Overview

The 4800i Industrial 2D Area Imager, powered by Adaptus™ Imaging Technology 5.0, decodes faster, farther, and future-proofs your investment. This means employees spend less time trying to capture data, and more time creating a productive and cost effective work environment.

Whether the requirement is reading conventional linear bar codes or 2D matrix symbologies, the 4800i can capture them all today. If the application requires signature capture, OCR, or digital photography, the 4800i can do it. The advanced imaging optics software in the 4800i quickly and easily determines the image content and transfers it to the host system.

The 4800i can be used in a wide range of applications from circuit board manufacture to package delivery tracking. In addition, bar codes, images, and signature capture can provide positive proof of delivery. If discrepant material needs to be viewed by a production supplier, images can be captured and quickly transferred for immediate review and resolution, saving time and money.

The 4800i is extra tough. Full shock-absorbing rubber protects the imager from dozens of 6.5 feet (2 meter) drops to concrete. Since many application environments exhibit airborne dust and rain, the 4800i is sealed so these elements will not degrade performance. In addition to an IP54 enclosure specification, the 4800i is backed by an industry leading 5-year warranty.

Features

- **Powered by Adaptus™ Imaging Technology 5.0:** Delivers extraordinary reading performance to enable ease-of-use and reader versatility.
- **Aggressive, omni-directional point-and-shoot reading:** Of linear, PDF417, and full 2D matrix symbols to allow for greater throughput.
- **NEW! Increased Resolution:** Improved image quality for vision-based applications.
- **Rugged Packaging:** Impact absorbent, shock resistant housing withstands fifty 6.5 foot (2 meter) drops, and is sealed to resist dust, water, and contaminants from entering the unit. Backed by an industry leading 5-year warranty.
- **NEW! Increased Motion Tolerance:** Greater stability in scanning; useful in fast-paced and mixed-symbology environments. Ease of use in all types of scanning applications; better hand/motion tolerance for linear codes.
- **Future-Proof Technology:** The versatility of Adaptus Imaging Technology 5.0 serves broad image-based data capture needs; providing a solid solution for future application requirements.
- **NEW! Faster Time to Read (TTR):** Advanced Linear Decoding (ALD) is faster and reads more like a linear unit.
- **NEW! Broader Depth of Field (DOF):** Ability to read wider bar codes quickly and easily, including hard to read bar codes.
### Performance

<table>
<thead>
<tr>
<th>Specifications</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Illumination LEDs:</strong></td>
<td>626nm ±30nm</td>
</tr>
<tr>
<td><strong>Aiming (Green LED Aimer):</strong></td>
<td>526nm ±30nm</td>
</tr>
<tr>
<td><strong>Image:</strong></td>
<td>VGA, 752x480. Binary, TIFF, or JPEG output.</td>
</tr>
<tr>
<td><strong>Working Range:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>4800iSR</strong></td>
<td></td>
</tr>
<tr>
<td>Near</td>
<td></td>
</tr>
<tr>
<td>8.3 mil Linear</td>
<td>0.021cm</td>
</tr>
<tr>
<td>13 mil UPC</td>
<td>0.033cm</td>
</tr>
<tr>
<td>6.6 mil PDF417</td>
<td>0.017cm</td>
</tr>
<tr>
<td>10 mil PDF417</td>
<td>0.025cm</td>
</tr>
<tr>
<td>15 mil PDF417</td>
<td>0.038cm</td>
</tr>
<tr>
<td>35 mil MaxiCode</td>
<td>0.089cm</td>
</tr>
<tr>
<td>Far</td>
<td></td>
</tr>
<tr>
<td>7.1 in. (18.0cm)</td>
<td></td>
</tr>
<tr>
<td>12.7 in. (32.3cm)</td>
<td></td>
</tr>
<tr>
<td>5.7 in. (14.5cm)</td>
<td></td>
</tr>
<tr>
<td>8.5 in. (21.6cm)</td>
<td></td>
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<tr>
<td>9.7 in. (24.6cm)</td>
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<tr>
<td>12.5 in. (31.8cm)</td>
<td></td>
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<tr>
<td><strong>4800iSF</strong></td>
<td></td>
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<tr>
<td>Near</td>
<td></td>
</tr>
<tr>
<td>7.5 mil Linear</td>
<td>0.019cm</td>
</tr>
<tr>
<td>13 mil UPC</td>
<td>0.033cm</td>
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<tr>
<td>6.6 mil PDF417</td>
<td>0.017cm</td>
</tr>
<tr>
<td>10 mil PDF417</td>
<td>0.025cm</td>
</tr>
<tr>
<td>15 mil Data Matrix</td>
<td>0.038cm</td>
</tr>
<tr>
<td>15 mil QR Code</td>
<td>0.038cm</td>
</tr>
<tr>
<td>Far</td>
<td></td>
</tr>
<tr>
<td>2.0 in. (5.1cm)</td>
<td></td>
</tr>
<tr>
<td>1.5 in. (3.8cm)</td>
<td></td>
</tr>
<tr>
<td>2.3 in. (5.8cm)</td>
<td></td>
</tr>
<tr>
<td>1.7 in. (4.3cm)</td>
<td></td>
</tr>
<tr>
<td>1.3 in. (3.3cm)</td>
<td></td>
</tr>
<tr>
<td>1.7 in. (4.3 cm)</td>
<td></td>
</tr>
<tr>
<td><strong>Skew Angle:</strong></td>
<td>+40°</td>
</tr>
<tr>
<td><strong>Pitch Angle:</strong></td>
<td>+40°</td>
</tr>
<tr>
<td><strong>Motion Tolerance:</strong></td>
<td>4 in. (10 cm) per second</td>
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</table>

