RS4000 1D Ring Scanner

Powerful hands-free 1D scanning for Zebra's next-generation WT6000 wearable mobile computer

Whether your workers spend their days moving products through your warehouse or retail store, or moving packages through distribution centers and onto trucks for delivery, every time they need to set an item down to check a paper work order or scan a barcode with a handheld device, their productivity decreases. But when you put the small and lightweight RS4000 1D ring scanner on the fingers of workers who are using Zebra's WT6000 wearable mobile computer, your workers are free to keep their hands and eyes on the items they are handling. The result? Worker productivity increases. And a split-second press of the RS4000 trigger verifies task accuracy and provides the real-time inventory visibility you need to eliminate out-of-stocks.

Give your Workers Hands-Free Scanning Power
Ring scanner design leaves hands free to move packages and other materials, improving worker productivity and operational efficiency.

Increase Productivity with a Wide Working Range
Our patented Adaptive Scanning technology allows workers to capture barcodes from near contact to 15 ft./4.5 m.

Two Scanning Modes
Workers can either press the trigger button once to scan a single barcode or keep the trigger depressed to continuously scan barcodes.

Capture Virtually any Barcode in Practically any Condition
With our advanced scanning algorithms, your workers can capture scratched, dirty, damaged and poorly printed barcodes, first time, every time.

A Patented Liquid Polymer Scan Element with a Lifetime Warranty
Friction and wear are eliminated, maximizing uptime and worker productivity, along with a low total cost of ownership.

A Bright Scan Line
The easy to see scan line ensures easy aiming for first-time capture of barcodes in virtually any lighting condition. And with an oversize LED light, users can easily see when a scan is successful.

Diecast Zinc Scan Engine Chassis, Single Board Construction and Scan Engine Isolation
Superior impact protection for the scan engine improves reliability in the event of a drop.

Put the RS4000 on the fingers of your workers to improve productivity and accuracy in your operations.
For more information about the RS4000 1D Ring Scanner, visit www.zebra.com/rs4000 or access our global contact directory at www.zebra.com/contact

Cable Wear Beads

The areas of the cable most vulnerable to wear and tear are protected to help keep your RS4000 ring scanners looking like new.

Supports Reduced Space Symbology (RSS)

A broad range of scanning capabilities provides future-proofing, increasing your investment protection.

Convenient Swivel Feature

Workers can easily switch the RS4000 from right to left handed operation.

Separate Finger Strap Assembly

Give each worker their own easy-to-replace finger strap assembly to help improve hygiene and prevent the spread of germs.

Full Shift Power

The RS4000 draws very little power from the wearable mobile computer, preserving plenty of power for full shift operation on a single charge.

Specifications

Physical and Environmental Characteristics

Dimensions	1.9 in. H x 1.4 in. W x 1.9 in. D 4.8 cm H x 3.6 cm W x 4.8 cm D
Weight	2.0 oz./56.7 g
Current	92 mA typical/121 mA max (one LED on)
Standby Current	12 µA typical/60 µA max
Battery Backup	Rechargeable UPS battery for operation during power loss; internal rechargeable battery for multiple months of real-time clock backup
Voltage	3.1 VDC to 3.6 VDC

User Environment

Operating Temp.	-22° to 122° F/-30° to 50° C
Storage Temp.	-25° to 160° F/-40° to 70° C
Humidity	5% to 95% non-condensing
Ambient Light Immunity	Tolerant to typical artificial indoor and natural outdoor (direct sunlight) lighting conditions. Fluorescent, Incandescent, Mercury Vapor, Sodium Vapor, LED: 450 Ft. Candles (4,844 Lux) Sunlight: 10000 Ft .Candles (107,640 Lux) Note: LED lighting with high AC ripple content can impact scanning performance
Environmental Sealing	IP54

Performance Characteristics

Light Source	650nm LASER 1.7mW peak power
Scan Rate	92 min., 104 typical, 116 max. scans/sec (bi-directional)
Yaw[1]	± 40° from normal
Roll[2]	± 35° from vertical
Pitch[3]	± 65° from normal

Footnotes

1 – Skew (Yaw): Controlled by rotating the wrist from left to right or vice versa
2 – Roll (Tilt): Controlled by rotating the wrist clockwise or counterclockwise
3 – Pitch: Controlled by dropping or raising the wrist

The Zebra wordmark and logo are trademarks of Zebra Technologies Corp., registered in many jurisdictions worldwide. All other trademarks are the property of their respective owners. ©2026 Zebra Technologies Corp. and/or its affiliates. Part number: SS-RS4000 08/2016 HTML