



# Field Of View Calculator for DIAS IR cameras

## FOV Calculator PYROVIEW/PYROLINE

The program „FOV Calculator PYROVIEW/PYROLINE“ is used for the calculation of the measurement field diameter in dependence of the measurement distance of infrared cameras and infrared line cameras of the company DIAS Infrared GmbH.

## Installation

### License Agreement

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### Terms Of Guarantee

Although the software has been tested extensively, no warranty or liability claims can be asserted on the basis of diverse hardware and software environments in which the software can be used. For the completeness and accuracy of the content of this document no guarantee is furnished.

### Requirements to hardware and software

The programm „FOV Calculator PYROVIEW/PYROLINE“ runs on computers using Windows® XP to Windows® 10.

### Installation notes

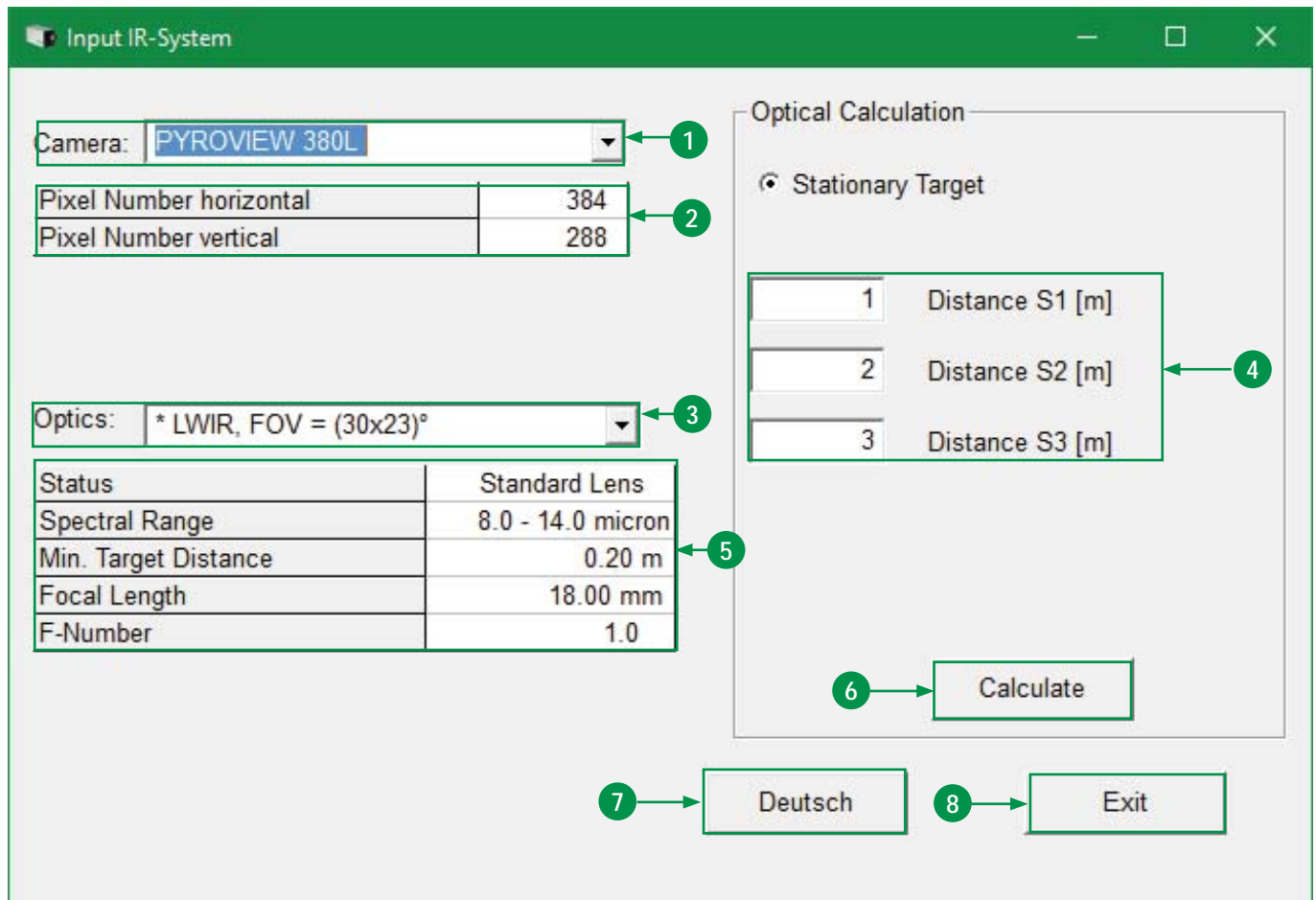
For the installation of the software FOV Calculator PYROVIEW/PYROLINE run the program „Setup\_FOV\_Calculator\_Vxxx.exe“. The install wizard guides you through the installation process.