### Mechanical/Electrical

<table>
<thead>
<tr>
<th>Specifications</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Length:</strong></td>
<td>5.3 in. (13.5 cm)</td>
</tr>
<tr>
<td><strong>Height:</strong></td>
<td>6.4 in. (16.3 cm)</td>
</tr>
<tr>
<td><strong>Width:</strong></td>
<td>3.2 in. (8.1 cm)</td>
</tr>
<tr>
<td><strong>Weight:</strong></td>
<td>7.5 oz. (213 g)</td>
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<tr>
<td><strong>Power Requirements:</strong></td>
<td>4.0 - 14Vdc at imager</td>
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<tr>
<td><strong>Housing:</strong></td>
<td>UL 94V0 grade</td>
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<tr>
<td><strong>Current Draw (Typical):</strong></td>
<td></td>
</tr>
<tr>
<td>Input</td>
<td>5 V</td>
</tr>
<tr>
<td>Scanning</td>
<td>382mA</td>
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<tr>
<td>Idle</td>
<td>53mA</td>
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### Power Supply

<table>
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<th>Specifications</th>
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<tbody>
<tr>
<td><strong>Noise Rejection:</strong></td>
<td>Maximum 100mV peak to peak, 10 to 100 kHz</td>
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</table>

### Environmental

<table>
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<tr>
<th>Specifications</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Operating Temperature:</strong></td>
<td>14°F to +122°F (-10°C to +50°C)</td>
</tr>
<tr>
<td><strong>Storage Temperature:</strong></td>
<td>-40°F to 158°F (-40°C to +70°C)</td>
</tr>
<tr>
<td><strong>Humidity:</strong></td>
<td>0 to 95%, non-condensing</td>
</tr>
<tr>
<td><strong>Sealing:</strong></td>
<td>IP54 (water and dust resistant)</td>
</tr>
<tr>
<td><strong>Mechanical Shock:</strong></td>
<td>Operational after 50 drops from 6.5 ft. (2 m) to concrete</td>
</tr>
<tr>
<td><strong>Ambient Light:</strong></td>
<td>0 to 100,000 lux (full sunlight)</td>
</tr>
<tr>
<td><strong>ESD Protection:</strong></td>
<td>Functional after 100 discharges at 15kV</td>
</tr>
<tr>
<td><strong>Vibration:</strong></td>
<td>Withstands 5G peak from 22 to 300 Hz</td>
</tr>
<tr>
<td><strong>Agency:</strong></td>
<td>FCC Class B, CE EMC Class B, CE Low Voltage Directive, IEC60825-1 LED Safety, Class 1, UL, cUL listed, TÜV, 2005 Sunrise Compliant</td>
</tr>
<tr>
<td><strong>MTBF:</strong></td>
<td>per MIL-HDBK-217F Ground Benign exceeds 82,000 hours</td>
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### Symbologies

