

# 4600g

## General Purpose 2D Imager



### Overview

The 4600g area imager from Hand Held Products combines the versatility of area imaging with the speed and cost of linear scanning for retail and commercial applications. Powered by Adaptus™ Imaging Technology 5.0, the 4600g is full featured, fast, and cost effective.

Today's demanding retail and commercial applications involve much more than linear bar codes. EAN-UCC composite codes are beginning to appear in food stores; PDF codes are used for age verification in restricted item sales; and postal bar codes are used to sort mail. The omni-directional reading capability of the 4600g allows fast and easy reading of all these codes. Simply point and shoot. There's no need to align a scan line, or wait for a raster beam to open up.

Whether capturing a signature as proof of delivery, taking a picture for identification, or even storing data electronically, image capture is a mainstream requirement and an important part of current and future solutions. Equipped with Adaptus Imaging Technology 5.0, the 4600g provides best-in-class image quality and image transfer speed, all at very economical prices.

The 4600g is now easier to use under the most challenging conditions with Adaptus Imaging Technology 5.0; and with no moving parts, the 4600g is as durable as it is versatile.

### Features

- **Omni-directional reading** of 1D, PDF417, MicroPDF417, Postal, Matrix, and EAN•UCC Composite codes, and OCR fonts for the easiest ever data collection.
- **Image Capture:** Class-leading image quality and image transfer speed provide crisp images in less than one second.
- **Increased Resolution:** Improved image quality for vision-based applications.
- **Built to Last:** Durable, with no moving parts. Backed by an industry leading warranty.
- **Increased Motion Tolerance:** Ease of use in all types of scanning applications; better hand/motion tolerance for linear codes.
- **Connectivity:** The most popular interfaces in one model. Uses the standard Hand Held Products cable set.
- **Faster Time to Read (TTR):** Advanced Linear Decoding (ALD) is faster and reads more like a linear unit.
- **IQ Editing Pro™:** Provides easy integration into existing applications, without expensive host software changes.
- **Increased Field of View (FOV):** Ability to read wider bar codes quickly and easily, including hard to read bar codes.

# 4600® Specifications

## Performance

|                           |   |                                   |   |                                    |   |                                     |
|---------------------------|---|-----------------------------------|---|------------------------------------|---|-------------------------------------|
| <b>Illumination LEDs:</b> | 626nm ±30nm                                 |                                   |   |                                    |   |                                     |
| <b>Aiming:</b>            | 526nm ±30nm                                 |                                   |   |                                    |   |                                     |
| <b>Image:</b>             | VGA, 752x480. Binary, TIFF, or JPEG output. |                                   |   |                                    |   |                                     |
| <b>Working Range:</b>     |   |                                   |   |                                    |   |                                     |
| <b>SR</b>                 | <b>8.3 mil Linear<br/>(.021cm)</b>          | <b>13 mil UPC<br/>(.033cm)</b>    | <b>6.6 mil PDF417<br/>(.017cm)</b>      | <b>10 mil PDF417<br/>(.025cm)</b>  | <b>15 mil Data Matrix<br/>(.038cm)</b>  | <b>35 mil MaxiCode<br/>(.089cm)</b> |
| <b>Near</b>               | 3.5 in. (8.9cm)                             | 2.1 in. (5.3cm)                   | 4.4 in. (11.2cm)                        | 3.0 in. (7.6cm)                    | 2.3 in. (5.8cm)                         | 2.0 in. (5.1cm)                     |
| <b>Far</b>                | 7.5 in. (19.1cm)                            | 13.1 in. (33.3cm)                 | 6.1 in. (15.5cm)                        | 8.9 in. (22.6cm)                   | 10.1 in. (25.7cm)                       | 12.9 in. (32.8cm)                   |
| <b>SF</b>                 | <b>7.5 mil Linear<br/>(.019cm)</b>          | <b>13 mil UPC<br/>(.033cm)</b>    | <b>6.6 mil PDF417<br/>(.017cm)</b>      | <b>10 mil PDF417<br/>(.025cm)</b>  | <b>15 mil Data Matrix<br/>(.038cm)</b>  | <b>15 mil QR Code<br/>(.038cm)</b>  |
| <b>Near</b>               | 2.5 in. (6.4cm)                             | 2.0 in. (5.1cm)                   | 2.8 in. (7.1cm)                         | 2.2 in. (5.6cm)                    | 1.8 in. (4.6cm)                         | 2.2 in. (5.6 cm)                    |
| <b>Far</b>                | 6.4 in. (16.3cm)                            | 8.8 in. (22.4cm)                  | 5.9 in. (15.0cm)                        | 7.5 in. (19.1cm)                   | 7.4 in. (18.8cm)                        | 7.1 in. (18.0cm)                    |
| <b>HD</b>                 | <b>5 mil Code 39<br/>(.013cm)</b>           | <b>6 mil Code 39<br/>(.015cm)</b> | <b>13 mil 100% UPC-EAN<br/>(.033cm)</b> | <b>6.6 mil PDF417<br/>(.017cm)</b> | <b>6.7 mil Data Matrix<br/>(.017cm)</b> | <b>6.7 mil QR Code<br/>(.017cm)</b> |
| <b>Near</b>               | 2.4 in. (6.1cm)                             | 2.2 in. (5.6cm)                   | 2.1 in. (5.3cm)                         | 2.1 in. (5.3cm)                    | 2.9 in. (7.4cm)                         | 2.8 in. (7.1cm)                     |
| <b>Far</b>                | 4.3 in. (10.9cm)                            | 4.7 in. (11.9cm)                  | 6.7 in. (17.0cm)                        | 5.0 in. (12.7cm)                   | 4.0 in. (10.2cm)                        | 3.9 in. (9.9cm)                     |
| <b>Skew Angle:</b>        | ±40°  |                                   |   |                                    |   |                                     |
| <b>Pitch Angle:</b>       | ±40°  |                                   |   |                                    |   |                                     |
| <b>Motion Tolerance:</b>  | 4 in. (10 cm) per second                    |                                   |   |                                    |   |                                     |

