

GridEYE-Demo



Grid-EYE Demo

Temperature Values								Intensity Graph	
33,75	34,00	34,75	34,75	32,00	30,00	28,25	28,00		
34,25	34,25	34,00	34,00	32,50	29,00	27,75	27,25		
33,75	34,25	34,25	34,00	33,50	30,00	28,25	27,50		
32,50	32,50	33,50	33,25	32,25	32,50	28,25	27,00		
32,50	30,50	33,25	33,00	31,75	32,25	29,25	28,00		
32,25	30,00	32,75	32,00	32,75	30,75	30,00	27,50		
31,25	31,25	31,25	32,25	32,50	29,75	28,25	27,50		
31,50	31,00	31,00	31,00	30,00	29,25	28,25	28,50		

Panasonic

ais electronic GmbH & Co. KG

COM Port: COM5 Baud Rate: 57600

Scan Ports Log Data

Stop Measurement Receive Data

View Mode: Device View

Update Speed: 10Hz

Output Mode: Normal

Thermistor temperature: 28,3750

Temperature scaling x: 1,00

Manual Auto

Temperature Color scaling

MAX: 35

MIN: 20

Thermal Image Options

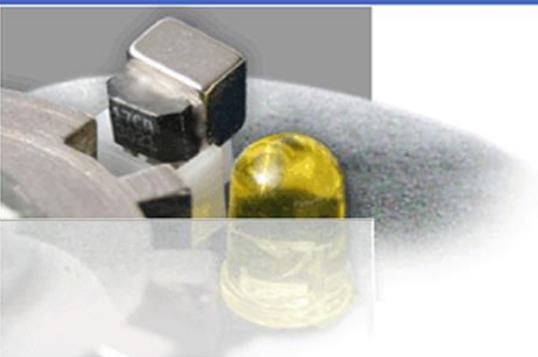
Thermal Image

Communication Settings

Measurement Options

Internal Thermistor Measurement

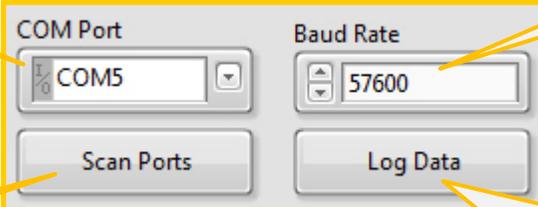
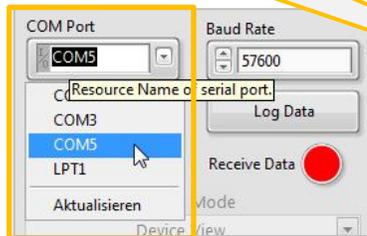
Thermal Image Color Scaling



GridEYE-Demo Communication Settings

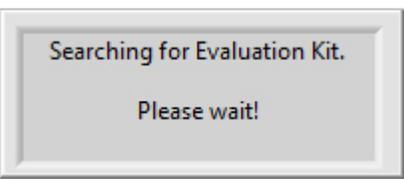
Choose the **COM Port** manually if needed

Baud Rate can be set individually to fit your hardware



If the Evaluation Kit is not found automatically, you may initiate the search again by **Scan Ports**

Log Data lets you define a filename and location to log the measurements of the sensor; the default filename is **Grid-EYE_Log.txt**



Time	Pixel 1	Pixel 2	Pixel 3	Pixel 4	Pixel 5	Pixel 6	Pixel 7	Pixel 8	Pixel 9
0,295	26,500	25,000	25,250	25,500	26,000	26,250	26,000	25,500	26,250
0,342	26,000	24,750	25,500	25,000	25,000	25,750	25,500	27,000	25,500
0,388	26,000	25,750	25,750	26,000	26,000	24,500	26,500	25,000	25,750
0,433	27,000	24,500	26,000	25,750	26,000	26,000	26,250	26,750	26,000
0,503	27,000	26,000	26,000	25,250	25,250	25,750	25,500	26,500	25,500
0,617	27,250	25,250	25,000	25,750	26,000	24,250	24,750	26,250	26,500
0,730	25,250	24,500	25,250	24,500	26,750	25,750	25,250	26,250	25,000
0,843	25,500	24,750	25,000	25,000	25,500	24,750	25,250	26,250	25,750



