Product Summary

The HawkEye 52 and HawkEye 53 hand-held readers combine laser and imaging technology to provide superior read performance on one-dimensional (1-D) bar codes and two-dimensional (2-D) Data Matrix codes. By integrating laser technology and advanced imaging, the HawkEye 52 and HawkEye 53 are easy, trouble-free reading solutions for low-contrast direct part marks (DPMs) and bar code labels. The HawkEye 52 excels at reading DPMs with cell sizes as small as 0.007 inches, and the HawkEye 53 reads DPMs with cell sizes as small as 0.005 inches.

The HawkEye 52 and HawkEye 53 feature the patented LytePype™ illumination system, and provide excellent DPM read performance with precise lighting angles. The LytePype guides the operator to position the reader for a simple, point-and-shoot operation. Both models read codes applied using a variety of DPM methods on a wide range of materials and surfaces.

The HawkEye 52 and HawkEye 53 provide a rich set of programmable features that can be configured to address any data collection application. Set-up is simple and can be performed via the serial interface port or by reading Data Matrix codes supplied with the unit.

The HawkEye 52 and HawkEye 53 read all sizes of bar codes as well as the most demanding DPM Data Matrix codes, without special operator training or skills. This all-in-one reading capability saves time on the shop floor and makes the transition from 1-D bar codes to DPM Data Matrix codes easy and efficient without disrupting the existing process.

Features and Benefits

- Fast and easy set-up and operation
- Omnidirectional scanning and positioning for greater reliability and accuracy
- LytePype illumination system for reading low-contrast symbols on various surfaces
- Incorporates laser scanning technology and imaging technology to read both bar code labels and DPMs
- Read full range of 1-D and Data Matrix symbol sizes from 6" (15.24 cm) bar codes to 1" (2.54 cm) square Data Matrix codes

Applications

- Reading low-contrast bar code labels and Data Matrix DPMs at close range
- Electronics and aerospace applications using small DPM Data Matrix codes
- Legacy applications:
  - Reading legacy 1-D bar codes
  - Transitioning from a 1-D bar code to a Data Matrix code system
  - Reading 1-D bar codes and Data Matrix symbols simultaneously
### Physical Characteristics

**Dimensions:**
7.0" L x 2.4" W x 4.5" D  
(17.78 cm L x 6.10 cm W x 11.43 cm D)

**Power Requirements:**
AC Adapter 100-250 VAC, .5A 50/60 Hz input, 12 V at 600 mA avg. output  
(1200 mA peak)

### Performance Characteristics

**Interfaces:**
RS 232 baud rates from 1200 bps to 115.2 Kbps

**Field of View:**

<table>
<thead>
<tr>
<th>HE52: Working Distance</th>
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<th>Field of View</th>
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<tbody>
<tr>
<td>0&quot; (0 cm) D</td>
<td>0&quot; (0 cm) D</td>
<td>0.95&quot; (2.4 cm) D</td>
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<tr>
<td>2&quot; (5.1 cm) D</td>
<td>2&quot; (5.1 cm) D</td>
<td>1.7&quot; (4.3 cm) D</td>
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**Depth of Field:**

| Imager: Near contact to 3.5" (8.9 cm) D | Laser: 2" to 6" (5.08 cm to 15.24 cm) |

**Minimum Element Size:**

| HE52 Imager: 0.007" (0.175 mm) | Laser: 0.005" (0.13 mm) |
| HE53 Imager: 0.005" (0.13 mm) | Laser: 0.005" (0.13 mm) |

**Optical Resolution:**

644 x 494 Pixels

**Minimum Contrast Resolution:**

| Imager: 25% at 632 nm | Laser: 25% at 650 nm |

**Optical Parameters:**

| Imager: Directional LytePype® illumination system | Laser: Visible laser diode operating at 650 +/- 10 nm |

**Programming:**

Windows® 95/98 or NT. Assignable push button icons, terminal interface, configuration and a rich set of image storage and retrieval options.

**Decode Capability:**

1-D: Code 39, I2 of 5, UPC-A, UPC-E, EAN-8, Code 128  
2-D: Data Matrix

### User Environment

**Operating Temperature:**
32° F to 104° F (0° C to 40° C)

**Storage Temperature:**
-4° F to 149° F (-20° C to 65° C)

**Shock:**
Drop 4 ft./1.2 m to concrete

**Humidity:**
Up to 95%, non-condensing

### Regulatory

**Electrical Safety:**
UL 1950, CSA 60950, EN 90950/IEC 60950

**Laser Safety:**
CDRH Class II, IEC Class 2

**EMI/RFI:**
FCC Part 15 Class A, EN 55022 Class A

Specifications subject to change without notice.