# Z-Band Direct Wristband

## The High-Quality Wristband Solution for Positive Patient Identification

Setting the Standard for Positive Patient Identification

Refined from over 20 years of innovation in patient identification, Z-Band Direct wristbands are the most durable, comfortable, and easy-to-use solutions for patients, clinicians, and admissions. The bands meet every application requirement to ensure adult, pediatric, and infant patients are accurately identified. Made from high-quality materials and engineered to last, they help your clinical teams work efficiently, providing superior image durability for accurate, first-time scanning, while their tensile strength ensures the bands stay fixed for the duration of average patient stays.

### A Secure Solution

Z-Band Direct is a white thermal polypropylene wristband. It's easy to print and secure, with a "peel and seal" permanent rubber adhesive tab for confident closure. The adhesive ensures bands cannot be removed and reapplied, while tamper-free slits further enhance security. Also, the direct thermal imaging chemistry, primarily consisting of leuco dyes and developers, enables efficient on-demand printing without the need for ink or ribbons. Z-Band Direct therefore meets healthcare patient ID and safety goals (The Joint Commission), by removing the potential of data theft from data left on ribbons (HIPAA secure[1]).”

### Comfortable to Wear

The latex-free wristbands reduce the risk of allergic reactions. The bands are also BPA-free to make them safer for both prolonged skin contact and disposal.

### Robust and Resilient to Clinical Conditions

Waterproof, and resistant to smear, abrasion, alcohol, mild cleaners, and more, trust in Z-Band Direct to ensure reliable performance. Featuring a patented antimicrobial coating, which protects the wristband from degradation, independent testing shows that Z-Band Direct wristbands are significantly more robust when compared to a leading competitor. Z-Band Direct offers 3.5 times more durability against 3M Avagard, and 6 times more durability against Purell® waterless hand sanitizers.[2]

### Patient Condition Alerts

With Z-Band Direct's seven color options (red, blue, green, yellow, pink, purple, or orange stripes), your team can quickly identify special patient conditions.

**Z-Band Direct — the most durable, comfortable and easy-to-use solutions for patients,clinicians, and admissions.**
For more information, please visit www.zebra.com/wristbands

## Consistently Exceptional Performance

A barcode that fails to scan jeopardizes patient safety and staff productivity. That’s why we design, produce, and rigorously pretest our own line of thermal printing supplies to ensure consistent, optimized performance. Our 23-point quality inspection process ensures consistent quality, and we never swap out materials. This ensures you get optimum image durability and scanning performance to ensure first-scan readability, even for narrow barcodes.

## Environmentally Friendly Wristband Cartridge: Supporting Your Sustainability Goals

As well as designing our wristbands to enhance patient safety, we innovate to support your environmental, social, and governance goals. Our new Environmentally Friendly Wristband Cartridge, for use with our HC100 / ZD510-HC Wristband Printers, is made from PET 1 material. PET 1 can be recycled in standard curbside collections, reducing landfill and promoting circular economy practices. The cartridge is easier to use, too, with new openings in the side making it easy to thread the wristband through, should there happen to be a retraction error.

# Specifications

## Material Construction

| | |
|---|---|
| Facestock | Direct thermal polypropylene<br>6.0 Caliper ±10% |
| Adhesive tab | Permanent acrylic adhesive |
| Environment | Indoor use; cold temperature compatible |

## Temperature Performance

| | |
|---|---|
| Service Temperature Range* | -40° F to 140° F/-40°C to 60°C |

## Recommended Printer Settings

| | |
|---|---|
| Printers | HC100 desktop, midrange, and high-performance thermal printers capable of handling 25mm-wide media |
| Darkness / Print Speed Settings | ZPL Printers: Darkness: 22, Print Speed: 50mm/sec (2ips)<br>EPL Printers: Darkness: 13, Print Speed: 50mm/sec (2ips)<br>Direct thermal printer (no ribbon). Use Zebra ZD510-HC/HC100 wristband printers; desktop midrange and high-performance thermal printers capable of handling 25mm-wide media holder for optimal performance |