GridEYE-Demo Measurement Options

Start & Stop Measurement

Start Measurement Receive Data ●

Stop Measurement Receive Data ●

Stop Measurement Receive Data ●

Receive Data indicating data acquisition:
Green = receiving data
Red = no data acquisition
Orange = waiting for data

Stop Measurement Receive Data ●

View Mode

Device View ▼

Update Speed

1Hz Device Calculation ▼

Output Mode

Normal ▼

Device View
 shows the thermal image from the sensors' point of view;
Mirror Inverted View
 flips the sensor view vertically

View Mode

Mirror Inverted View ▼

Device View

✓ Mirror Inverted View

Output Mode
Normal = unfiltered output
Moving average = noise reduction by averaging of two samples in a row

Output Mode

Normal ▼

✓ Normal

Moving average

Update Speed
10Hz = fast data acquisition with 10Hz;
1Hz Device Calculation = device calculates mean of 10 measurements for each pixel;
1Hz Software Mean Calculation = mean calculation of 10 samples per pixel by software

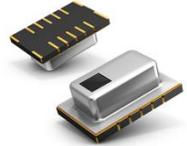
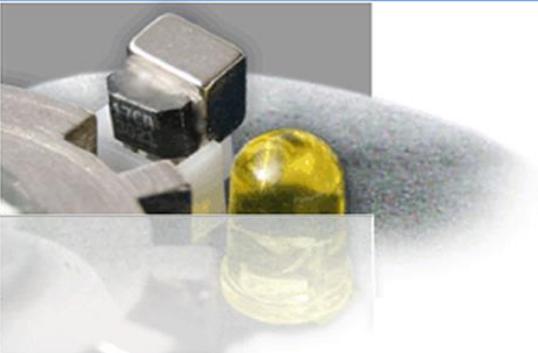
Update Speed

10Hz ▼

✓ 10Hz

1Hz Device Calculation

1Hz Software Mean Calculation



GridEYE-Demo

Thermal Image Color Scaling

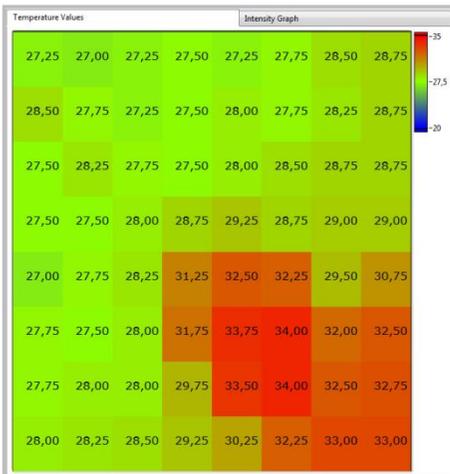
Manual Temperature Color scaling lets you define the temperature range for MAX (red) and MIN (blue) color

Manual **Auto**

Temperature Color scaling

MAX

MIN



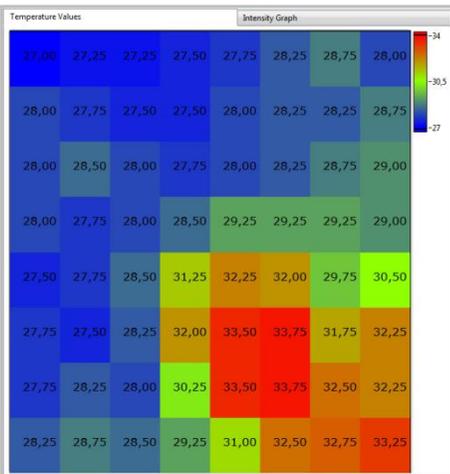
Auto Temperature Color scaling automatically references red/blue color to the highest/lowest temperature in the view

