

SP20 Series Single-Plane Scanner

Simple to deploy. Easy to use. Built for better checkouts—without compromising performance for price

You work hard to earn your customers' trust—don't let a poor checkout experience put it at risk. When a scanner fails to perform, your customers notice—and so does your bottom line. The SP20 Series Single-Plane Scanner delivers the reliable checkout performance you need at a price that fits your budget. Getting started is fast and hassle-free—go from unboxing to fully operational in under five minutes. Its compact design fits seamlessly into tight Point of Sale (POS) spaces, leaving room for impulse items. Intuitive visual guides and a generous scanning area make scanning simple, even for novice users, to keep lines moving smoothly. Supported by a globally trusted leader in scanning technology, the SP20 Series delivers reliable, straightforward performance and peace of mind every day—ideal for retailers who want dependable scanning without added cost or complexity.



Fits any Checkout. Ready in Minutes

From unboxing to fully operational in five minutes or less

The Simple Setup Experience gets you up and running fast, using your mobile phone. Just scan the QR code on the SP20 Series to get started. Zebra's Simple Setup Experience walks you through a quick, tailored setup using clear visuals and a few yes/no questions to create the optimal configuration for your POS. Integrated assistance keeps everything running smoothly, with help available whenever you need it. And for those who want more control, advanced options are just a tap away.

Compact and space-saving on the counter

With a low profile and adjustable stand, the SP20 Series fits into tight spaces—perfect for Quick Serve Restaurants (QSRs), convenience stores, and specialty retailers where every inch at the POS counts. Its compact footprint frees valuable counter space for product displays and impulse items, helping boost sales while maintaining a clean checkout area.

Flexible mounting options fit your setup needs

With versatile accessories, you can create the right setup for every application. A standard 1/4-20 camera mount supports a wide range of third-party accessories—from clamps and poles, to swivels and wall mounts. Support for both L-Brackets and Flange Brackets streamline mounting on walls, in kiosks, and more. And with similar dimensions to competitive products, the SP20 Series is a drop-in replacement for existing installations.

Effortless Scanning to Keep Lines Moving

Scan with confidence with clear visual guides

Bright green indicator lines on the scan window provide clear visual guidance, taking the guesswork out of positioning items for fast, accurate scanning.

Faster checkouts with less effort

With a field of view up to 80% larger than competitive models, the SP20 Series captures barcodes as they approach the window—speeding transactions and eliminating the need to hunt for a “sweet spot.”



Read every barcode every time

With Zebra's industry-leading scanning technology, the SP20 Series reads everything from damaged, poorly printed, and low contrast barcodes to mobile coupons with ease, ensuring smooth, efficient transactions.

Future-ready scanning for GS1 Digital Link

The SP20 Series is fully compatible with GS1 Digital Link standards and features a large field of view that easily captures both the 1D UPC barcode and 2D Digital Link code on product packaging. With Zebra's i23Scan tool, scanners can be configured for GS1 Digital Link in less than a minute—enabling anything from minimal disruption to full adoption with access to richer product data like expiration dates, recalls, ingredients, and traceability.

Eye-friendly illumination provides a better user experience

The SP20 Series uses recessed, deep-red LEDs that are gentle on the eyes and safe for customer-facing environments. To reduce visual distractions in busy checkout areas, the illumination automatically turns off between scans, providing a comfortable user experience.

Built to Last. Easy to Manage

Engineered for demanding environments

The SP20 Series is designed to perform in high-traffic settings like checkouts and self-service stations. Its IP52 sealing and elevated electronics safeguard against dust and the everyday spills common on QSR and convenience store counters. With the durability to withstand drops of up to 5 ft. (1.5 m) onto concrete, the SP20 Series keeps your operations running smoothly, while lowering downtime and replacement expenses.

Superior reliability

The SP20 Series is backed by a 3-year warranty. Since Zebra data capture products are proven to have less than 0.5% failure rates, you can be confident in the long-term reliability of your scanner.

An OEM-ready version for advanced kiosk and embedded applications

Building a self-service kiosk or custom enclosure? The SM20 Series OEM Scan Module delivers the same dependable performance as the SP20 Series, with unbranded housing and support from Zebra's dedicated OEM team to help you design, build, and deploy reliable solutions with confidence.

Easy, no-cost management solutions

Zebra's Simple Setup Experience gets you up and running on day one, with scanner configuration taking less than five minutes. Then, Zebra's no-cost management tools help minimize downtime and keep your devices performing at their best. Remote management tools let you update firmware without losing existing settings, while Remote Diagnostics helps confirm that each scanner is properly configured down to the last detail—while giving you real-time visibility into every aspect of your scanners.

Unleash the power of Zebra DNA

With more than 50 years of field-proven innovation, Zebra knows the scanning journey better than other providers. That's why we've engineered into all our scanners Zebra DNA for Scanners—a suite of software tools to make your scanning journey simple to navigate. From effortless deployment to remote management and real-time analytics, Zebra DNA empowers your scanners with unmatched visibility, uptime, and adaptability. When you choose Zebra, you're investing in more than just a scanner—you're investing in a smarter, more agile future for your business.

