

# Code Reader 2.0 (CR2)

CR2 is a revolutionary new, bar code reader. Developed to be the first universal reader, no other single device performs as many functions. With a cost of ownership far less than comparable systems, the CR2 incorporates a unique dual path optical system, a 1.3 million pixel CMOS sensor, and a 400 MHz processor. This combination has created a reading system that supports:

- Superior working range
- High-speed omni-directional decoding
- High density matrix codes and larger low density linear codes
- Cordless and cabled interfaces
- Unsurpassed data rates
- Linux OS (OEM version)



The CR2 is configurable and features a clip-on pistol grip handle

The CR2 sets a new benchmark for size and weight. It is smaller and lighter than comparable systems yet can withstand multiple drops to concrete. It is the only product available in handheld, gun handle, and presentation stand form factors with cabled, batch and cordless versions. The cordless version utilizes the latest Bluetooth™ class 1 radio with a 300 foot operating range. Although rugged and lightweight, the cordless version will operate for more than a complete shift at the highest use rate. The CR2 performs more than 4000 reads and transmits from a single battery charge.

The CR2 is versatile enough for the most demanding warehouse and production applications, yet graceful, rapid and economical enough for point-of-sale applications. Small and light enough to be used in parcel tracking, the CR2 features a 1300 milliamp Lithium-Ion battery and 8 MB of non-volatile memory, outperforming all other store and forward devices. CR2 will automatically discriminate between all major 2-D matrix and linear barcode symbologies and features a timestamp feature for logging data.

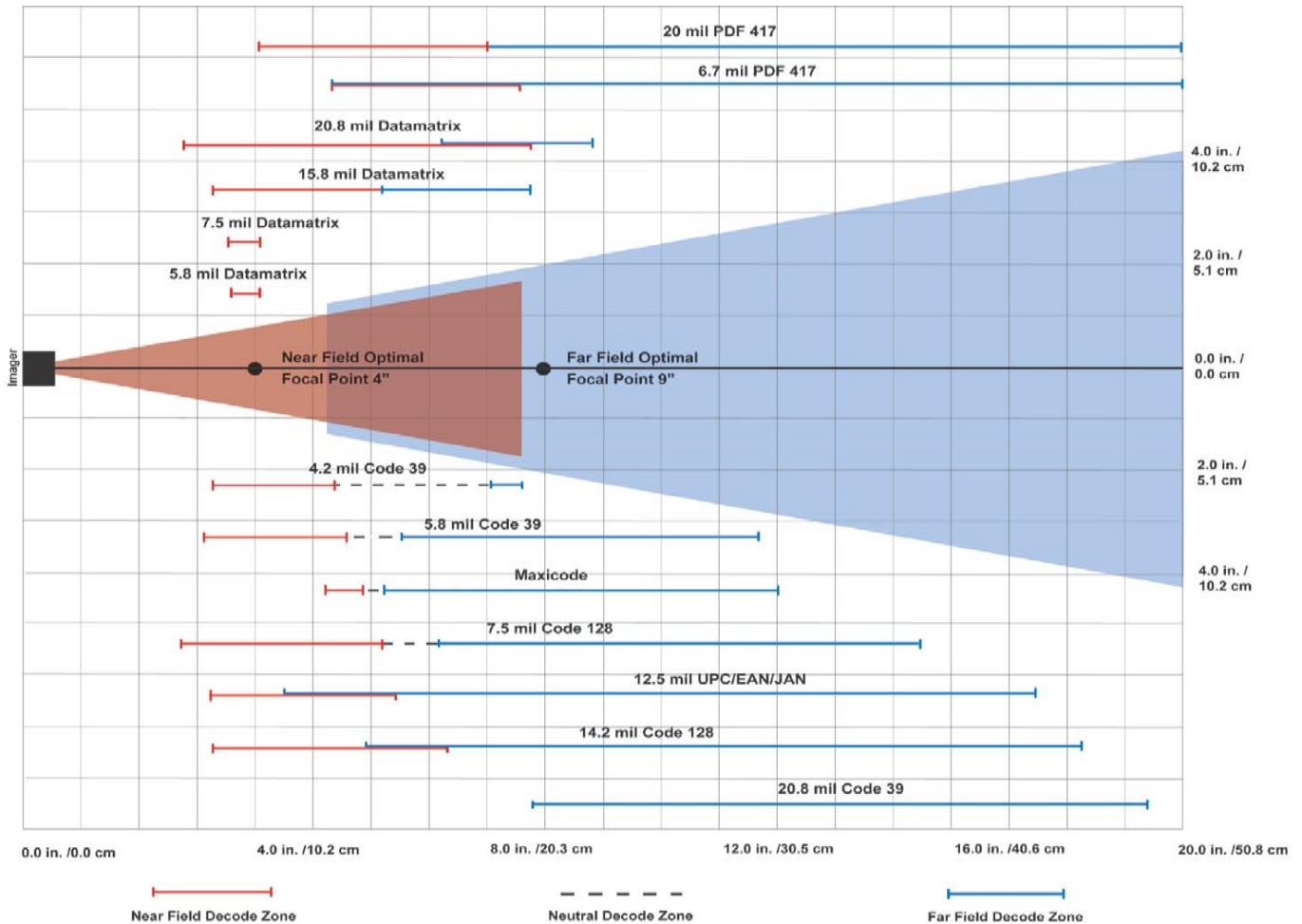
Whether you need a small, palm held device or a traditional gun, CR2 was specifically developed so users may easily choose the device that best meets their needs. The CR2 is available in three (3) configurations:

