

# Bluetooth® Cordless Hand Scanner Series 7

Lightweight, Pocket-sized, Dependable

## Data Collection for Mobile Workers

The Socket *Bluetooth* Cordless Hand Scanner (CHS) Series 7 brings industrial-class barcode scanning into a pocket-sized form factor. It enables new opportunities to bring the productivity benefits of 2D and 1D barcode scanning to mobile workers.

The CHS provides the right features to simplify data collection, giving users an essential tool that they can rely on. Its light, ergonomic yet rugged design withstands the daily rigors of field use. It's comfortable to use for long periods of scanning and slips easily into a pocket, carry on a lanyard or attach to a belt.

Battery Friendly® technology enables multi-shift/ multi-day scanning and reduces the power consumption of the host computer while providing the freedom of a reliable, long range wireless connection.

The wide range of host device support and complete SocketScan™ software suite eases integration into existing applications. For new deployments, Socket's VAR / integrator partners provide diverse solutions which integrate the Socket *Bluetooth* CHS Series 7.

### Features:

- Comfortable to use over extended periods and easy to carry
- Easy integration with applications on mobile computing platforms
- Dependable with long battery life and reliable, long-range *Bluetooth* connection








### HARDWARE FEATURES

- *Bluetooth* 2.1<sup>1</sup> or 2.0 Class 1 wireless connection (up to 330 ft/100 m from host device)
- Rugged versions withstand multiple drops onto concrete and are dust, shock and water resistant
- Antimicrobial versions for healthcare, food service and other hygiene sensitive applications
- Battery Friendly® technology enables extensive battery life on a single charge
- LED indicates good scan, connection, power status
- Tactile Vibrate Recognition for high ambient noise environments<sup>1</sup>
- Built-in stylus tip for use with touch screen devices
- Works with *Bluetooth* enabled PDAs, smartphones and computers including: Apple iPad, iPhone, iPod touch; Windows platforms; and Nokia, Palm and BlackBerry smartphones<sup>2</sup>
- Error Proof Protocol™ ensures scanned data reaches host computer over *Bluetooth* link

### SOFTWARE FEATURES<sup>3</sup>

- Connect!Agent software for Windows Mobile automatically configures and manages the *Bluetooth* connection
- SocketScan™ keyboard wedge software enters scanned data into any application — no custom programming needed
- Eliminate manual data entry with automatic prefix / suffix functions, such as carriage return and tab
- Power and beep tone management
- SocketScan Symbology Selector for enabling/ disabling barcode symbologies
- View the properties of any barcode for any of the supported symbologies
- *Bluetooth* security and reconnection options
- No license fee for standard software
- Works with Windows-based development tools for custom applications (SDK available)
- SocketScan Floating Trigger lets you conveniently tap an on-screen icon to trigger the scanner
- SocketScan ActivePairing™ and Permanent Pair make the *Bluetooth* connection quick, easy, and convenient

