Code Handheld Barcode Scanners

code®

Advanced, cost-effective barcode readers

The Code Reader™ line of advanced barcode readers have been designed to provide reliable data capture in a variety of settings, while maintaining an ergonomic, lightweight form factor. Code has developed the world's best image capture by using a powerful vision sensor and built-in lighting to reliably capture the barcode while not relying on external light sources.

In addition to leading-edge technical capabilities, all Code handheld barcode scanners feature housings made from specially engineered CodeShield™ plastics. These case materials are designed to provide superior, long-term protection against most commonly used chemicals and chemical disinfectants without damage to the housing.

CR950

CR1500

CR6022

The Code Reader™ 950 (CR950) is an aggressive barcode reader that rapidly decodes 1D and 2D barcodes. Its lightweight, ergonomic design makes it comfortable to use over long shifts, and unmatched durability makes it an investment that will last.

The Code Reader™ 1500 (CR1500) is a compact tethered barcode reader that features a high-performance scan engine, patented dual-field optical platform, and intuitive targeting that makes reading 1D, 2D, and postal bar codes extremely fast and reliable.

The Code Reader™ 6022 (CR6022) is an industrial grade direct part mark (DPM) imager designed to read barcodes of every sort. The CR6022 effortlessly reads laser-etched, embossed, dot peen and low-contrast barcodes and easily decodes dense and extremely small barcodes.

CR5210

CR1100

CR2701 / CR2702

The Code Reader™ 5210 (CR5210) is designed for use in fast-paced environments and handles data from 1D, 2D and postal barcodes with speed and accuracy. The tabletop design allows for hands-free operation or optional trigger reading of large, heavy or bulky items.

The Code Reader™ 1100 (CR1100) is a compact, corded barcode reader that takes up limited workspace without compromising barcode reading performance. The patented dual-field optical platform of the CR1100 allows users to quickly scan both wide 1D barcodes and small dense 2D barcodes.

The Code Reader™ 2700 (CR2701/CR2702) is Code's fourth-generation (Bluetooth 5) barcode scanner, combining nearly 20 years of market experience with new features to improve workflow in any setting. Code has taken their unparalleled scanning performance and stepped it up a notch, tackling even more damaged or poorly-printed barcodes to keep your business moving.

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CR1100 Advanced Cost-Effective Barcode Scanner

CR1100

The Code Reader™ 1100 (CR1100) is a versatile barcode reader that is easy to set up and use in a variety of different settings. It is available with either USB or RS-232 communication capabilities. The USB version can connect to the *C-more* HMI. AutomationDirect provides sample code which can be used to connect the reader to Click, BRX, and Productivity PLCs.

Features

- High-speed, omnidirectional reading of 1D and 2D barcode symbologies.
- Manual or automatic triggering.
- Pre-threaded screw holes to allow for mounting.
- User feedback with LED and audible tone.
- Reads barcodes on mobile device screens.
- Efficient power consumption (lowest in its class).
- Optional stand (sold separately).

Code Handheld Barcode Reader – Selection Chart

Part Number	Price	Description	Communication Protocol	Corded/ Cordless	Form Factor	Weight (lb [kg])	Dimensional Drawing
CR1100-K201-C298	$236.00	Code barcode scanner, 6ft [1.83 m] USB cable included.	USB	Corded	Handheld/ presentation	0.15 [0.07]	PDF
CR1100-K202-C298	$260.00	Code barcode scanner, 6ft [1.83 m] RS-232 (DB9) cable and power supply included.	RS-232	Corded	Handheld/ presentation	0.15 [0.07]	PDF

Code Handheld Barcode Scanners Typical Working Range (in [mm])

Size and Type of Barcode (in [mm])	CR1100-K20x-C298	
	Min	Max
3 mil Code 39	3.3 [84]	4.3 [109]
7.5 mil Code 39	1.9 [47]	7 [177]
10.5 mil GS1 DataBar	0.6 [16]	7.7 [196]
5.8 mil PDF417	–	–
6.7 mil PDF417	–	–
13 mil UPC	1.3 [33]	11.3 [286]
4.2 mil Data Matrix	–	---
5 mil Data Matrix	1.9 [48]	4.8 [121]
6.3 mil Data Matrix	1.4 [35]	5.6 [142]
10 mil Data Matrix	0.6 [14]	7.2 [182]
20.8 mil Data Matrix	1.0 [25]	12.6 [319]

Note: Working ranges may vary depending on barcode quality and reading environment. The above numbers are a combination of both the wide and high density fields. All samples were high quality barcodes and were read along a physical center line at a 10 degree angle. Distances are measured from the front of the reader. Default automatic gain control settings were used with regular office lighting. Accuracy = +/- 10%. Test conditions may affect working ranges.

