ARC IMAGER
RADIOMETRIC THERMAL
PROCESS IMAGING

0 to 1000 °C / 32 to 1832 °F

LAND
AMETEK®
PROCESS & ANALYTICAL INSTRUMENTS

QUALITY CUSTOMER SOLUTIONS
AMETEK LAND HAS BEEN MANUFACTURING PRECISION MEASURING EQUIPMENT SINCE 1947.

We are specialists in non-contact temperature measurement and combustion monitoring with applications across diverse industries such as steel and glass making, power generation and cement manufacture.

As part of AMETEK Process & Analytical Instruments Division since 2006, our customers benefit from the worldwide AMETEK sales and service team.

ARC is a range of General Purpose Thermal Process Imagers which are rugged enough to withstand heavy industrial applications, while compact enough for use in research and development and automation. ARC is a high resolution radiometric thermal imager providing detailed thermal images with unsurpassed temperature accuracy.

ARC is available with two temperature ranges (0 to 500 °C / 32 to 932 °F and 100 to 1000 °C / 212 to 1832 °F), four lenses, two frame rates and three software variants to meet exact user requirements.

Sophisticated data-processing is performed within the ARC Imager. Connection to an I/O module is made via standard industrial Ethernet, offering stand-alone operation for a smarter image. ARC is supplied as standard with ARC Viewer software, which enables visualisation of the thermal data, while Viewer+ offers configuration of the Smart Camera features and LIPS allows full analysis, recording and playback of thermal data.

The range of four lenses enables viewing of any target, at any distance with outstanding image clarity. Coupled with this is the wide ambient temperature operating range making ARC suitable for everything from bench top monitoring to the most demanding industrial applications.

ARC uses remote motorised focus allowing quicker installation and safer and convenient operation.

### Field of View Lens Option

<table>
<thead>
<tr>
<th>Distance</th>
<th>0.3m</th>
<th>0.5m</th>
<th>1.0m</th>
<th>5.0m</th>
<th>10.0m</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>e</td>
<td>g</td>
<td>i</td>
<td>j</td>
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<td>b</td>
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</tbody>
</table>

For Horizontal, Vertical & Single Pixel Instantaneous Field of View refer to table above.

[Table with field of view options]
SPECIFICATION & DESIGN

1: VIEWING ANGLE
11°, 22°, 44° or 60° angle provides thermal view, 384 x 288 resolution

2: OPTIONAL ATEX AND CLASS/DIVISION ENCLOSURES
Suitable for hazardous area applications

3: IP65/NEMA 4 X SEALING
Maintains performance in any environment

4: REMOTE MOTORISED FOCUS
Quicker installation, safe and convenient operation

5: STANDARD INDUSTRIAL ETHERNET
Direct connection to a range of I/O modules for simple, stand-alone operation

6: MONITORING SOFTWARE
Image view with basic temperature data (Viewer), plus smart feature configuration (Viewer+), image recording, profiles, areas of interest, alarms

TYPICAL APPLICATIONS

<table>
<thead>
<tr>
<th>Automation</th>
<th>Process Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machine Vision</td>
<td>Flare Stack Monitoring</td>
</tr>
<tr>
<td>Coal Pile Hot Spot Detection</td>
<td>Medical</td>
</tr>
<tr>
<td>Critical Vessel Refractory</td>
<td>Petrochemical</td>
</tr>
<tr>
<td>Food</td>
<td>Minerals</td>
</tr>
</tbody>
</table>

FEATURES & BENEFITS

- High resolution radiometric thermal imager - detailed thermal images with unsurpassed temperature accuracy
- A smarter image - 4 areas with min, max, mean and noise filter, individual emmissivities, 4 alarms (high low) per area - all configurable from Viewer+ software
- Viewer software as standard - user-friendly monitoring software enables visualisation of thermal data
- 4 Lens options - view any target, at any distance with outstanding clarity
- Wide ambient temperature operating range - install just about anywhere

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## SPECIFICATIONS

**Measurement Range**

<table>
<thead>
<tr>
<th>Model</th>
<th>Range</th>
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<tbody>
<tr>
<td>ARC-8-FOV-500-Rate</td>
<td>0 to 500 °C / 32 to 932 °F</td>
</tr>
<tr>
<td>ARC-8-FOV-1000-Rate</td>
<td>100 to 1000 °C / 212 to 1832 °F</td>
</tr>
</tbody>
</table>

**Spectral Response:** 8 to 14 µm

**Frame Rate**

<table>
<thead>
<tr>
<th>Type</th>
<th>Rate</th>
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</thead>
<tbody>
<tr>
<td>LF Models</td>
<td>7.5 Hz</td>
</tr>
<tr>
<td>HF Models</td>
<td>30 Hz</td>
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</table>

**Image Pixels:** 384 x 288

**Accuracy:** ±2% or ±2 °C

**Sealing:** IP 65 / NEMA 4X

**Software:** ARCViewer, ARCViewer +, LIPS

**Field of View (Horizontal):** 11°, 22°, 44° or 60°

**Focus Range:** 0.3 m > infinity (22°, 44° or 60°) / 0.5 m > infinity (11°)

**Dimensions:** 85 x 85 x 276 mm / 3.5 x 3.5 x 11 in (including lens)

**Weight:** 1.8 kg / 4 lbs

**Ambient Range:** -20 to 60 °C / -4 to 140 °F

**Operating Humidity:** 5 % to 95 % (non-condensing)

**Power Supply:** 9 to 30 Vdc

**EMC:** EN 61326