



Barcode scanners

Versatile 1D/2D Barcode Scanners

A complete POS solution provider, Star Micronics offers a variety of 1D and 2D barcode scanners to complement its POS printer range. The IP-rated scanner range includes presentation, handheld, and wireless Bluetooth handheld scanners for retail, hospitality, healthcare and many other applications.

Presentation Scanner

BSD-40U USB Desktop 1D/2D Barcode Scanner

- Reads 1D and 2D Barcodes, Megapixel CMOS sensor
- Captures high-density, high-volume and even distorted printed and screen barcodes
- Simple switch to toggle between paper and screen mode
- Plugs directly into any POS system, including STAR POS printers with USB Hub
- Superior motion tolerance (2,5m/s)
- Large field of view (horizontal 51°, vertical 32°)
- IP52-rated design and 1.2 m drop resistance
- Superior CPU for faster parsing of barcodes

Key Applications

★ Retail

POS and self-service checkout, order collections and returns, order tracking, inventory management

★ Hospitality

Customer check-in and access control, food order tracking, inventory management

★ Healthcare

Product identification, medication tracking



StarSCAN, included with all Star Micronics scanners, is a Utility compatible with iOS, Android, and Windows platforms. Users can tailor their scanning preferences and configure scanners to specific needs. Developers can further integrate it into applications using the provided SDK.

Handheld Scanners

BSH-20U USB Wired Handheld 1D/2D Barcode Scanner

- High-performance CPU captures high-density, high-volume and distorted barcodes
- Plugs directly into any POS system, including Star POS printers with USB Hub
- Scans on paper, uneven media or screen
- 5 scanning modes (level, sense, continuous, pulse, batch)
- Ergonomic, IP42-rated design and 1.2m drop resistance
- CMOS sensor



BSH-32U USB Wired Handheld 1D/2D Barcode Scanner

- Reads 1D and 2D Barcodes, Megapixel CMOS sensor
- High-density, high-volume and distorted barcodes on paper and screens
- Plugs directly into any POS system, including Star POS printers with USB Hub
- Superior CPU for faster parsing of barcodes
- 5 Scanning modes (trigger, sense, continuous, pulse and batch)
- Lightweight, comfortable design
- IP42-rated design and 1.5m drop resistance
- Scanner Stand included, Auto Presentation Mode option via smart Stand



Wireless Scanners






BSH-20B Wireless Bluetooth Handheld 1D/2D Barcode Scanner

- High-performance CPU captures high-density, high-volume and distorted barcodes on paper or screen
- Two forms of wireless communication: Bluetooth or USB dongle (included)
- 12 hours of continuous battery use
- 6 scanning modes (level, trigger, sense, continuous, pulse, batch)
- Lightweight, comfortable design
- IP42-rated design and 1.2m drop resistance
- CMOS sensor

BSH-32B Wireless Bluetooth Handheld 1D/2D Barcode Scanner

- High-resolution CMOS captures high-density, high-volume and distorted barcodes on paper or screen
- 12 hours of continuous battery use
- Two forms of communication: Connects directly to the host device via Bluetooth low-energy or can be wirelessly connected via the charging cradle
- Superior CPU for faster parsing of barcodes
- IP42-rated design and drop-resistant (1.2m)
- Megapixel CMOS sensor
- Superior CPU for faster parsing of barcodes