# Field Of View Calculator for DIAS IR cameras

## FOV Calculator PYROVIEW/PYROLINE

### Field Of View Calculation of 2D cameras



The screenshot shows the 'Input IR-System' window with the following elements:

- 1**: Camera selection dropdown menu (currently set to PYROVIEW 380L).
- 2**: Table for camera features:
 

Pixel Number horizontal	384
Pixel Number vertical	288
- 3**: Optics selection dropdown menu (currently set to \* LWIR, FOV = (30x23)°).
- 4**: Table for measurement distances:
 

1	Distance S1 [m]
2	Distance S2 [m]
3	Distance S3 [m]
- 5**: Table for optics features:
 

Status	Standard Lens
Spectral Range	8.0 - 14.0 micron
Min. Target Distance	0.20 m
Focal Length	18.00 mm
F-Number	1.0
- 6**: 'Calculate' button.
- 7**: 'Deutsch' button.
- 8**: 'Exit' button.

To make the optical calculation, please select camera type (1), optics (3) and measurement distance (4). Click „Calculate“ (6) then.

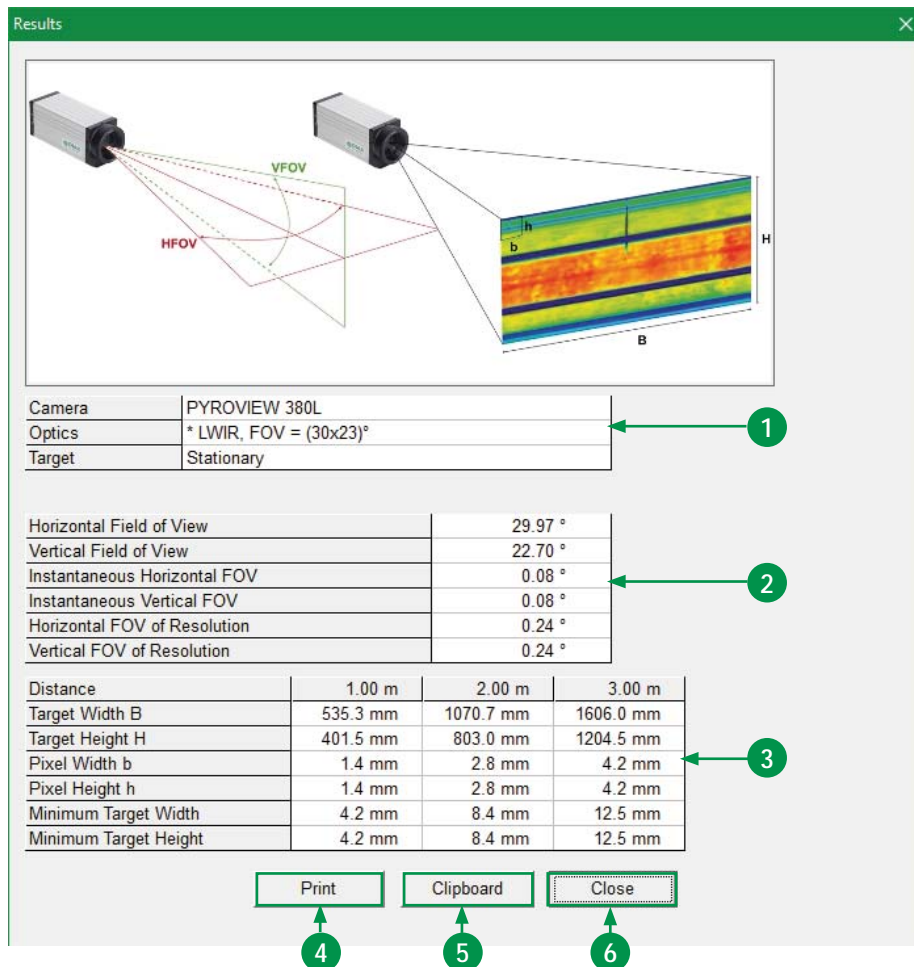
- (1) Select camera type
- (2) Camera features
- (3) Select optics type
- (4) Insert measurement distance
- (5) Optics features
- (6) Start calculation
- (7) Switch language (German or English)
- (8) Exit program



