



Quick Start Application Set

For thermal imaging and easy application of our arrays we designed an evaluating processor unit in a modular metal case for better handling. The module's field of view depends on housing, the built-in lens and can be varied on demand. The object temperature range can be easily changed by software.

The digital data stream is transferred from the module to the PCB via SPI and contains the signal voltages of the elements, the offset of the amplifiers and the ambient temperature information of the module. The analogous data stream contains the same information and can be sampled by an external ADC. The microcontroller processes the data and communicates via Ethernet/UDP to a PC. On PC side the data stream is logged and visualized with a Graphical User Interface. The given software allows you to start your measurements and testing almost immediately.

Applications

- Person detection
- Fire detection
- Hotspot detection
- Energy management
- Security cameras
- Industrial process control
- Air condition control
- Out of position

Benefit

- Low cost TO8/TO39 housing
- Low power consumption
- · Short time constant
- · High sensitivity of the system
- · No need for shutter and thermal stabilization

Features:

- Communications via RJ45/Ethernet/UDP
- · False color images with auto scaling
- · Selectable frame rate
- Data log mode
- · Contrast adjustment
- Interpolation
- Temperature display
- · Several lenses for different field of view

Included in delivery:

- Array module
- Cable interface
- AC adapter (100V~ ... 240V~)
- Tripod
- Software

Module dimension:

Diameter 28 mm; length approx. 55 mm (length depends on chosen lens)





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Heimann Sensor ArraySoft

Graphical User Interface for HTPA Modules and Application sets

The HTPA application set comes with our comprehensive Graphical User Interface (GUI) "ArraySoft" which provides a lot of features and is constantly updated. It can be used instantly with our UDP-Modules, SPI-SDK for the HTPA series and our application sets. Furthermore, it is possible to use it with our UART modules by connecting the module via a transceiver to the RS232 interface of your PC.

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Features:

- 7 false color scales
- Auto and manual scaling (7 scaling modes)
- Temperature and voltage mode
- Data streaming into files
- AVI export
- Interpolation mode
- · Complete control of the device
- Multiple devices can be controlled
- The data stream of 4 devices can be displayed at the same time
- Histogram
- · Selectable temperature or voltage profile

- Minimum and Maximum Temperature / Voltage info
- Suitable for all HTPA types (8x8 to 64x62)
- Frames per second indicator
- Alignment for offset corrected frames
- Temperatures in Kelvin or degree Celsius
- IR-Frame can be mirrored in both axis
- Single Pixel information accessible
- Temperature calculation with the respect to object emissivity
 Screenshot ability (JPG or ASCII data)
- Recorded data streams can be played in selectable speed →Make your own "thermal movie"

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