## Mechanical/Electrical

|                               |                       |                 |             |
|-------------------------------|-----------------------|-----------------|-------------|
| <b>Length:</b>                | 5.3 in. (13.5 cm)     |                 |             |
| <b>Height:</b>                | 6.2 in. (15.7 cm)     |                 |             |
| <b>Width:</b>                 | 3.2 in. (8.1 cm)      |                 |             |
| <b>Weight:</b>                | 6.5 oz. (184.3 g)     |                 |             |
| <b>Housing:</b>               | UL 94V0 grade         |                 |             |
| <b>Power Requirements:</b>    | 4.0 - 14VDC at imager |                 |             |
| <b>Current Draw (Typical)</b> | <b>Input</b>          | <b>Scanning</b> | <b>Idle</b> |
|                               | 5 V                   | 382mA           | 53mA        |

## Power Supply

|                         |   |
|-------------------------|---|
| <b>Noise Rejection:</b> | Maximum 100mV peak to peak, 10 to 100 kHz |
|-------------------------|---|

## Environmental

|                               |  |
|-------------------------------|--|
| <b>Sealing:</b>               | IP41 (Water and Dust Resistant)  |
| <b>Operating Temperature:</b> | 32°F to +122°F (0°C to +50°C)  |
| <b>Storage Temperature:</b>   | -40°F to 158°F (-40°C to +70°C)  |
| <b>Humidity:</b>              | 0 to 95%, non-condensing   |
| <b>Mechanical Shock:</b>      | Operational after 50 drops from 6 ft. (1.8 m) to concrete  |
| <b>Ambient Light:</b>         | 0 to 100,000 lux (full sunlight)   |
| <b>ESD Protection:</b>        | Functional after 100 15kV discharges   |
| <b>Vibration:</b>             | Withstands 5G peak from 22 to 300 Hz   |
| <b>Agency:</b>                | FCC Class B, CE EMC Class B, CE Low Voltage Directive, IEC60825-1 LED Safety: Class 1, UL, cUL listed, TÜV, 2005 Sunrise Compliant |
| <b>Laser Classification:</b>  | <b>Laser Aimer Model only:</b> Class 2 under 21 CFR 1040.10 and 1040.11 1mW max output, 650 nm, EN60825-1: 1994+A11+A2             |
| <b>MTBF:</b>                  | per MIL-HDBK-217F Ground Benign exceeds 70,000 hours   |



## Symbologies

|                                |  |
|--------------------------------|--|
| <b>2 Dimensional:</b>          | PDF417, MicroPDF417, MaxiCode, Data Matrix, QR Code, Aztec, Aztec Mesas, Code 49, and EAN•UCC Composite  |
| <b>Linear:</b>                 | Codabar, Code 39, Interleaved 2 of 5, Code 93, Code 128, UPC, EAN, RSS, Codablock F, BC412*, and ISBT 128 Concatenation*<br>*available to licensed users   |
| <b>Postal (SR/SF Only):</b>    | Postnet, Planet Code, British Post, Canadian Post, Japanese Post, KIX (Netherlands) Post   |
| <b>OCR Fonts (SR/SF Only):</b> | OCR-A, OCR-B   |
| <b>Interfaces:</b>             | All popular PCs and terminals via keyboard wedge, keyboard replacement/direct connect, USB, TTL level RS-232, wand emulation (primary interface only) mode, TTL level Serial Wedge, and IBM 46XX retail terminals. |

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