### WHICH VERSION IS RIGHT FOR YOU?

<b>CHS 7E2</b> Reliable, Affordable 1D Laser		- For light-duty or general-purpose indoor scanning - Reads all common 1D/linear and stacked barcodes up to 10.5" (27 cm) away - Class 1 laser technology
<b>CHS 7M2</b> Long-range 1D Laser		- Moderate to intensive scanning, including ISBN book and VIN numbers - Easy to use and can scan thousands of barcodes per day, up to 45" (114 cm) away - Reads 1D and stacked barcodes, even if they are worn or damaged - Class 2 laser technology
<b>CHS 7P</b> Rugged Long-range 1D Laser		- High-performance for scanning small barcodes indoors or outdoors - Ruggedized dust, shock and water resistant case withstands 5 ft (1.5 m) drops - Ideal for reading VIN numbers, through Mylar / thick glass or damaged barcodes - Easy to use and can scan thousands of barcodes per day, up to 45" (114 cm) away - Class 2 laser technology reads 1D and stacked barcodes
<b>CHS 7X</b> Rugged 1D & 2D Omni-directional		- Xtreme performance for 2D, 1D, PDF barcodes, including small barcodes - Ruggedized dust, shock and water resistant case withstands 5 ft (1.5 m) drops - <i>Bluetooth</i> v2.1 with 330 ft (100 m) range - No software installation required, edit data with special barcodes - Tactile vibrate recognition for high ambient noise environments
<b>CHS 7XRx</b> <b>CHS 7NRx</b> Rugged Antimicrobial 1D & 2D		- Features an antimicrobial case inhibiting growth of bacteria and microbes - Ruggedized dust, shock and water resistant case withstands 5 ft (1.5 m) drops - 2D or 1D barcodes, reads worn, poorly printed or damaged barcodes - <i>Bluetooth</i> v2.1 <sup>1</sup> or v2.0 with 330 ft (100 m) range - Tactile vibrate recognition for high ambient noise environments <sup>1</sup>

Charging cradles  
(sold separately)



<sup>1</sup>Version 7X and 7XRx only.

<sup>2</sup>Not all scanner versions support all OS platforms or devices. See specifications for specific smartphone models.

<sup>3</sup>Software not required for *Bluetooth* HID mode of 7X and 7XRx.

# Socket *Bluetooth* Cordless Hand Scanner (CHS) Series 7

## In the Box:

- Socket *Bluetooth* Cordless Hand Scanner
- Charging source
- Lanyard/belt clip with retractable tether
- Rechargeable battery
- Software (laser versions only) and documentation

## Optional Accessories:

- Lanyard / belt clip
- Charging Cradle
- USB to DC Plug Charging Cable
- AC Charger with International Plugs
- Car Charger
- Scanning Companion: USB *Bluetooth* Adapter
- Mobile Power Pack: portable battery pack (Available only in Americas and Asia Pac)
- SocketScan SDK

For more information, please visit:

<http://www1.socketmobile.com/products/bluetooth-scanners/accessories-bt1.aspx>

Items not shown to scale and may vary slightly from those shown.