# Field Of View Calculator for DIAS IR cameras

## FOV Calculator PYROVIEW/PYROLINE

### Results of the field of view calculation (PYROVIEW)



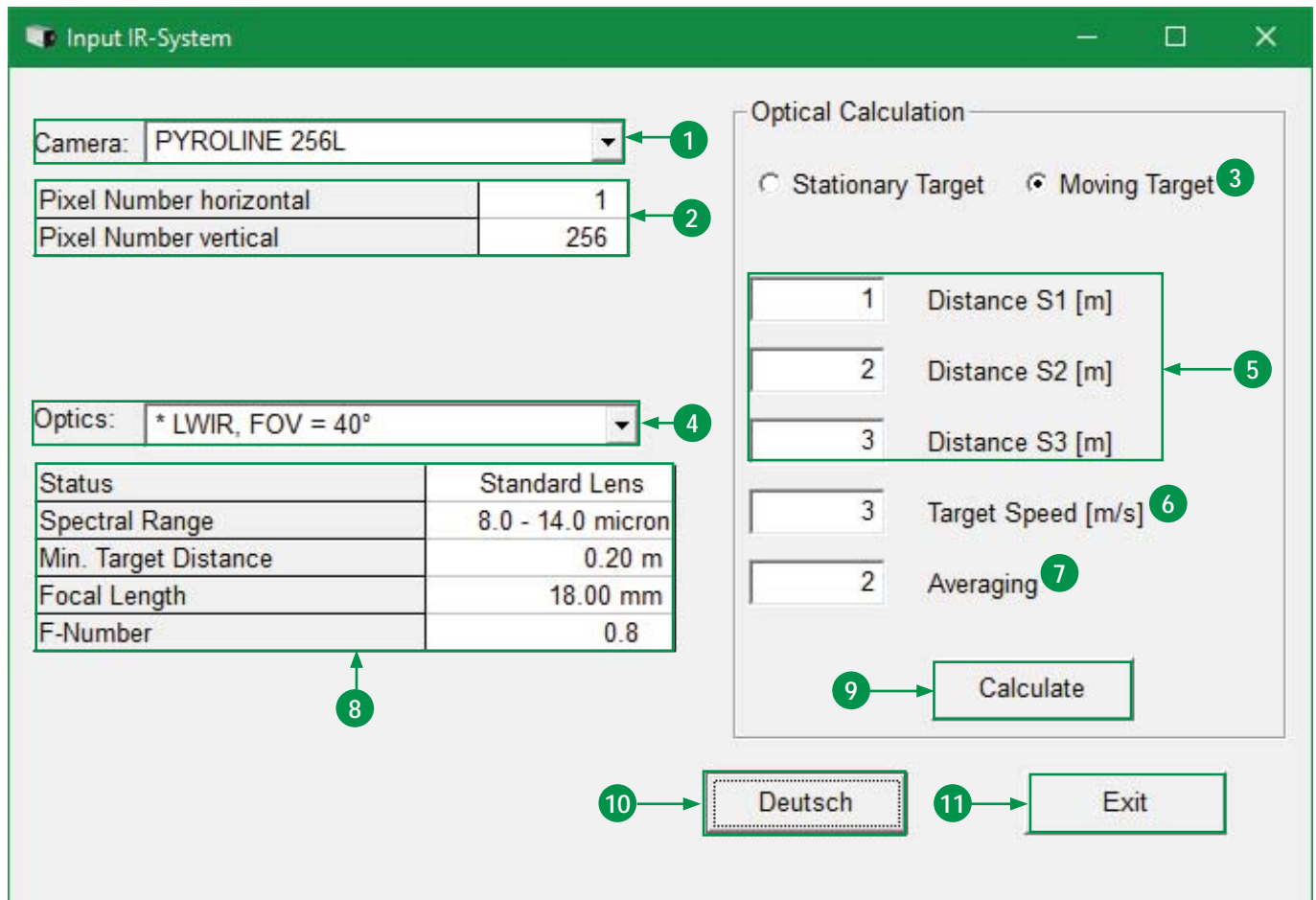
- (1) Measurement information
- (2) Results field of view
- (3) Results of measurement field size
- (4) Print results
- (5) Copy results into clipboard
- (6) Close window