Manua **Auto**

Auto scale step size

Spread spectrum

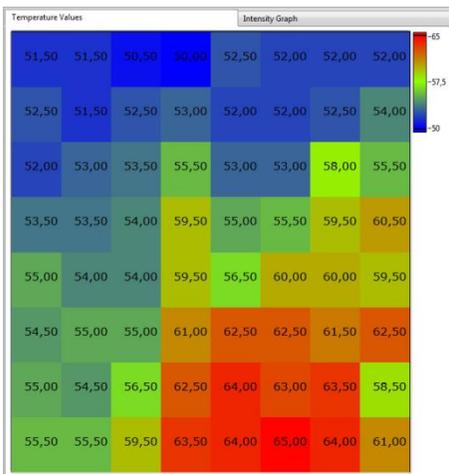
OFF/ON

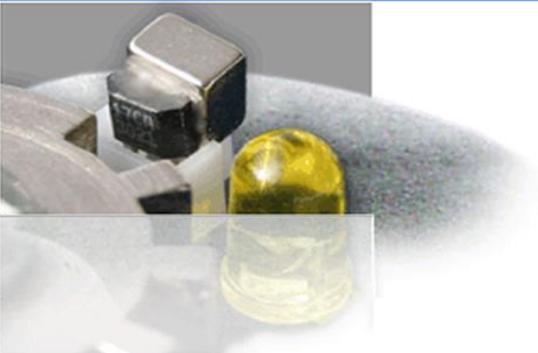


The number of color shades can be reduced by increasing **Auto scale step size** and activating **Spread spectrum**

Temperature scaling multiplies the temperature values by the given factor

Temperature scaling x





GridEYE-Demo

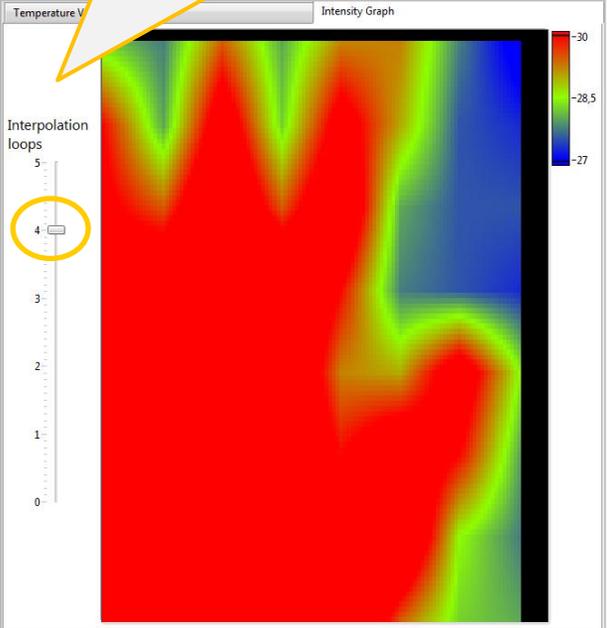
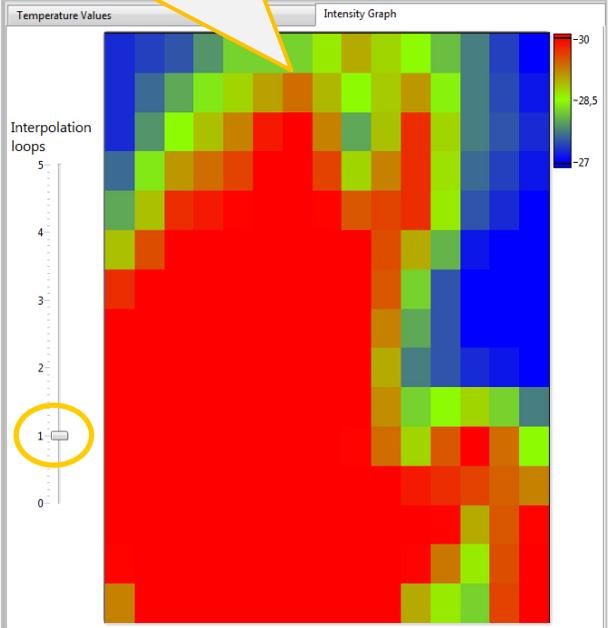
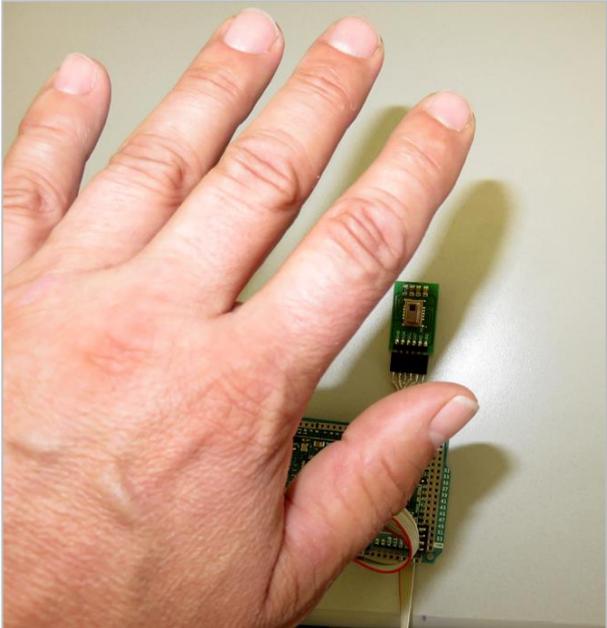
Thermal Image: Intensity Graph



