

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.

Three models are available. Each of these models can be purchased with a USB or serial communications option.



CR950

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.



CR1100

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



CR6022

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.

Features

- High-speed, omnidirectional reading of 1D and 2D barcode symbologies.
- Manual or automatic triggering. Stand (sold separately) is required for automatic triggering.
- User feedback with LED and audible tone.
- All-inclusive kits include reader and cable.
- Reads barcodes on backlit screens such as those found on mobile devices.
- Optional stand (sold separately).

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).

Features

- Reads laser-etched and dot peen markings.
- Reads color and low-contrast barcodes.
- IP54 housing protects against dust and debris.
- Small form factor for operator comfort.
- Integrated metal hook holder for ease of placement and retrieval.
- User feedback with programmable LED, audible tone and vibrating good read indicators.
- Operates hands-free or handheld.
- 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
CR950-K301-C298	\$144.00	Code barcode scanner, 6ft [1.83 m] USB cable included.	USB	Corded	Handheld	0.25 [0.11]	PDF
CR950-K302-C298	\$172.00	Code barcode scanner, 6ft [1.83 m] RS-232 (DB9) cable and power supply included.	RS232	Corded	Handheld	0.25 [0.11]	PDF
CR1100-K201-C298	\$234.00	Code barcode scanner, 6ft [1.83 m] USB cable included.	USB	Corded	Handheld/presentation	0.15 [0.07]	PDF
CR1100-K202-C298	\$255.00	Code barcode scanner, 6ft [1.83 m] RS-232 (DB9) cable and power supply included.	RS232	Corded	Handheld/presentation	0.15 [0.07]	PDF
CR6022-C500-C298	\$744.00	Code barcode scanner, 6ft [1.83 m] USB cable included.	USB	Corded	Handheld	0.35 [0.16]	PDF
CR6022-C502-C298	\$754.00	Code barcode scanner, 6ft [1.83 m] RS-232 (DB9) cable and power supply included.	RS232	Corded	Handheld	0.35 [0.16]	PDF

Code Handheld Barcode Scanners



Code Handheld Barcode Scanners Decode Capability				
	<i>Decode Capability</i>	<i>CR950-xxx-C298</i>	<i>CR1100-xxx-C298</i>	<i>CR6022-xxx-C298</i>
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	✓	✓	✓
	GoCode		✓	✓
	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		✓	✓	

Code Handheld Barcode Scanners



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

Size and Type of Barcode (in [mm])	CR950-xxx-C298		CR1100-xxx-C298		CR6022-xxx-C298	
	Min	Max	Min	Max	Min	Max
3 mil Code 39	-	-	3.3 [84]	4.3 [109]	1 [25]	2 [50]
7.5 mil Code 39	2 [50]	9.6 [245]	1.9 [47]	7 [177]	0.8 [20]	5.9 [150]
10.5 mil GS1 DataBar	1.4 [35]	8.9 [225]	0.6 [16]	7.7 [196]	0 [0]	5.9 [150]
5.8 mil PDF417	3.3 [85]	14.6 [370]	-	-	-	-
6.7 mil PDF417	2.6 [65]	6.1 [155]	-	-	-	-
13 mil UPC	1.6 [40]	6.9 [175]	1.3 [33]	11.3 [286]	0.6 [15]	7.9 [200]
4.2 mil Data Matrix	-	-	-	-	0.6 [15]	1.8 [45]
5 mil Data Matrix	3.0 [75]	3.5 [90]	1.9 [48]	4.8 [121]	0.6 [15]	2.4 [60]
6.3 mil Data Matrix	2.8 [70]	5.3 [135]	1.4 [35]	5.6 [142]	0.2 [5]	3 [75]
10 mil Data Matrix	2.0 [50]	8.1 [205]	0.6 [14]	7.2 [182]	0 [0]	3.9 [100]
20.8 mil Data Matrix	1.2 [30]	15.7 [400]	1.0 [25]	12.6 [319]	0.4 [10]	7.5 [190]
Low Contrast Data Matrix DPM						
Laser Marks	-	-	-	-	0 [0]	1.4 [35]
Dot Peen Marks	-	-	-	-	0 [0]	2.8 [70]