Specifications

Physical Characteristics	
Dimensions	Scanner Only: H x W x D: 3.0 x 3.0 x 2.2 inches (75 x 75 x 57 mm) With Stand: H x W x D: 5.5 x 3.1 x 3.1 inches (140 x 80 x 80 mm)
Weight	Scanner Only: 3.9 oz. (110 g) With Stand: 7.7 oz. (218 g)
Input Voltage Range	4.75 to 5.25 VDC Host Powered; 4.75 to 5.25 VDC External Power Supply
Operating Current at Nominal Voltage (5.0V)	Presentation Mode: 280mA RMS (Typical) Host Trigger Mode: 260mA RMS (Typical)
Idle Current at Nominal Voltage (5.0V)	Presentation Mode: 110mA RMS (Typical) Host Trigger Mode: 80mA RMS (Typical)
Color	Midnight Black
Supported Host Interfaces	USB, RS232 (TTL)
Keyboard Support	Supports over 90 international keyboards
User Indicators	Power, Active Scan Zone, Good Decode LEDs; Beeper
Imaging Characteristics	
Resolution	1 Megapixel (1280 x 800 pixels)
Illumination	(2) deep red LEDs
Field of View	62° H x 41° V nominal
Minimum Print Contrast	20% minimum reflective difference
Skew Tolerance	+/-70°
Pitch Tolerance	+/-60°
Roll Tolerance	0° - 360°
User Environment	
Operating Temperature	32.0°F to 122°F (0.0°C to 50.0°C)
Storage Temperature	-40.0°F to 158.0°F (-40.0°C to 70.0°C)
Humidity	5% to 95% RH, non-condensing
Sealing	IP52
Drop/Impact Shock Specification	Designed to withstand multiple drops at 5 ft. (1.5 m) to concrete
Electrostatic Discharge (ESD)	ESD per EN61000-4-2, +/-15 KV Air, +/-10 KV Direct, +/-8 KV Indirect
Ambient Light Immunity	Sunlight: 0 to 10,000 Foot Candles/0 to 108,000 Lux Artificial indoor light: < 450 Foot Candles/4845 Lux
Approved Cleaners	Refer to the Product Reference Guide for the complete list of approved cleaners

Accessories	
Adjustable Stand, Flange Bracket, L-Bracket, third-party accessories that provide a standard 1/4" - 20 camera mounting screw	
Regulatory	
Environmental	EN IEC 63000:2018
Electrical Safety	UL 62368-1; CAN/CSA-C22.2 No. 62368-1-19; IEC 62368-1; EN 62368-1
LED Safety	IEC 62471; EN 62471
EMI/RFI	47 CFR Part 15, Subpart B, Class B; ICES-003 Issue 7, Class B; EN55032, EN55035; EN61000-3-2; EN61000-3-3 EN61000-6-2, EN60601-1-2
Symbol Decode Capability	
1D	All major 1D barcodes including Code 39, Code 128, Code 93, Codabar/NW7, Code 11, MSI Plessey, UPC/EAN, I 2 of 5, Korean 3 of 5, GS1 DataBar, Base 32 (Italian Pharma)
2D	All major 2D barcodes including QR Code, Micro QR, DataMatrix, GS1 Digital Link, PDF417, Micro PDF417, Composite Codes, TLC-39, Aztec, MaxiCode, Han Xin, Postal Codes, SecurPharm
GS1	Digital Link
Digimarc	Digimarc barcodes
Minimum Element Resolution	Code 39: 3.0 mil Code 128: 3.0 mil Data Matrix: 5.0 mil QR Code: 5.0 mil
Refer to Product Reference Guide for a complete list of symbologies.	
Decode Range ¹	
3 mil Code 39	0.7 inches (1.8 cm) to 2.5 inches (6.4 cm)
5 mil Code 39	0 inches (0 cm) to 5.5 inches (14.0 cm)
20 mil Code 39	0 inches (0 cm) to 16.0 inches (40.6 cm)
3 mil Code 128	0.7 inches (1.8 cm) to 2.3 inches (5.8 cm)
5 mil Code 128	0 inches (0 cm) to 5.0 inches (12.7 cm)
6.7 mil PDF 417	0 inches (0 cm) to 4.5 inches (11.4 cm)
13 mil UPC (100%)	0 inches (0 cm) to 10.0 inches (25.4 cm)
10 mil DataMatrix	0 inches (0 cm) to 5.0 inches (12.7 cm)
20 mil QR Code	0 inches (0 cm) to 7.8 inches (19.8 cm)
Utilities and Management	
Simple Setup Experience	Provides a guided, web-based experience for basic out-of-the-box setup and configuration, enabling non-technical customers to get the device up and running in just 5 minutes. https://www.zebra.com/scannersetup

Markets and Applications

Retail and Hospitality

- Small retailers
- Specialty goods retailers
- Small grocery/supermarkets
- Convenience stores
- Non-OEM kiosk integrators
- Quick Serve Restaurants (QSRs)

Applications

- Self-checkout
- Point of Sale (POS)
- Kiosks
- Check-in, admissions, ticketing
- Mobile couponing/loyalty

PRODUCT SPEC SHEET
SP20 SERIES SINGLE-PLANE SCANNER

123Scan	Programs scanner parameters, upgrades firmware, displays scanned barcode data, scanning statistics, battery health, asset data and prints reports. www.zebra.com/123scan
Scanner SDK	Generates a fully featured scanner application, including documentation, drivers, test utilities and sample source code. www.zebra.com/scannersdkforwindows
Scanner Management Service (SMS)	Remotely manages your Zebra scanner and queries its asset information. www.zebra.com/sms

Recommended Services

Zebra OneCare Select; Zebra OneCare Essential

Warranty

Subject to the terms of Zebra's hardware warranty statement, the SP20 Series is warranted against defects in workmanship and materials for a period of 3 years from the date of shipment. Complete Zebra hardware product warranty statement: www.zebra.com/warranty

Zebra DNA

Zebra DNA is a suite of highly intelligent firmware, software, utilities and apps exclusively engineered to ensure maximum performance from every Zebra scanner. For more information about Zebra DNA and its applications, please visit www.zebra.com/zebradna

Footnotes

1. Distance dependent on symbology type and size, and under 30 foot-candles ambient
- Specifications are subject to change without notice.



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