# IRImagerDirectSDK - Features

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# **Description:**

- C/C++ Software Development Kit (SDK) for accessing temperature data
- Lightweight and highly integrable (no GUI; slim package)
- Multiplatform capabilities
- Free of charge

# **Use Cases:**

- custom embedded applications
- custom linux based applications
- custom processing of image data without the need of PI-Connect software

#### **Features:**

- C++ utilities for generating false color images
- C++ code examples for fast training and development
  - OpenGL image display (linux)
  - DirectShow image display (windows)
  - Operation of multiple cameras
- Tutorial for embedded reference platform (RaspberryPi 3)
- Doxygen documentation
- Network communication capabilities
  - Transport image data via TCP
  - Configure device via TCP (limited functionality)
- Support for the Process Interface (PIF)
- Automatic download of calibration files
- ExpertAPI Access to most camera configuration parameters
- EasyAPI An easy starting point for development

- Additional Implementations for:
  - o Matlab (EasyAPI)
  - LabView (EasyAPI)
  - C# (ExpertAPI)
  - Python (EasyAPI) (coming soon)
- Support for visible image channel PI450 (not available with EasyAPI)
- Load and save xml-based configuration files for each camera
- Control Focusmotor (Xi80, Xi400)

# **Supported Cameras:**

- PI160
- PI200, PI230 (+ visible image channel)
- PI400, PI450 (PI400i, PI450i coming soon)
- PI640
- PI1M, PI05M
- Xi80, Xi400

# **Supported Platforms:**

- Linux (amd64, i386, arm64, armhf, armel, atom)
- Windows (amd64, i386)

### **Not supported Features:**

- No Access to raw camera data
- Cannot Process ravi files
- · Cannot Generate ravi files
- No Image processing (like in pi-connect)
- No Graphical user interface for configuration
- Not a Ready to use software (no DoubleClick application) → SDK
- Not a linux version of PI-Connect

EasyAPI, directbindings and C-Bindings means the same. It is an C-functions-based interface for the driver package. This interface only provides a reduced set of functionalities of the ExpertAPI. Most additional implementations are based on the directbindings. Therefore they provide only reduced functionality, too.