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SPECIFICATIONS						
	CHS 7E2 Short-Range 1D Laser	CHS 7NRx Short-Range 1D Laser	CHS 7M2 Long-Range 1D Laser	CHS 7P Long-Range 1D Laser	CHS 7X Omni-directional 2D & 1D	CHS 7XRx Omni-directional 2D & 1D
SKU #	CX2847-1193	CX2852-1245	CX2850-1243	CX2830-1097	HID: CX2849-1242 SPP: CX2854-1276	HID: CX2843-1160 SPP: CX2856-1278
Scanner Type	Class 1 laser (1D)		Class 2 laser (1D)		High Density Imager with Performance Aiming (2D, 1D)	
Symbology Support	Chinese 2 of 5, Codabar, Code 11, Code 128, Code 39, Code 93 , Discrete 2 of 5, GS1 Data-Bar (RSS), GS1-128 (UCC-128 / EAN-128), Interleaved 2 of 5 (ITF-14), ISBN, MSI, UPC/EAN			Same as 7E2, 7NRx, 7M2  Recommended for VIN vehicle numbers	Same as other models (except Chinese 2 of 5), plus:  Aztec, Codabar with ISBT 128 bit concatenation, Codablock, Data Matrix, GS1 Composite (EAN / UCC Composite), GS1 DataBar Limited (RSS Limited), Matrix 2 of 5, Maxi-Code, PDF 417, Macro / Micro PDF 417, Plessey, QR Code, Standard 2 of 5, Telepen, TLCode 39, postal (various)	
Decode Distance¹	1.5 to 10.5 inches (3.8 to 27 cm)		1.5 to 45+ in. (3.8 to 114+ cm)		1.5 to 10.5 in. (3.8 to 27 cm)	
Ruggedized Case		✓		✓	✓	✓
Antimicrobial Case		✓				✓
Tactile Vibrate Recognition					✓	✓
Operating Temperature	+32 to +122°F (0 to +50°C)					
Battery Type	Two AAA NiMH rechargeable batteries				One Li-ion rechargeable battery	
Battery Life with Bluetooth Enabled	19 hours or 15,000 scans²				10 hours on single charge	
OS Support						
• Windows Mobile³	✓	✓	✓	✓	✓	✓
• Windows CE.NET³	✓	✓	✓	✓		
• Win 7, Vista, XP³	✓	✓	✓	✓	✓	✓
• Palm OS³	✓	✓	✓	✓		
• RIM BlackBerry³	✓	✓	✓	✓	✓	✓
• Symbian (Nokia)³	✓	✓	✓	✓	✓	✓
• Apple iPad, iPhone, iPod touch⁴					✓	✓
Interface Standard	Bluetooth Serial Port Profile (SPP)				Bluetooth HID only or HID and SPP	
Bluetooth Protocol	Bluetooth 2.0 + Enhanced Data Rate (EDR)				Bluetooth 2.1 + EDR	
Radio Range	Class 1 Bluetooth - Up to 330 ft (100 m), depending on environment					
Included Software	SocketScan: Windows Mobile, 7, Vista, XP, Palm, RIM, Symbian Connect!Agent: Windows Mobile Floating Trigger: Windows Mobile, 7, Vista, XP				HID: No software required SPP: Includes same software for Windows Mobile, 7, Vista, XP, RIM	
Certification/ Compliance	Electrical Safety: Certified to CAN/CSA C22.2 No. EN60950-1, EN60825-1, IEC60601 Environmental: RoHS EMI/RFI: FCC Part 15 Class B, VCCI, CE EN55024:2003 Laser/LED Safety: IEC60825-1, EN 60825-1					
Warranty	Barcode scanner: One year    Accessories: 90 days SocketCare enhanced service program available separately					

<sup>1</sup>Depends on symbol size, symbology, label media, W-N Ratio, scan angle

<sup>2</sup>Based on elapse time of 4.8 seconds / scan under typical usage conditions. Results include *Bluetooth* and vibrate recognition enabled for 7X/7XRx

<sup>3</sup>Not all versions or devices are supported, see Specification Sheet at: [http://www.socketmobile.com/pdf/data-collection/chs-series7\\_spec.pdf](http://www.socketmobile.com/pdf/data-collection/chs-series7_spec.pdf)

<sup>4</sup>Other computers running Mac OS 10.4 or greater may also be supported. iPhone and iPod touch running OS 4 or later only.