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

	CR950-xxx-C298	CR1100-xxx-C298	CR6022-xxx-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	CMOS 1.2 megapixel monochrome	CMOS 1.2 megapixel monochrome
Operating Temperature	-20 to 50°C [-4 to 122°F]	-20 to 55°C [-4 to 131°F]	-20 to 55°C [-4 to 131°F]
Storage Temperature	-30 to 65°C [-22 to 150°F]	-30 to 65°C [-22 to 150°F]	-30 to 65°C [-22 to 150°F]
Humidity	5% to 95% non-condensing	5% to 95% non-condensing	5% to 95% non-condensing
Field Selection	Wide Field (used for long barcodes)	High Density (used for small/dense barcodes) and Wide Field (used for long barcodes)	High Density (used for small/dense barcodes) and Wide Field (used for long barcodes)
Field of View	51° horizontal by 39.4° vertical	High Density: 30° horizontal by 20° vertical Wide Field 50° horizontal by 35.5° vertical	30° horizontal by 33.5° vertical
Focal Point	Approximately 130mm [5.12 in]	High Density: ~100mm [3.94 in] Wide Field ~115mm [4.53 in]	~50mm [1.97 in]
Optical Resolution	1280 x 960	High Density: 960 x 640 Wide Field: 960 x 640	High Density: 960 x 640 Wide Field: 960 x 640
Pitch	± 65° (from front to back)	± 65° (from front to back)	± 65° (from front to back) (varies with DPM)
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	IP54	Not tested	IP54
Agency Approval	CE		

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Code Handheld Barcode Reader Accessories				
Part Number	Price	Description	Weight (lb [kg])	Dimensional Drawing
CRA-C501-C298	\$14.50	6ft straight USB cable	0.15 [0.07]	N/A
CRA-C501-C298	\$14.50	CR1100-K201-C298	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](#)

USB Cables



[CRA-C500-C298](#)



[CRA-C508-C298](#)

Stands



[CRA-US3-C298](#)



[CRA-US4-C298](#)



[CRA-US9-C298](#)

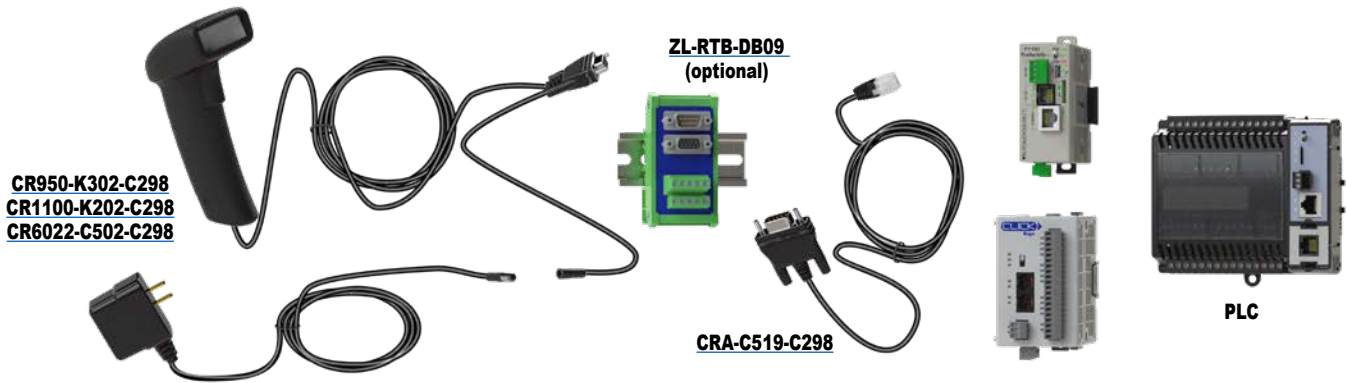
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Compatibility					
Scanner	C-more EA7*	C-more EA9	Productivity PLC	CLICK PLC	BRX PLC
CR950-K301-C298	Yes	Yes	No	No	No
CR950-K302-C298	No	No	Yes	Yes	Yes
CR1100-K201-C298	Yes	Yes	No	No	No
CR1100-K202-C298	No	No	Yes	Yes	Yes
CR6022-C500-C298	Yes	No	No	No	No
CR6022-C502-C298	No	No	Yes	Yes	Yes

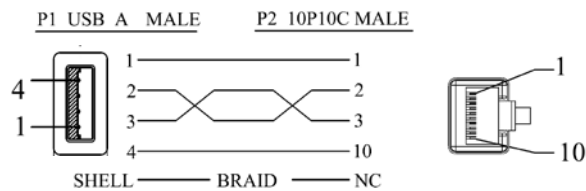
* Please note that the C-more EA7 is no longer in active production.

System Assembly Options

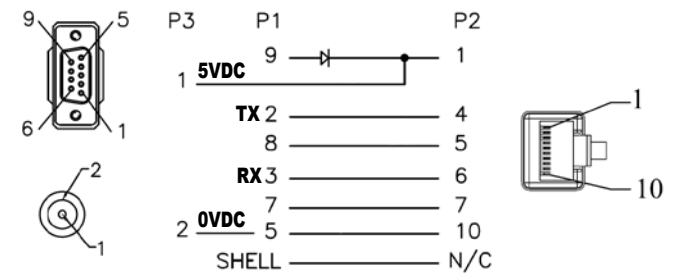


Connection Diagrams

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



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



DB9 to RJ12 (CRA-C519-C298)