# Field Of View Calculator for DIAS IR cameras

## FOV Calculator PYROVIEW/PYROLINE

### Field Of View Calculation of line cameras (PYROLINE)



**Input IR-System**

Camera: PYROLINE 256L

Pixel Number horizontal: 1  
Pixel Number vertical: 256

Optics: \* LWIR, FOV = 40°

Status	Standard Lens
Spectral Range	8.0 - 14.0 micron
Min. Target Distance	0.20 m
Focal Length	18.00 mm
F-Number	0.8

**Optical Calculation**

☐ Stationary Target ☒ Moving Target

Distance S1 [m]  
Distance S2 [m]  
Distance S3 [m]

Target Speed [m/s]  
Averaging

Calculate

Deutsch Exit

To make the optical calculation, please select camera type (1), optics (4), optical calculation (3) and measurement distance (5). Click „Calculate“ (6) then.

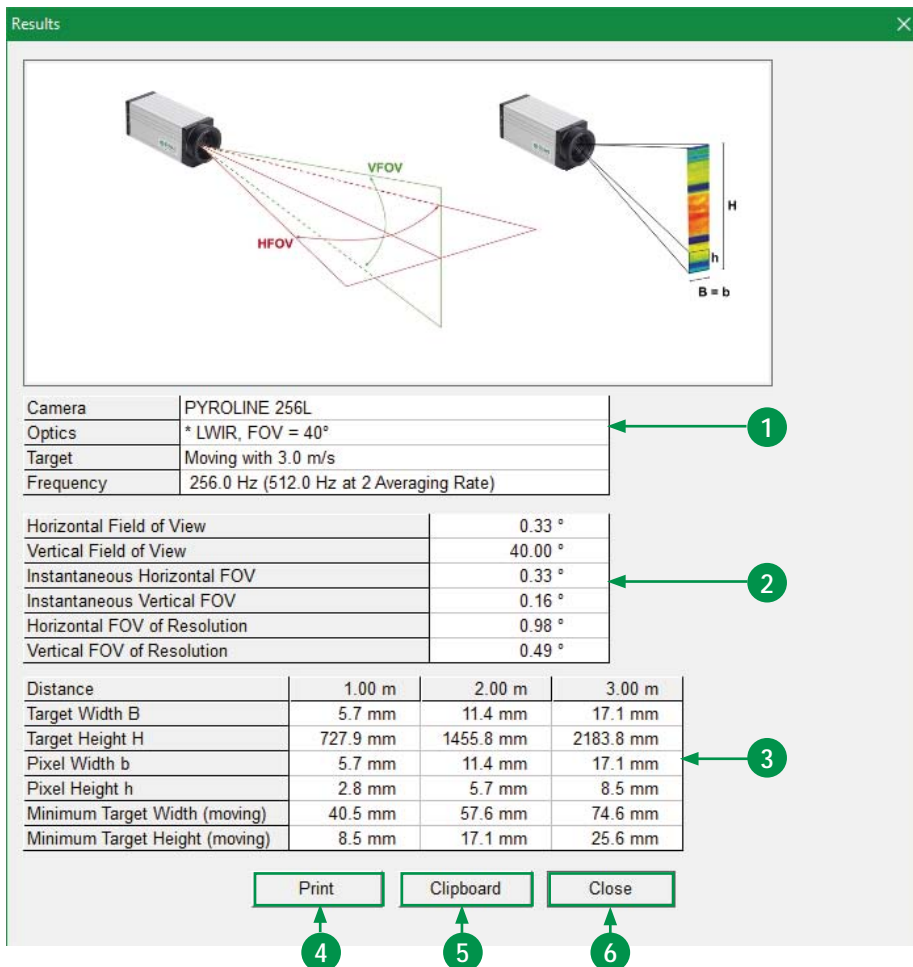
- (1) Select camera type
- (2) Camera features
- (3) Select state of target: stationary or moving
- (4) Select optics
- (5) Insert measurement distance
- (6) Insert speed of measurement object in [m/s]
- (7) Insert measurement frequency or averaging:  
Averaging 1: 512 lines/second,  
Averaging 2: 256 lines/second,  
Averaging 4: 128 lines/second, etc.
- (8) Optics features
- (9) Start calculation
- (10) Switch language (German or English)
- (11) Exit program



# Field Of View Calculator for DIAS IR cameras

## FOV Calculator PYROVIEW/PYROLINE

### Ergebnisse der Field Of View Berechnung (PYROLINE)



- (1) Measurement information
- (2) Results field of view
- (3) Results measurement field size
- (4) Print results
- (5) Copy results into clipboard
- (6) Close window