Intensity Graph shows the thermal image with the option of adding **Interpolation loops**

Intensity Graph of a hand with default setting

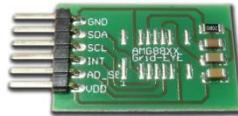
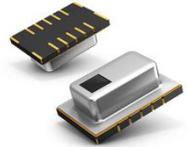
Intensity Graph of a hand calculated with four **Interpolation loops**





GridEYE-Demo

Optional Hardware: Grid-EYE Adaptor-Board



Ordering Code

Description

130-10029-000

AS-TB-GridEYE-AMG88xx

Pre-Equipped PCB without Grid-EYE Sensor

130-10029-100

AS-TB-GridEYE-AMG8833

PCB with Grid-EYE Sensor AMG8833 (3.3V/High-Gain/Gen.II)



130-10029-200

AS-TB-GridEYE-AMG8834

PCB with Grid-EYE Sensor AMG8834 (3.3V/Low-Gain/Gen.II)

130-10029-300

AS-TB-GridEYE-AMG8853

PCB with Grid-EYE Sensor AMG8853 (5V/High-Gain/Gen.II)

130-10029-400

AS-TB-GridEYE-AMG8854

PCB with Grid-EYE Sensor AMG8854 (5V/Low-Gain/Gen.II)



130-10030-100

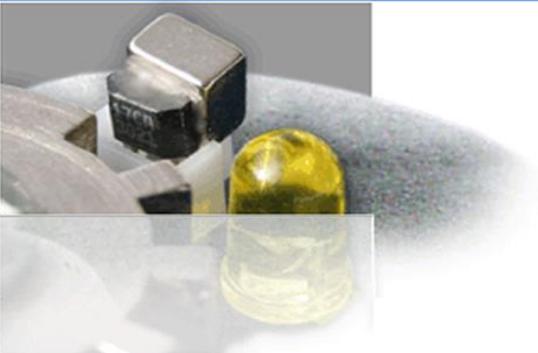
AS-TB-GridEYE-AMG8833-EK

ARDUINO DUE & PCB with Grid-EYE Sensor AMG8833 (3.3V/High-Gain/Gen.II)

