8620 High Performance Ring Scanner
For Use with the Honeywell Wearable Solution

The 8620 High Performance Ring Scanner provides the capability to read virtually any 1D or 2D barcode in a rugged and ergonomic scanner that mounts on the index finger and interfaces directly with the wrist-mounted Honeywell Wearable Solution.

Incorporating Honeywell’s industry-leading Adaptus™ 6 imaging and decoding technology, the 8620 High Performance Ring Scanner provides fast decode speeds, excellent motion tolerance and improved scanning performance on poor-quality or damaged barcodes.

Years of experience with previous generations of ring scanners have led to multiple design improvements, making this more comfortable and more durable than any past or present ring scanner product. The new soft rubber finger straps are very comfortable and impervious to moisture so that they do not absorb sweat. The finger straps can be quickly interchanged to enable easy cleaning and to allow each operator to have their own straps – not share between shifts.

In addition to providing outstanding reliability, comfort and scanning performance, the 8620 High Performance Ring Scanner also expands the capabilities of the Honeywell Wearable Solution by supporting all versions of the Dolphin™ 75e mobile computer. When used with the 8620 High Performance Ring Scanner, the Honeywell Wearable Solution supports Windows® Embedded Handheld 6.5 on the Dolphin 70e, Android™ 4.4 on the Dolphin 75e and Windows Embedded 8.1 Handheld on the Dolphin 75e.

This scanner, used in conjunction with the existing wearable accessories and either the Dolphin 70e or Dolphin 75e mobile computer, gives customers a unique solution to their hands-free computing needs, and delivers cost savings.

The Honeywell Wearable Solution provides better ergonomics and hygiene through its larger screen, more flexible keypad and watchband-style armband than conventional wearables, all based on a general-purpose device that does not lock the customer into a dedicated device that serves only one purpose. It can be supported on most operating systems and development environments.

FEATURES

- **Multi OS**
  - Integrates seamlessly with the Honeywell Wearable Solution for Dolphin mobile computers supporting multiple operating systems, including Windows Embedded Handheld 6.5, Android 4.4 and Windows Embedded 8.1 Handheld.

- **Increase Productivity and Throughput**
  - Increase productivity and throughput with an ergonomic ring scanner based on an industry-grade imager that provides high-performance scanning of linear and 2D barcodes, high motion tolerance for scanning moving products and the ability to read poor-quality or damaged barcodes.

- **Soft Rubber Finger Straps**
  - Soft rubber finger straps improve comfort and eliminate hygiene concerns because they are impervious to moisture, are easily cleaned and are quickly interchangeable between shifts. The soft, pliable surface reduces sliding or rotating on the finger.
8620 High Performance Ring Scanner Technical Specifications

**MECHANICAL**
- **Dimensions:** 50 mm x 30 mm x 30 mm (2.0 in x 1.2 in x 1.2 in)
- **Weight:** 71 g (2.5 oz)

**ENVIRONMENTAL**
- **Operating Temperature:** -20°C to 50°C (-4°F to 122°F)
- **Storage Temperature:** -25°C to 70°C (-13°F to 158°F)
- **Humidity:** 5% to 95% relative humidity (non-condensing)
- **Drop:** Designed to withstand 30 (1.2 m [5 ft]) drops to concrete, all axes
- **Tumble:** Exceeds 1,000 (0.5 m) tumbles per IEC 60068-2-32 specification
- **ESD:** ± 20 KV Air and ± 15 KV Contact
- **Environmental Sealing:** Independently certified to meet IP54 standards for moisture and particle intrusion
- **Light Levels:** 0 to 100,000 lux (9,290 foot-candles)

**SCAN PERFORMANCE**
- **Scan Pattern:** Area Image (838 x 640 pixel array)
- **Motion Tolerance:** Up to 580 cm/s (19.7 in/s) for 13 mil UPC at optimal focus
- **Scan Angle:** Horizontal: ± 21.4° ± 1.2°; Vertical: ± 16.5° ± 0.8°
- **Symbol Contrast:** 20% minimum reflectance difference
- **Pitch, Skew, Tilt:** 45°, 60°, 180°
- **Decode Capability:** All standard 1D, 2D and PDF 417 symbologies

<table>
<thead>
<tr>
<th>Symbology</th>
<th>Distance Near</th>
<th>Distance Far</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 mil C39/128</td>
<td>54 mm (2.1 in)</td>
<td>153 mm (6.0 in)</td>
</tr>
<tr>
<td>10 mil C39/128</td>
<td>18 mm (0.7 in)</td>
<td>328 mm (12.9 in)</td>
</tr>
<tr>
<td>100% 13 mil UPC</td>
<td>36 mm (1.4 in)</td>
<td>409 mm (16.1 in)</td>
</tr>
<tr>
<td>6.7 mil PDF417</td>
<td>36 mm (1.4 in)</td>
<td>175 mm (6.9 in)</td>
</tr>
<tr>
<td>10 mil Data Matrix</td>
<td>43 mm (1.7 in)</td>
<td>193 mm (7.6 in)</td>
</tr>
</tbody>
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Typical Depth of Field Measurement data based on following conditions: Distances measured from front of lens, +23°C (+73°F), 0 lux, photographic-quality codes

For a complete listing of all compliance approvals and certifications, please visit [www.honeywellaidc.com/compliance](http://www.honeywellaidc.com/compliance).
For a complete listing of all supported barcode symbologies, please visit [www.honeywellaidc.com/symbologies](http://www.honeywellaidc.com/symbologies).