

## Installation Guide for G-API on Linux

### Introduction

The Linux software includes the following components:

- Linux service (daemon) for controlling of the devices (`gapi.service`)
- GOPEL C-API (G-API-Linux-library) in the form of 'shared Libraries'
- Documentation of the C-API
- Code samples (C-Code) to illustrate the functions

### Application environment

#### Supported Distributions

The software was developed and tested for the following distributions:

- openSUSE 15.1
- openSUSE Leap 42.2
- Debian GNU/Linux 9
- Ubuntu 16.04 LTS

#### System requirements

- Standard desktop PC with Intel processor and at least one network adapter
- Approximately 50 MB free disk space
- C/C++ compiler
- C compiler runtime library

### Installation of the package

The installation package is provided in the form of a self-extracting archive (created with 'Makeself' Vers. 2.3.1, file extension '\*.run').

The file name has the following structure: install\_g\_api\_<Version>\_<Distro>.run

The Installation process is quite simple:

1. **Copy install file to current directory**  
i.e.: >cp ./Downloads/install\_g\_api\_2.1.\*\*\*\*.run ./
2. **Make file executable**  
i.e.: >chmod +x ./install\_g\_api\_2.1.\*\*\*\*.run
3. **Start installation and follow the instructions**  
i.e.: ./install\_g\_api\_2.1.\*\*\*\*.run
4. **Components**

The following components are installed:

- Service 'gapi.service' (systemd)



- Shared Libraries (directory /usr/lib/g\_api/)
- Documentation, samples, tools , setup-files (directory ./gapi)

#### 5. Options

The installation executable provides optional parameters.

Run './install\_g\_api\_2.1.\*\*\*.run --help' to see all options.

For example you can get informations about the package (--info, --list), extract without starting the installation (--noexec) or choose an installation path (--target dir, default path is “./g\_api”).

## Useful commands to control the software

### Build samples

- > cd samples
- > make

### Get firmware versions of attached devices

- > bin/test\_GetFirmwareVersions

### Get a list of interfaces that can currently be used

- > bin/GetInterfaceList

### Generate or refresh the configuration file

- > bin/g\_api\_refresh\_config

### Module info of the driver

- > sudo modinfo Pxi61xx

### State of gapi.service

- > sudo systemctl status gapi.service

### Restart of the service

- > sudo systemctl restart gapi.service

### Set library path if needed

- > export LD\_LIBRARY\_PATH=/usr/lib/g\_api