Code Handheld Barcode Scanners Specifications

	CR1100-K20x-C298
Power Requirements	5VDC (USB versions are powered from the host device) (RS232 versions utilize a 120VAC-to-5VDC power adapter)
Sensor	CMOS 1.2 megapixel monochrome
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
Field Selection	High Density (used for small/dense barcodes) and Wide Field (used for long barcodes)
Field of View	High Density: 30° horizontal by 20° vertical Wide Field 50° horizontal by 35.5° vertical
Focal Point	High Density: ~100mm [3.94 in] Wide Field ~115mm [4.53 in]
Optical Resolution	High Density: 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
Ambient Light Immunity	Sunlight: Up to 9,000 ft candles
Shock	Withstands multiple drops of 6ft [1.8 m] to concrete
IP Rating	Not tested
Agency Approval	CE

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Code Handheld Barcode Scanners Decode Capability							
Decode Capability		CR950	CR1100	CR1500	CR5210	CR270x	CR6022
1D	BC412	✓	✓	✓	✓	✓	✓
	Codabar	✓	✓	✓	✓	✓	✓
	Code 11	✓	✓	✓	✓	✓	✓
	Code 32	✓	✓	✓	✓	✓	✓
	Code 39	✓	✓	✓	✓	✓	✓
	Code 39 Extended	–	✓	–	–	–	✓
	Code 93	✓	✓	✓	✓	✓	✓
	Code 128	✓	✓	✓	✓	✓	✓
	GS1 Databar	✓	✓	✓	✓	✓	✓
	Hong Kong 2 of 5	✓	✓	✓	✓	✓	✓
	IATA 2 of 5	✓	✓	✓	✓	✓	✓
	Interleaved 2 of 5	✓	✓	✓	✓	✓	✓
	Matrix 2 of 5	✓	✓	✓	✓	✓	✓
	MSI Plessey	✓	✓	✓	✓	✓	✓
	NEC 2 of 5	✓	✓	✓	✓	✓	✓
	Pharmacode	–	✓	✓	✓	✓	✓
	Straight 2 of 5	✓	✓	✓	✓	✓	✓
	Telepen	✓	✓	✓	✓	✓	✓
	Trioptic	✓	✓	✓	✓	✓	✓
	UK Plessey	✓	✓	✓	✓	✓	✓
	UPC/EAN/JAN	✓	✓	✓	✓	✓	✓
Stacked 1D	Codablock F	–	✓	✓	✓	✓	✓
	Code 49	–	✓	✓	✓	✓	✓
	GS1 Composite (CC-A/CC-B/CC-C)	✓	✓	✓	✓	✓	✓
	GS1 DataBar Expanded Stack	✓	✓	–	–	–	✓
	MicroPDF	✓	✓	✓	✓	✓	✓
	PDF417	✓	✓	✓	✓	✓	✓
2D	Aztec Code	✓	✓	✓	✓	✓	✓
	Data Matrix	✓	✓	✓	✓	✓	✓
	Grid Matrix	–	✓	✓	✓	✓	✓
	HanXin	–	✓	✓	✓	✓	✓
	Maxicode	–	✓	✓	✓	✓	✓
	Micro QR Code	✓	✓	✓	✓	✓	✓
	QR Code	✓	✓	✓	✓	✓	✓
	QR Model 1	–	✓	✓	✓	✓	✓
Postal Codes	Australian Post	–	✓	✓	✓	✓	✓
	Canada Post	–	✓	✓	✓	✓	✓
	Japan Post	–	✓	✓	✓	✓	✓
	KIX Code	–	✓	✓	✓	✓	✓
	Korea Poast	–	✓	✓	✓	✓	✓
	UK Royal Mail	–	✓	✓	✓	✓	✓
	UPU ID Tags	–	✓	✓	✓	✓	✓
	USPS Intelligent Mail	–	✓	✓	✓	✓	✓
	USPS Planet	–	✓	✓	✓	✓	✓
	USPS Post-net	–	✓	✓	✓	✓	✓