Star Scanner Series	BSD-40U 	BSH-20U 	BSH-32U 	BSH-20B 	BSH-32B 
Type	Desktop Barcode Scanner	Wired Handheld Barcode Scanner	Wired Handheld Barcode Scanner	Wireless Handheld Barcode Scanner	Wireless Handheld Barcode Scanner
Sealing	IP52	IP42	IP42	IP42	IP42
Image Sensor	1280X800 CMOS	640x480 CMOS	1280X800 CMOS	640x480 CMOS	1280x800 (megapixel) CMOS
Color	Black	Black	Black	Black	Black
Resolution	≥3mil ≥0.0762 mm	≥3mil ≥0.0762 mm	≥3mil ≥0.0762 mm	≥3mil ≥0.0762 mm	≥3mil ≥0.0762 mm
Symbologies 2D	PDF417, Data Matrix, QR Code, Micro QR Code, Aztec etc.	PDF417, Micro PDF417, Micro QR, QR Code, Data Matrix, Aztec	PDF417, QR Code, Data Matrix, Aztec, Maxicode, etc.	PDF417, MicroPDF417, QRCode, Data Matrix, Micro QR Code, Aztec	PDF417, Data Matrix, QR Code, Micro QR Code, Aztec etc.
Symbologies 1D	Code-11, Code-128, Code-39, GS1-128(UCC/EAN-128), AIM-128, ISBT-128, Codabar, Code 93, UPC-A, UPC-E, Coupon, GS1Composite, EAN-8, EAN-13, ISBN/ISSN, Interleaved 2 of 5, Febraban, Matrix 2 of 5, Industrial 25, ITF-6, ITF-14, Standard 25, ChinaPost25, MSI-Plessey, Plessey, GS1Databar (RSS)	Code 11, Code 128, Code 39, GS1-128 (UCC/EAN 128), AIM 128, ISBT 128, Codabar, Code 93, UPC-A, UPC-E, Coupon, GS1 Composite, EAN-8, EAN-13, ISBN/ISSN, Interleaved 2 of 5, Matrix 2 of 5, Industrial 25, ITF6, ITF-14, Standard 25, China Post 25, MSI Plessey, Plessey, GS1 Databar (RSS)	EAN-8, EAN-13, UPC-E, UPC-A, Code128, Coupon, UCC/EAN128, CodaBar, I2Of5, Febraban, ITF14, ITF6, Matrix 25, Code39, Code93, ISSN, ISBN, Industrial 25, Standard 25, China Post 25, Plessey, Code 11, MSI Plessey, UCC/EAN Composite, GS1 Databar, Code 49, Code 16K, AIM 128, ISBT 128	Code-11, Code-128, Code-39, GS1-128(UCC/EAN-128), AIM-128, ISBT-128, Codabar, Code 93, UPC-A, UPC-E, Coupon, GS1 Composite, EAN-8, EAN-13, ISBN/ISSN, Interleaved 2 of 5, Febraban, Matrix 2 of 5, Industrial 25, ITF-6, ITF-14, Standard 25, China Post 25, MSI-Plessey, Plessey, GS1 Databar(RSS)	EAN-8, EAN-13, UPC-E, UPC-A, Code128, Coupon, UCC/EAN128, CodaBar, I2Of5, Febraban, ITF14, ITF6, Matrix 25, Code39, Code93, ISSN, ISBN, Industrial 25, Standard 25, China Post 25, Plessey, Code 11, MSI Plessey, UCC/EAN Composite, GS1 Databar, Code 49, Code 16K, AIM 128, ISBT 128
Connectivity	RS-232, USB	RS-232, USB	RS-232, USB	USB, Bluetooth 5.0	USB, Bluetooth 5.0
Dimensions/Weight	82(W)×80(D)×147(H)mm 297g	146(W)×103 (D) ×69 (H) mm 125g	113.4(W)×71.4(D)×158(H) mm 156g	144(W)×103(D)×69(H)mm 177g	113(W)×71(D)×158(H)mm 214g
Typical Depth of field	EAN-13: 10-210mm (13mil) QR Code: 10-180mm (15mil)	EAN-13: 50 mm-260 mm (13 mil) Code 39: 50 mm-115 mm (5 mil) PDF 417: 50 mm-120 mm (6.7 mil) Data Matrix: 35 mm-125 mm (10 mil) QR Code: 30 mm-170 mm (15 mil)	EAN-13: 45 mm-510 mm (13 mil) Code 39: 75 mm-220 mm (5 mil) PDF 417: 70 mm-215 mm (6.7 mil) Data Matrix: 50 mm-220 mm (10 mil) QR Code: 20 mm-330 mm (15 mil)	EAN-13: 50 mm-260 mm (13 mil) Code 39: 50 mm-115 mm (5 mil) PDF 417: 50 mm-120 mm (6.7 mil) Data Matrix: 35 mm-125 mm (10 mil) QR Code: 30 mm-170 mm (15 mil)	EAN-13: 50 mm-495 mm (13 mil) Code 39: 85 mm-220 mm (5 mil) PDF 417: 70 mm-215 mm (6.7 mil) Data Matrix: 50 mm-220 mm (10 mil) QR Code: 20 mm-325 mm (15 mil)
Scan Angle	Pitch: ±50°, Roll: 360°, Skew: ±45°	Pitch: ±55°, Skew: ±55°, Roll: 360°	Pitch: ±55°, Skew: ±55°, Roll: 360°	Pitch: ±60°, Roll: 360°, Skew: ±60°	Pitch: ±55°, Roll: 360°, Skew: ±55°
Field of View	Horizontal 51°, Vertical 32°	Horizontal 45°, Vertical 34°	Horizontal 39°, Vertical 24°	Horizontal 45°, Vertical 34°	Horizontal 39°, Vertical 24°
Min Symbol Contrast	25%	20%	25%	20%	25%
Drop Resistance	1.2m	1.2m	1.5m	1.5 m	Scanner: 1.2 m Cradle: 1 m
Warranty	2 years	2 years	2 years	2 years	2 years

Specifications are subject to change without notice