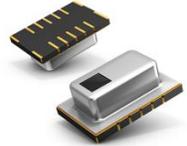
130-10030-200

AS-TB-GridEYE-AMG8834-EK

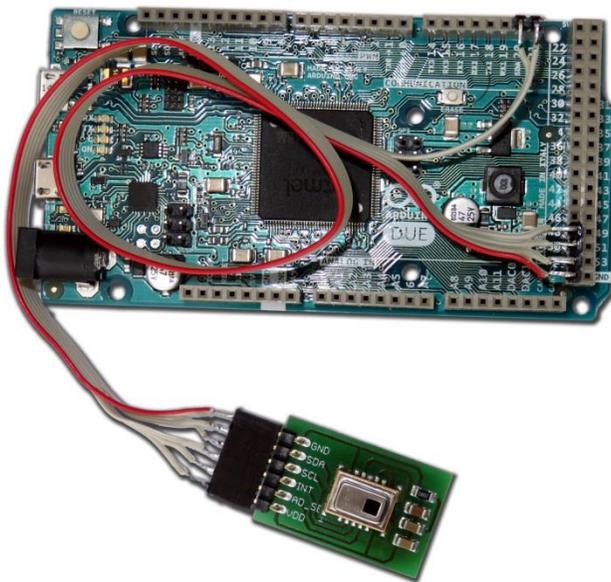
ARDUINO DUE & PCB with Grid-EYE Sensor AMG8834 (3.3V/Low-Gain/Gen.II)



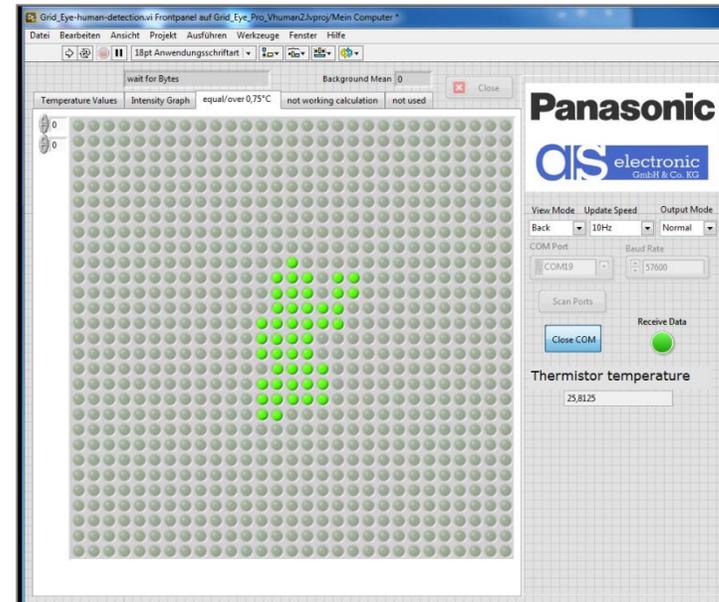
GridEYE-Demo Optional Hard & Software



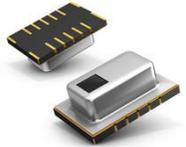
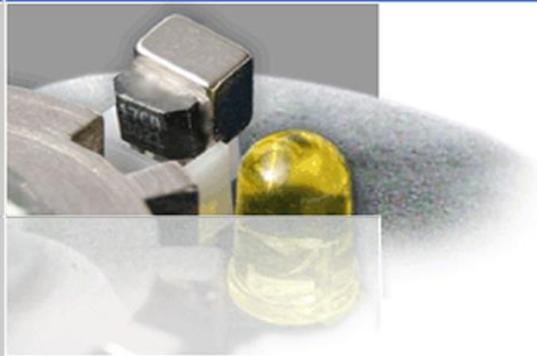
ARDUINO DUE with AS-TB-GridEYE-AMG88xx *



Presence Detection Approach *



* ARDUINO source and LabView .vi available on request



***Feel free to contact us
in case of any questions !***

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