<table>
<thead>
<tr>
<th>Specifications</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2 Dimensional:</strong></td>
<td>PDF417, MicroPDF417, MaxiCode, Data Matrix, QR Code, Aztec, Aztec Mesas, Code 49, and EAN-UCC Composite.</td>
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<tr>
<td><strong>Linear:</strong></td>
<td>Codabar, Code 39 including PARAF, Interleaved 2 of 5, Code 2 of 5, Code 11, Code 93, Code 128, UPC, EAN/JAN, RSS, and ISBT 128 Concatenation (requires a paid license).</td>
</tr>
<tr>
<td><strong>Postal (SR/SF Only):</strong></td>
<td>Postnet, Planet Code, British Post, China Post, Canadian Post, Japanese Post, KIX (Netherlands) Post</td>
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<tr>
<td><strong>OCR Fonts (SR/SF Only):</strong></td>
<td>OCR-A, OCR-B</td>
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<tr>
<td><strong>Interfaces:</strong></td>
<td>All popular PCs and terminals via keyboard wedge, keyboard replacement/direct connect, TTL level RS-232, TTL level Serial Wedge, USB, wand emulation (primary interface only), HHLB non-decoded laser compatible, True RS-232, IBM 468x, and IBM469x.</td>
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### Worldwide Offices

<table>
<thead>
<tr>
<th>World Region</th>
<th>Office Name</th>
<th>Address</th>
<th>Phone Number</th>
<th>Fax Number</th>
<th>Email Address</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ASIA AND THE PACIFIC RIM</strong></td>
<td>Hong Kong</td>
<td>[852] 2911 3050</td>
<td><a href="mailto:appresales@handheld.com">appresales@handheld.com</a></td>
<td>[852] 2911 3050</td>
<td><a href="mailto:appresales@handheld.com">appresales@handheld.com</a></td>
</tr>
<tr>
<td></td>
<td>Japan</td>
<td>[813] 5770 6312</td>
<td><a href="mailto:appresales@handheld.com">appresales@handheld.com</a></td>
<td>[813] 5770 6312</td>
<td><a href="mailto:appresales@handheld.com">appresales@handheld.com</a></td>
</tr>
<tr>
<td></td>
<td>Shanghai</td>
<td>[86 2] 6361 3818</td>
<td><a href="mailto:appresales@handheld.com">appresales@handheld.com</a></td>
<td>[86 2] 6361 3818</td>
<td><a href="mailto:appresales@handheld.com">appresales@handheld.com</a></td>
</tr>
<tr>
<td></td>
<td>Malaysia</td>
<td>[600] 6201 9020</td>
<td><a href="mailto:appresales@handheld.com">appresales@handheld.com</a></td>
<td>[600] 6201 9020</td>
<td><a href="mailto:appresales@handheld.com">appresales@handheld.com</a></td>
</tr>
<tr>
<td><strong>LATIN AMERICA</strong></td>
<td>Naples, Florida</td>
<td>[399] 239 263 7600</td>
<td><a href="mailto:lappresales@handheld.com">lappresales@handheld.com</a></td>
<td>[399] 239 263 7600</td>
<td><a href="mailto:lappresales@handheld.com">lappresales@handheld.com</a></td>
</tr>
<tr>
<td></td>
<td>Rio de Janeiro</td>
<td>[55 2] 2178 0500</td>
<td><a href="mailto:lappresales@handheld.com">lappresales@handheld.com</a></td>
<td>[55 2] 2178 0500</td>
<td><a href="mailto:lappresales@handheld.com">lappresales@handheld.com</a></td>
</tr>
<tr>
<td></td>
<td>Mexico</td>
<td>[52 5] 5203 2100</td>
<td><a href="mailto:lappresales@handheld.com">lappresales@handheld.com</a></td>
<td>[52 5] 5203 2100</td>
<td><a href="mailto:lappresales@handheld.com">lappresales@handheld.com</a></td>
</tr>
<tr>
<td><strong>EUROPE, MIDDLE EAST, AND AFRICA</strong></td>
<td>Europe</td>
<td>[33 (0)] 40 29 01 600</td>
<td><a href="mailto:eusales@handheld.com">eusales@handheld.com</a></td>
<td>[33 (0)] 40 29 01 600</td>
<td><a href="mailto:eusales@handheld.com">eusales@handheld.com</a></td>
</tr>
<tr>
<td></td>
<td>United Kingdom</td>
<td>[44 (0)] 1 925 240055</td>
<td><a href="mailto:eusales@handheld.com">eusales@handheld.com</a></td>
<td>[44 (0)] 1 925 240055</td>
<td><a href="mailto:eusales@handheld.com">eusales@handheld.com</a></td>
</tr>
<tr>
<td></td>
<td>Italy</td>
<td>[39 0] 7254 8754</td>
<td><a href="mailto:info.itlay@handheld.com">info.itlay@handheld.com</a></td>
<td>[39 0] 7254 8754</td>
<td><a href="mailto:info.itlay@handheld.com">info.itlay@handheld.com</a></td>
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