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Business Mobility Now!™

# Bluetooth® Cordless Hand Scanner Series 7

## SPECIFICATION SHEET

PHYSICAL	Dimensions	125 x 31 x 35 mm (4.9 x 1.2 x 1.4 in.)	137 x 31 x 37 mm (5.3 x 1.2 x 1.5 in.)	125 x 31 x 35 mm (4.9 x 1.2 x 1.4 in.)	137 x 31 x 37 mm (5.3 x 1.2 x 1.5 inches)		
	Total Mass	51 g (1.8 oz)	~68 g (2.4 oz)	51 g (1.8 oz)	approximately 68 g (2.4 oz)		
	Ruggedized Case	N/A	Same as 7P, 7X	N/A	Withstands multiple 1.5 m (5 ft) drops to concrete Dust, shock, and water resistant		
	Antimicrobial Rating (JIS Z2801:2000 Test)	N/A	2.49 on MRSA, 6.07 if cleaned with Sani-Cloth® Plus cloth wipes	N/A	N/A	N/A	2.49 on MRSA, 6.07 if cleaned with Sani-Cloth® Plus cloth wipes
	Antimicrobial Additive	N/A	Biosafe® HM4100 EPA# 83019-1	N/A	N/A	N/A	Biosafe® HM4100 EPA# 83019-1
	Built-in Stylus Tip	For use with device touch screens					
ENVIRONMENTAL	Operating Temp. <sup>1</sup>	+32 to +122°F (0 to +50°C)					
	Storage Temp. <sup>1</sup>	-22 to +158°F (-30 to +70°C)					
	Relative Humidity	5% to 95% non-condensing					
	Ambient Light	Sunlight: 10,000 ft. candles (107,640 lux)			Artificial light: 450 ft. candles (4,844 lux)		0 to 100,000 lux
POWER	Battery Type	Two AAA NiMH rechargeable batteries				One Li ion rechargeable battery	
	Battery Life with Bluetooth Enabled	19 hours or 15,000 scans <sup>2</sup>				10 hours on single charge <sup>2</sup>	
	Battery Charging Time	3 hours (under conditions of 0 to +40°C)					
SCANNER PERFORMANCE	Scanner Type	Class 1 laser	Class 1 laser	Class 2 laser	Class 2 laser	High Density Imager with Performance Aiming System	
	Barcode Support	Linear (1D), Stacked linear composite				2D, 1D, stacked linear	
	Symbologies Decoded	Chinese 2 of 5, Codabar, Code 11, Code 128, Code 39, Code 93, Discrete 2 of 5, GS1 DataBar (RSS), GS1-128 (UCC-128/EAN-128), Interleaved 2 of 5 (ITF-14), ISBN, MSI, UPC/EAN, Webcode			Same as 7E2, 7NRx, 7M2  Recommended for VIN vehicle numbers	Same as other models (except Chinese 2 of 5) plus:  1D: Codabar with ISBT 128 bit concatenation  2D: Aztec, Codablock, Data Matrix, GS1 (EAN.UCC), Matrix 2 of 5, Maxi-code, PDF 417/ Macro PDF 417/ Micro PDF 417, Plessey, QR Code, RM4SCC, Standard 2 of 5, Telepen, TLCode 39  Postal: Australia Post, BP0 4, Canada Post, Dutch Post (KIX), GS1 (EAN.UCC), Japan Post, Planet, Postnet, RM4SCC, Sweden Post, Telepen, TLCode 39, 4 State Code	
	Scan Repetition Rate	100 scans/sec bi-directional				Omni-directional / Auto Adaptive 2D mode: 56 images/second 1D mode: 200 images/second	
	Optical Resolution	0.004 inch (0.102 mm) minimum/bar code element width (X Dimension)				752(H) x 480(V) pixels, 256 gray levels	
	Print Contrast	Minimum 25% absolute dark/light reflectance (MRD) measured at 650 nm				Down to 25%	

<sup>1</sup>Temperature range may vary depending on shelf life of battery/batteries.

<sup>2</sup>Based on elapse time of 4.8 seconds/scan under typical usage conditions. Results include both Bluetooth and vibrate recognition enabled for the 7X and 7XRx.

