Code Reader™ 2500

Features & Benefits

- Dual field optics, both high density and wide field in the same unit
- Glare reduction technology
- Lightweight, ergonomic, fully-mobile modular design (hand held, handle, presentation stand)
- Rapid battery replacement, multiple battery formats and charging options
- User feedback with vibration and/or audible tones
- Unequaled performance on rounded, curved, and shiny surfaces
- Over 10 MB of batch data and JavaScript memory
- Reads all linear stacked and 2D matrix symbologies
- Withstands multiple drops to concrete from 6'
- High speed digital image capture
- Powerful data management capability via JavaScript
- Firmware is field upgradeable
- Multicolor LEDs with optimal focus and FOV indicator

| Imager | 1D | 2D | PDF | Postal | OCR Optical Character | Bluetooth | USB Interface | RS232 Interface | Memory | JavaScript |

Overview

With high-performance bar code reading technology the Code Reader 2500 (CR2500) is the most advanced, modular bar code reader on the market today. The CR2500 decodes bar codes faster and offers new automatic glare reducing illumination technology not found in other readers. The result is unequaled performance, even on difficult reading surfaces, including circuit boards, IV bags, patient-wristbands, driver licenses and other shiny or curved surfaces.

The CR2500 also offers the next generation in dual-field optics and is the only bar code reader that can read both wide linear and the smallest of 2D bar codes.

The CR2500 be can be deployed in low and high-volume use-case scenarios and will excel in batch, cabled or Bluetooth wireless modes. Built on an open JavaScript platform, the CR2500 can be easily customized to meet the data manipulation needs of any end-user application. All scanned data configuration settings and JavaScripts files are stored in non-volatile flash memory and maintained in the event of a power loss.

Enabled for both in-stand and out-of-stand operation the CR2500 can be used as a wireless hand-held and fixed presentation reader. This lightweight, comfortable and easy to use bar code reader solution can be further customized with a handle to fit the needs of applications in the healthcare, public safety, manufacturing, aerospace, industrial, automotive and defense environment.

Representing the embodiment of Code's years of experience with high definition dual-field optics makes the CR2500 future-proof and establishes a new benchmark as the most cost effective reader available in a mobile imaging reader.

Code Reader™ 2500 Specifications

Physical Characteristics

Reader Dimensions:	1.2" H x 4.9" L x 1.8" W (3.0cm H x 12.4cm L x 4.6cm W)
Reader Weight:	3 oz (89 g)
Battery Weight:	2 oz (56 g)
Battery Blank Weight:	0.5 oz (13.6 g)
Battery Handle Weight:	BH1 4.8 oz (136 g) / BH2 6.4 oz (181 g)

Performance Characteristics

Field of View:	High Density Field: 17° horizontal by 10.5° vertical Wide Field: 33° horizontal by 10.5° vertical
Focal Point:	High Density Field: approximately 85 mm Wide Field: approximately 85 mm
Sensor:	CMOS 1.3 Megapixel (1024x1280) gray scale
Optical Resolution:	High Density Field: 1024 x 640 Wide Field: 1024 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% (PDF417) absolute dark/light reflectance differential, measured at 650 nm
Target Beam:	LED multicolor, optimal focus and field of view indicator
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 = 180; Peak = 460; Idle = n/a; Sleep = 3; Bluetooth Radio @ 90m away (mA) Typical = 215 Peak = 595; Idle = 55; Sleep = 3
Optional Cable Interfaces:	USB (Full Speed) and RS232
Memory Capacity:	10 MB Non-Volatile Memory
Operational Modes:	Bluetooth Wireless, Cabled or Batch Mode

FIPS Characteristics (FIPS Compliant Versions Only)

Security:	FIPS 140-2 Level 2 Security
Encryption:	AES 256 bit Encryption with hardware generated session keys
Bluetooth:	Class I Bluetooth® (100 meter range)

Accessories

- Batteries: 1950 mAH Battery Cartridge, 1950 mAH Battery Handle, and 3900 mAh Battery Handle
- Chargers: Single-Bay, Two-Bay, Battery Handle and ECS-H Chargers
- CodeXML® Modems (Bluetooth®)
- CodeXML® Router Software
- Reader Stand
- Elastomer Boot
- USB or RS232 Cables
- US, Europe/South America, or UK Power Supply
- Software Development Kits

User Environment

Operating Temperature:	0° to 50° C / 32° to 122° F
Storage Temperature:	-20° to 65° C /- 4° to 150° F
Humidity:	5% to 95% non-condensing
Decode Capability:	**1D:** UPC/EAN/JAN, Code 39, Code 128, Interleaved 2 of 5, Codabar, GS1 DataBar (RSS), MSI Plessey, Code 11, Code 93, NEC 2 of 5, Matrix 2 of 5, Trioptic Code, Telepen, Hong Kong 2 of 5, Pharmacode, Composite Codes **Stacked 1D:** PDF417, Micro PDF417, Codablock A & F **2D:** Data Matrix, QR Code, Micro QR Code, Aztec Code, Maxicode **Proprietary 2D:** GoCode® (Requires Additional Licensing) **Postal:** USPS OneCode (4CB), POSTNET, PLANET, Japanese Post, Australian Post, Royal Mail, KIX Code **OCR:** OCR-A and OCR-B Fonts, Passports (Requires Additional Licensing)
Image Output Options:	Formats: JPEG, PGM, Raw (Uncompressed)
Field Selection:	High-Density or Wide Field
Field Resolution Selection:	1024 x 640 (Multiple Window Options)
Time Stamp:	Interval Logging
Data Editing:	JavaScript (Requires Additional Licensing) / CodeXML® Rules

Working Ranges

CR2500 Performance	
Wide Field	**Depth of Field**
6.3 mil Data Matrix	87 mm - 95 mm
20.5 mil Data Matrix	32 mm - 153 mm
5.8 mil PDF417	80 mm - 109 mm
7.5 mil Code39	53 mm - 110 mm
10.5 mil GS1 DataBar Stacked	37 mm - 132 mm
12.5 mil Code128	30 mm - 137 mm
High Density Field	**Depth of Field**
6.3 mil Data Matrix	86 mm - 90 mm
20.5 mil Data Matrix	65 mm - 112 mm
7.5 mil Code39	81 mm - 86 mm
10.5 mil GS1 DataBar Stacked	60 mm - 99 mm
12.5 mil Code128	82 mm - 103 mm

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%.

code

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Specifications subject to change without notice.