- **Cabled** - USB or RS-232 (serial)
- **Batch** - Store and forward unit with long-life battery
- **Cordless** - Bluetooth Radio with 300 foot operating range

Accessories
• <b>2 cable options: USB or RS-232</b>
• <b>Long-life Lithium-Ion battery</b>
• <b>Bluetooth radio with 300 foot operating range</b>
• <b>Clip-on pistol grip handle</b>
• <b>External battery charger (Available Q2 2003)</b>
• <b>Presentation Stand (Available Q2 2003)</b>



# CR2 Decode Zone - CR2 features simultaneous near-field and far-field decoding



## Physical Characteristics

**Dimensions:** Reader: 1.3" H x 4.3" D x 1.8" W (3.3cm H x 10.9cm L x 4.6cm W)  
 Handle: 3.8" H x 1.4" D x 1.2" W (9.65cm H x 3.6cm D x 3cm W)

**Weight:** Reader: 2.5 oz (71.5 gm) - Does not include cable  
 Battery: 2.1 oz (59.5 gm) - Does not include cable  
 Battery Blank: .5 oz (13.6 gm) - Does not include cable  
 Handle: 2.1 oz (58.9 gmQ) - Does not include cable

**Cable Length:** 6ft/1.8m

## User Environment

**Operating Temperature:** 0 ° to 40 ° C/32 ° to 104 ° F

**Storage Temperature:** -20 ° to 60 ° C/-4 ° to 140 ° F

**Humidity:** 5% to 95% noncondensing

**Decode Capability:** MaxiCode, PDF417, Data Matrix, QR Code, MicroPDF417, GoCode, UCC Composite, Aztec Code, Code 39, Code 128, UPC/EAN/JAN, Int 2 of 5, Codabar, Code 93, UCC RSS, POSTNET, PLANET, Japanese Post, Australia Post, Royal Mail RM4SCC, KIX code

**Image Output Options:** Formats: JPEG, BMP, TIFF  
 Field Selection: Near or Far  
 Resolution Selection: 1024 x 640, 640x480, 354x288  
 Gray Scale: 256 Level

**Time Stamp:** Interval Logging

## Performance Characteristics

**Field of View:** Near: 21.5° horizontal by 16.2° vertical  
 Far: 22.9° horizontal by 11.6° vertical

**Focal Point:** Near: 21.5° horizontal by 16.2° vertical  
 Far: 22.9° horizontal by 11.6° vertical

**Sensor:** Progressive Scan CMOS 1.33MP (1024x1280) 256 level gray scale

**Optical Resolution:** Near Field: 1024 x 640  
 Far 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:** Class 2 Visible Laser Diode at 630nm

**Ambient Light Immunity:** Sunlight: Up to 9,000ft-candles/96,890 lux

**Shock:** Withstands multiple drops of 6.56 feet (2 Meters) concrete

**Power Requirements:** Reader @ 5vdc (mA) - Typical = 110; Peak = 500; Standby = 28  
 Bluetooth Radio (mA) - Typical = 120; Peak = 600; Standby = 28  
 Battery with radio will support 4000 read/transmits per charge including 8 hours of standby interval.

**Interfaces:** USB (standard) or RS-232, Bluetooth Class 1 Radio (300 feet)