PIR uc SWIR HD 800
Stationary Thermographic Camera for Industrial Use

Thermographic camera with (1,280 x 1,024) IR pixels
Short wave spectral range (0.78 … 1.1) μm
Frame rate up to 60 Hz
Large temperature measuring range of (650 … 1,000) °C
Robust industrial camera with a high protection degree (IP67)
Compact light metal housing
Process and trigger interface

1) Metal forming
2) Heated sheet metal before the pressing process
3) Slab production

www.InfraTec.eu

Made in Germany
The high-resolution PIR uc SWIR HD 800 is a very compact thermographic camera designed for stationary use, which works in the short-wave spectral range and is used preferably for contactless temperature measurement on metal surfaces because of its spectral characteristics. The robust industrial camera is based on a high-resolution Si-CMOS array with $(1,280 \times 1,024)$ IR pixels and enables images in HD quality. It is suitable for solving a wide range of measuring tasks in production and development – including process monitoring, quality assurance and product development. The PIR uc SWIR HD 800 demonstrates its strengths, for example, as a component of PRESS-CHECK – in the automation solution of InfraTec for quality assurance during press hardening. It is used there for measuring the surface temperature distribution of the metal sheets to be machined before the pressing process.

Already the outer appearance reveals the perfect suitability for stationary industrial use. The high-quality light metal housing can be integrated easily into numerous process environments thanks to its compact dimensions. The protection degree IP67 enables installations even in environments where dirt and high temperatures are commonplace. The detector with its very high geometric resolution offers the possibility of detecting even the smallest details on large measurement objects quickly and precisely. Focusing on temperature measurements in the short-wave spectral range of $(0.78 \ldots 1.1) \mu m$ ensures that physically determined measurement errors, which occur due to the emission properties of metallic measurement objects, are minimised.

The evaluation and analysis programs of the IRBIS® 3 software family round off the flexible character of the PIR uc SWIR HD 800. Based on IRBIS® 3, IRBIS® 3 plus and IRBIS® 3 professional provide powerful tools for camera control and data acquisition that enable additional freedom for easy adjustment to the systems on site.

**Application examples**
- Monitoring during the press hardening of sheet metal parts (PRESS-CHECK)
- Quality inspection in the metalworking industry
- High temperature applications

**Order information**

<table>
<thead>
<tr>
<th>Item number</th>
<th>Thermographic system with lenses</th>
</tr>
</thead>
<tbody>
<tr>
<td>M92717</td>
<td>PIR uc SWIR HD 800 $(1,280 \times 1,024)$ IR pixels, 4.8 mm</td>
</tr>
<tr>
<td>M94860</td>
<td>PIR uc SWIR HD 800 $(1,280 \times 1,024)$ IR pixels, 8.0 mm</td>
</tr>
<tr>
<td>M92730</td>
<td>PIR uc SWIR HD 800 $(1,280 \times 1,024)$ IR pixels, 12.5 mm</td>
</tr>
</tbody>
</table>