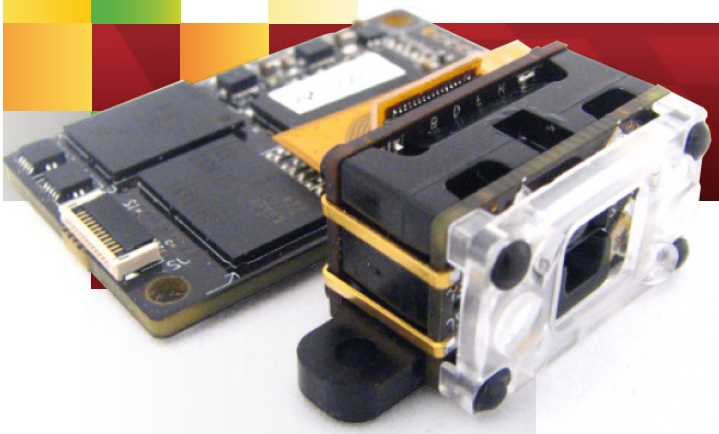
code
ADVANCED BAR CODE READERS



CODE READER™ 8000

Miniature in size, giant in capabilities, the CR8000 does the work of two readers.

A patented, high performance, miniature bar code imaging engine, the CR8000 continues Code's legacy of dual optical fields; featuring a high density field for reading the smallest of bar codes and a wide-angle field for reading oversized bar codes.

Its connectivity includes Code's patented glare reduction technology to effortlessly read bar codes printed on shiny or reflective surfaces. In addition, Code has designed-in functionality to allow the integration and control of additional illumination blocks, or elements such as document scanning, direct parts marking, and other applications that require expanded lighting.

Ultra-efficient mobile device integration.

Mounting options like tabs, blind-through holes and mounting brackets are available for the scan engine and decode board. The CR8000 draws significantly less current and transitions in and out of its low power state faster than any other imager-based scan engine. These two factors are critical when synching to a mobile device, since better power management from the imager facilitates longer battery life for mobile devices. The CR8000 communicates via RS232 or USB protocols and runs Code's JavaScripts. A Software Developer's Kit and Integration Manual can be downloaded, free of charge, from Code's website.

For flexible, advanced performance, the CR8000 makes a powerful addition to your operation.

Features & Benefits

- Dual field optics, both high density and wide field in the same unit
- Ultra fast microprocessor platform with world-class decoding platform
- Connectivity for Code's glare reduction technology
- Attachable illumination blocks for different applications
- Bright LED aiming mechanism
- Compact size fits any application
- Simple to setup and configure
- Customizable parsing routines using JavaScript
- On-board 128MB Flash ROM available for data/program storage
- Built in TTL RS232 or USB interface
- Optional mounting bracket

Applications

Medical Devices, ATMs, Price-lookup, Lottery, Age Verification, Direct Parts Marking and more

Features at a glance

CODE READER™ 8000 SPECIFICATIONS

Physical Characteristics

CR8000 Dimensions	0.47" H x 0.57" L x 0.47" W (11.9mm H x 14.5mm L x 20.6mm W)
CR8000 with Tabs Dimensions	0.47" H x 0.57" L x 1.25" W (11.9mm H x 14.5mm L x 31.7mm W)
Decode PCB	0.30" H x 0.98" L x 1.54" W (7.5mm H x 25.0mm L x 39.0mm W)
CR8000 with Tabs Weight	0.10 oz. (3.0 g)
CR8000 and Decode PCB Weight	0.17 oz. (5.0 g)
CR8000 without Tabs Weight	0.09 oz. (3.0 g)

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:** Codabar, Code 11, Code 32, Code 39, Code 93, Code 128, Interleaved 2 of 5, GS1 DataBar (RSS), Hong Kong 2 of 5, Maxtrix 2 of 5, MSI Plessey, Pharmacode, Plessey, Straight 2 of 5, Telepen, Trioptic, UPC/EAN/JAN
	Stacked 1D: GS1 Composite (CC-A/CC-B/CC-C), MicroPDF, PDF417
	2D: Aztec Code, Data Matrix, Micro QR Code, QR Code, Han Xin
	Proprietary 2D: GoCode® (Additional License Required)
	Postal Codes: Australian Post, Intelligent Mail, Japan Post, KIX Code, PLANET, POSTNET, UK Royal Mail
Image Output Options	JPEG, PGM, BMP
Field Selection	High-Density or Wide Field
Data Editing	JavaScript (Additional License Required)

Working Ranges

CR8000 Performance

Test Code	Min Inches (mm)	Max Inches (mm)
3 mil Code 39	3.1" (100 mm)	4.0" (102 mm)
7.5 mil Code 39	1.3" (33 mm)	7.2" (182 mm)
10.5 mil GS1 Databar	0.8" (20 mm)	8.7" (220 mm)
13 mil UPC	1.1" (28 mm)	11.0" (280 mm)
4.2 mil DM	1.9" (48 mm)	4.3" (110 mm)
5 mil DM	1.7" (43 mm)	4.5" (115 mm)
6.3 mil DM	1.3" (33 mm)	5.9" (150 mm)
10 mil DM	0.8" (20 mm)	7.1" (180 mm)
20.8 mil DM	1.1" (28 mm)	13.5" (343 mm)

Note: working ranges are a combination of both the wide and high density fields. All samples were high quality codes and were read along a physical center line at a 10° angle. Default AGC settings were used. Accuracy = +/- 10%.

Performance Characteristics

Field of View	High Density Field: 30° horizontal by 20° vertical Wide Field: 50° horizontal by 33.5° vertical
Focal Point	High Density Field: approximately 100 mm Wide Field: approximately 115 mm
Sensor	CMOS 1.2 Megapixel (1280 x 960) gray scale
Optical Resolution	High Density Field: 960 x 640 Wide Field: 960 x 640
Pitch	± 60° (from front to back)
Skew	± 60° from plane parallel to symbol (side-to-side)
Rotational Tolerance	± 180°
Print Contrast Res.	25% (1D symbologies) or 35% (2D symbologies) absolute dark/light reflectance differential, measured at 650 nm
Target Beam	Single, blue targeting bar
Ambient Light Immunity	Sunlight: Up to 9,000ft-candles/96,890 lux
Shock	Withstands multiple drops of 6' (1.8 Meters) to concrete
Power Requirements	Reader @ 5vdc (mA): Typical = 303 mA; Idle = 57 mA; Sleep = 1.6 mA
Memory Capacity	128MB Flash ROM, 32MB RAM
Communication Interfaces	RS232, USB 2.0 (Generic HID, HID Keyboard, Virtual Com Port)
Warranty	1 Year

Accessories

- Available Ribbon Cables: 2.0" (50 mm), 6.0" (150 mm) and 12.0" (300 mm)
- Horizontal Decode PCB Mounting Bracket
- Custom Mounting Brackets available upon request

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