	MODEL	7E2	7NRx	7M2	7P	7X	7XRx
SCANNER PERFORMANCE	Scan Angle	Wide (default): 47° ±3°    Narrow: 35° ±3°				Horiz.: 38.9° Vertical: 25.4°	
	Decode Distance¹	3.8 to 27 cm (1.5 to 10.5 in.)		3.8 to 114+ cm (1.5 to 45+ inches)		3.8 to 27 cm (1.5 to 10.5 in.)	
	Tactile Vibrate Recognition	Not included				Confirms successful data transfer in high ambient noise environments	
BLUETOOTH®	Interface Standard	Bluetooth Serial Port Profile (SPP)				Bluetooth HID only or HID and SPP	
	Bluetooth Protocol	Bluetooth 2.0 with Enhanced Data Rates (EDR)				Bluetooth 2.1 with EDR	
	Bluetooth Frequency	2.4 to 2.4835 GHz ISM band, supports Advanced Frequency Hopping					
	Radio Range	Class 1 Bluetooth: Up to 330 ft (100 m), depending on environment					
	Compatibility	Windows COM port, Bluetooth QD ID B0164000					
	Security	56 bit encryption					
	Typical Output	12 dbm					
	Supported Bluetooth Stacks for Windows	Mobile: Broadcom 1.5 or later, Microsoft, Stonestreet One 1.2.4 (Build 1783) XP/Vista/7: Broadcom 5.1.0.1700 or later, Microsoft, Toshiba 4.00.34, 5.00.06F or later				Bluetooth 2.1, 2.0: Microsoft, Toshiba, Broadcom², BlueSoleil (v2.0 only)	
SOFTWARE	Operating System Support	Windows Mobile 6 Classic/Professional (requires Bluetooth Serial Port Profile) Windows Mobile 2003 / 2003SE / 5.0 for Pocket PC / Pocket PC Phone Edition Windows CE.NET for Intermec CK3 Windows 7, Vista, XP Palm OS for Treo, Pre RIM BlackBerry OS for the following series: Bold 9000, 9600, 9700; Curve 8200, 8300, 8500; Pearl 8100; Storm 9500; Tour 9600 Symbian OS for Nokia E61, E61i, E71⁴				HID or SPP: Windows Mobile 6.1 or 5 Windows 7, Vista, XP  HID only: Mac OS for Apple iPad³ iOS 4 for Apple iPhone, iPod touch Symbian OS for Nokia E71⁴  SPP only: RIM BlackBerry OS	
	Included Software	SocketScan™ keyboard wedge software Connect!Agent™ Bluetooth software for Windows Mobile Socket Floating Trigger for Windows Mobile, 7, Vista, XP				HID: No software required SPP: Includes same software for Windows Mobile, 7, Vista, XP, RIM	
STANDARD OFFERING	Included Items	Socket Bluetooth Cordless Hand Scanner AAA rechargeable batteries Charging source Lanyard/belt clip with retractable tether Software and Documentation				Socket Bluetooth Cordless Hand Scanner Li ion rechargeable battery Charging source Lanyard/belt clip with retractable tether Documentation (Software for SPP only)	
	Warranty	Scanner: One year    Accessories: 90 days SocketCare™ enhanced service program available separately, visit <a href="http://www.socketmobile.com/socketcare">www.socketmobile.com/socketcare</a>					
COMPLIANCE	Electrical Safety	Certified to IEC 60950-1, UL 60950-1, CAN/CSA C22.2					
	Environmental	RoHS					
	EMI/RFI	FCC Part 15 Class C, RSS 210, iCES 003, C-Tick, CISPR 22, CE EN55022, EN55024					
	Laser / LED Safety:	IEC 60825-1, EN 60825-1					

<sup>1</sup>Depends on symbol size, symbology, label media, W-N ratio, scan angle.

<sup>2</sup>Broadcom v2.1 is recommended for best results.

<sup>3</sup>Also compatible with other computers running Mac OS 10.4 or greater with Bluetooth stack v2.2.4f3 (v1965). Other versions not tested.

<sup>4</sup>Other devices running Symbian OS 9.1 or greater may be supported.



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MODEL	DESCRIPTION	SKU - SINGLE UNIT	SKU - 20 PACK
7E2	Class 1 laser	CX2847-1193	CX2848-1194
7NRx	Class 1 laser, rugged, antimicrobial	CX2852-1245	CX2842-1148
7M2	Class 2 laser	CX2850-1243	CX2851-1244
7P	Class 2 laser, rugged	CX2830-1097	CX2831-1098
7X	2D and 1D, rugged	CX2849-1242 (HID only) CX2854-1276 (HID + SPP)	CX2853-1271 (HID only) CX2855-1277 (HID + SPP)
7XRx	2D and 1D, rugged, antimicrobial	CX2843-1160 (HID only) CX2856-1278 (HID + SPP)	CX2844-1161 (HID only) CX2857-1279 (HID + SPP)

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