



# S7CanOpener

## for SIEMENS SIMATIC S7-300 and S7-400 blocks

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### Purpose of S7CanOpener

S7CanOpener eases the “KNOW\_HOW\_PROTECT” protection set or removal of S7-300 and S7-400 blocks.

#### Useful when:

- Your machinery supplier or system integrator does no longer support the software they developed
- You lost your source code and you can not access your compiled blocks anymore.
- You like to keep just one copy of your blocks instead of maintaining both compiled and source copy of each block.
- You like to toggle the know\_how\_protect keyword on-the-fly, without having to compile your blocks.

#### SFB and SFC blocks

S7CanOpener does not remove such protection from SFB and SFC blocks.

SFC and SFB blocks are just calls to functions stored within the PLC system memory; no executable code is therefore available within SFB and SFC blocks you may find in your project.

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#### Restrictions

- The Software has been developed to ease Step7 blocks protection set or removal. Protection removal may be used by the legal owner of the Step7 blocks only.
- The Software is a program that can unprotect Siemens Step7 blocks developed by machinery manufacturers or other supplier. It may not be used for reverse engineering of copyrighted software or for any other purpose where functional or warranty issues are involved.
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- Each copy of the Software is registered to each user by means of an unique serial code. Illegal copies can therefore be tracked.
- Upload to Internet or BBS is strictly forbidden.

## Installation of S7CanOpener

The CanOpener program does not need installation, just copy all the files to a folder of your choice.

### Demo mode

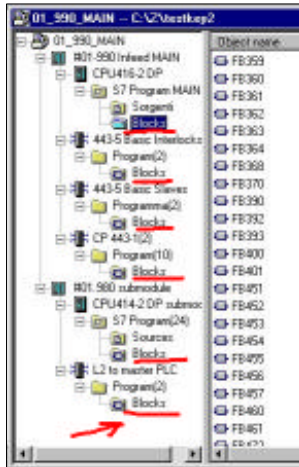
As long as the program is not registered, it just shows the blocks and their protection status and will not modify the know\_how\_protect status. In this mode the program acts as a demo version.

### Registered mode

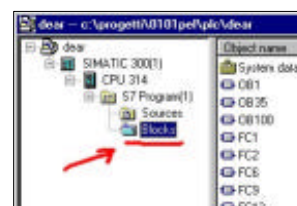
Once the program is purchased, a registration code will be issued. The registration code is an unique code identifying the user. To register the program, click on *About / Register* menu and type (or copy-paste) the registration code. After registration the program is fully functional.

## Use of S7CanOpener

1. We suggest to make a backup copy of your Step7 project before attempting to use the "S7 CanOpener". We never had problems while testing the "S7 CanOpener", but we are sure you don't wish to be the first to report a project loss.
2. Before running the program, close all applications which may interfere with Step7 project files (S7 Manager, S7 editor, Protocol, etc.)
3. Run CanOpener.exe and from "Open" menu select the desired S7 project or library, then a list of all "blocks" folders in S7 project will be shown.
4. If you have more than one S7 program in project, you will get a full list of all "blocks" folders contained in the project. The "S7 CanOpener" will not associate each "blocks" folder to its "S7 program" folder. If your project contains several S7 programs and you experience some difficulties to recognize the correct "blocks" folder, we suggest to save the interested S7 program to a dedicated S7 project or rename differently the "blocks" folders within the Siemens S7 Manager.



*Snapshot from Siemens Step7 editor:  
example of project with multiple S7 programs*



*Snapshot from Siemens Step7 editor:  
example of project with a single S7 program*

5. Select the "blocks" folder of your choice, then the list of contained blocks will be shown along with the indication of the blocks protected with the "know\_how\_protect" keyword. You can filter different block families (FBs, FCs, OBs, DBs).
6. Select the blocks you want the protection status to be modified. To operate on several blocks at once, multiple selection is possible.
7. Use "Protect" or "Unprotect" buttons to set or remove protection.
8. You will be asked for a password at the first protect/unprotect request each time the program is run. The user password has been provided to prevent undesired operations if you leave your computer unattended. You can change the user password at any time.

## Known issues

You may experience a list of duplicated copies of the same block (e.g. the S7canopener blocks list shows many FB44 instances co-existing in the same S7 project). Your S7 project size is also probably quite large if compared with the real extent of your S7 program.

This is due to garbled data in your S7 project, it is not a bug of the S7CanOpener.

Perform a reorganization of your S7 project using the File|Reorganize menu from the S7manager. After reorganization the S7 project will be considerably reduced in size and the S7CanOpener will show the correct list of blocks.

## Version history

- Version 1.30 Added a different program registration scheme.
- Version 1.24 Cosmetic changes only.
- Version 1.23 Minor and cosmetic changes.
- Version 1.22 The “open file” dialog allows to filter S7project (\*.s7p) or S7library (\*.s7l) files. Some cosmetics.
- Version 1.21 Program remembers the path to the last opened file.
- Version 1.20 Added a combo box to keep track of the last 4 files.
- Version 1.10 Initial commercial version release.

## Author's notes

Please report any bug or suggestion to the author:

Luca Gallina  
Via Cantarane, 6/R  
I-31040 Volpago del Montello (TV) - Italy  
Web site: <http://www.runmode.com>  
e-mail: [luca.gallina@runmode.com](mailto:luca.gallina@runmode.com)