## Durability Testing

The image durability of a 5mil narrow-bar 16-digit Code 128 C barcode printed on a Z-Band Comfort wristband at Zebra's recommended darkness and print speed settings was measured by scanning with an MS1690 Focus area imaging barcode scanner after exposure to solvents, abrasion, and water.For each test performed, a "Pass" or "Fail" designation was noted. Following are definitions of the designations:
• Pass = Immediate scan of barcode without repeated attempts
• Fail = Failure of barcode to scan or required repeated attempts to scanFor more details on the durability laboratory testing performed, please download our white paper on www.zebra.com, titled "Putting Wristband Durability to the Test."

## Regulatory and compliance

BPA and latex-free
Z-Band wristbands are considered to be MR safe. Z-Band wristbands are made of polypropylene and vinyl. The direct thermal imaging chemistry is composed primarily of leuco dyes and developers. The inks / varnishes used are UV varnishes and water-based inks. There is no metal content in or on these particular patient identification bands. Therefore, Z-Band wristbands are considered to be MR safe.

## Footnotes

1. The Health Insurance Portability and Accountability Act (HIPAA) is a series of federal laws that govern the use and disclosure of protected health information (PHI) in the United States and which are designed to protect sensitive patient health information from being disclosed without the patient's consent or knowledge.
2. Zebra Technologies commissioned Akron Rubber Development Laboratory (ARDL) to conduct durability testing for the Z-Band Direct, Z-Band UltraSoft, and a leading competitor's wristbands. ARDL is an A2LA ISO 17025 accredited, ISO 9001:2008 registered, FDA compliant independent testing laboratory.
*Following correct application and appropriate dwell time (usually 24hrs), the media will withstand this temperature range.
**Following correct application and appropriate dwell time (usually 24hrs), we expect, but do not warrant, a life span as indicated.
The information contained in this document is to be used for guidance only and is not intended for use in setting

## Product Testing

| | |
|---|---|
| Abrasion | Pass: Exceeds 1000X with a dry crocking cloth |
| Water | Pass: Withstands total immersion in 104° F/40° C water for up to 6 hours |
| 91% IPA | Pass: Withstands 50x rubs with soaked cotton applicator |
| 70% IPA | Pass: Withstands 50X rubs with soaked cotton applicator |
| Betadine | Pass: Withstands 100X rubs with soaked cotton applicator |
| Purrell | Pass: Withstands 50x rubs with soaked cotton applicator |
| Tensile strength | Pass: Withstands up to 45 pounds of force |

## Product Performance and Suitability

| | |
|---|---|
| Recommended storage conditions | 72° F (22° C) at 50% RH |
| Expected life span in application** | Indoor use, short term only; Please test in application |

## Chemical Resistance

| Chemical | Direct Thermal / Resistance |
|---|---|
| Blood | Recommended / Weak |
| Body fluid | Recommended / Weak |
| Salt water | Recommended / Weak |
| Water | Recommended / Weak |
| Window cleaner | Recommended / Weak |
| Alcohol | Test in Your Application / Moderate |
| Ammonia | Test in Your Application / Moderate |
| Bleach | Test in Your Application / Moderate |
| IPA | Test in Your Application / Moderate |
| Gasoline | Not recommended / Harsh |
| Grease | Not recommended / Harsh |
| Oil | Not recommended / Harsh |
| Acetone | Not recommended / Extreme |
| IR Reflow | Not recommended / Extreme |
| NR MEK | Not recommended / Extreme |
| TCE | Not recommended / Extreme |
| Xylene | Not recommended / Extreme |

## Markets and Applications

**Healthcare**

• Safe, secure, positive patient ID for hospitals
• Identification of patients

## Footnotes

specifications. All purchasers of Zebra products shall be solely responsible for independently determining if the product conforms to all requirements of their unique application.

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