Barcode, RFID, Vision

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Code Handheld Barcode Reader Accessories				
Part Number	**Price**	**Description**	**Weight (lb [kg])**	**Drawing**
CRA-C503-C298	$38.50	8ft coiled RS232 cable with power supply	0.40 [0.18]	N/A
CRA-A274-P1-C298	$108.00	Quad bay battery charger	0.67 [0.30]	N/A
CRA-B27DK-C298	$75.00	Battery for CR270x	0.10 [0.05]	N/A
CRA-C34-C298	$15.00	3ft straight USB cable (USB-A to micro USB)	0.09 [0.04]	N/A
CRA-C500-C298	$14.50	6ft straight USB cable	0.15 [0.07]	N/A
CRA-C501-C298	$14.50	8ft coiled RS232 cable	0.35 [0.16]	N/A
CRA-C502-C298	$14.50	6ft straight RS232 cable	0.20 [0.09]	N/A
CRA-C508-C298	$14.50	8ft coiled USB cable	0.25 [0.11]	N/A
CRA-C519-C298	$14.50	6ft straight DB9-RJ12 RS232 cable	0.20 [0.09]	N/A
CRA-US3-C298	$26.00	Flexible stand for CR950, CR1100 in dark gray	0.85 [0.39]	PDF
CRA-US4-C298	$38.50	Flexible stand for CR6022 in dark gray	0.85 [0.39]	PDF
CRA-US9-C298	$17.50	Rigid stand for CR950, CR1100 in dark gray	0.20 [0.09]	PDF
CR2AG-P1-C298	$26.00	Power supply for RS232 readers	0.10 [0.05]	N/A

RS232 Accessories

CRA-C501-C298

CRA-C502-C298

CR2AG-P1-C298

CRA-C519-C298

CRA-C503-C298

USB Cables

CRA-C500-C298

CRA-C508-C298

CRA-C34-C298

Stands

CRA-US4-C298

CRA-US3-C298

CRA-US9-C298

Battery and Charger

CRA-B27DK-C298

CRA-A274-P1-C298

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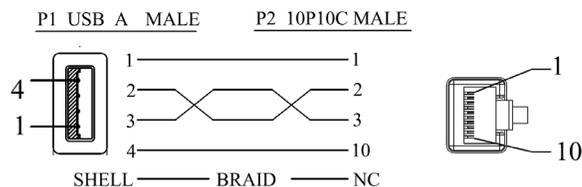| Compatibility					
Scanner	C-more EA9	C-more CM5	Productivity PLC	CLICK PLC	BRX PLC
CR950-K301-C298	Yes, with powered USB hub	Yes	No	No	No
CR950-K302-C298	No	No	Yes	Yes	Yes
CR1100-K201-C298	Yes, with powered USB hub	Yes	No	No	No
CR1100-K202-C298	No	No	Yes	Yes	Yes
CR1500-K201-C298	Yes, with powered USB hub	Yes	No	No	No
CR1500-K202-C298	No	No	Yes	Yes	Yes
CR5210-C502-C298	No	No	Yes	Yes	Yes
CR5210-C500-C298	Yes, with powered USB hub	Yes	No	No	No
CR2701-200-C298	Yes**	Yes**	No	No	No
CR2702-200-C298	Yes**	Yes**	No	No	No
CR6022-C500-C298	No	No	No	No	No
CR6022-C502-C298	No	No	Yes	Yes	Yes

** Please note that although the CR270x will work with the HMI, the HMI will not provide enough current to charge the scanner. However, the scanner battery can always be charged using an external charger such as the CRA-A274-P1-C298 quad bay battery charger.
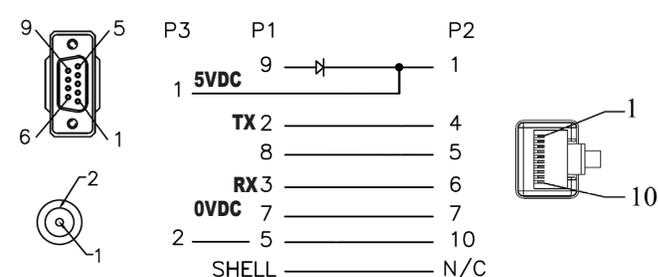
System Assembly Options

ZL-RTB-DB09
(optional)

CR950-K302-C298
CR1100-K202-C298
CR6022-C502-C298

CRA-C519-C298

PLC

Connection Diagrams

USB Connections
(CRA-C500-C298, CRA-C508-C298)

P1 USB A MALE   P2 10P10C MALE

4 1
1 2   1
   3   2
   4   3
          10

SHELL ——— BRAID ——— NC

DB9 to RJ12
(CRA-C519-C298)

P1 DB9PIN MALE   P2 6P6C MALE

6 1   3   4
9 5   2   3
            5   1

SHELL ——— BRAID ——— NC

RS232 Connections
(CRA-C501-C298, CRA-C502-C298)

9 5
6 1

P3   P1   P2
        9   1
1 5VDC
        TX 2   4
        8   5
        RX 3   6
        0VDC 7   7
2   5   10
        SHELL   N/C