



## Item description

The *e!COCKPIT* Profiler add-on allows programmers and application developers to measure and evaluate the processing times and code coverage of different blocks in an IEC 61131-3 application at an early stage. This add-on can be seamlessly integrated into the *e!COCKPIT* Engineering Software. Measurement may be performed parallel to the application development in the standard development environment.

### Advantages:

- Measure both machine code's runtime behavior and code coverage right at the beginning of the development phase
- Detect runtime problems at an early stage
- Identify both time-consuming program parts and unused programming blocks
- Overall and individual measurement of all application blocks
- Identify the code efficiency by comparing historical and current measurements
- Increase the software quality

### Main Functions:

- Implicit binary code extension during translation, without changing the program code of a project
- Dynamic measurement via code instrumentation at each function entry and exit
- Only during measurement: temporary code enlargement and runtime extension of 10 to 50%
- Measurement start via variable or command
- Overview of the measurement results in the development environment

### Functions:

- Control the runtime measurement via freely selectable Boolean variable
- Measure the runtime of individual programming blocks and function block instances within the "profiler watch list"

Subject to changes. Please also observe the further product documentation!



- Measure the percentage of missed instructions per block via code coverage
- Measurement results show the time-critical path

Setting Options:

- Select the task to be measured
- Select the unit base (tick, milliseconds or microseconds)
- Define the memory size required for the measurement
- Adjust the measurement behavior (next or maximum cycle)
- Select the calls to be measured in the monitoring list
- Select the program blocks to be measured to determine the code coverage

Detailed Results:

- Percentage of time spent in the call
- Total time spent in call
- Average time of all POU calls in a single cycle
- Minimum and maximum processing time over multiple cycles
- Number of calls
- Time spent for each call
- Standard deviation of average measured time
- Percentage of the iterated code

Display the Results as:

- Summary table
- Call tree (time- or process-oriented)
- Tables
- Watch list

## Data

### System requirements

Hard disk storage	min. 30 MByte
Other required software	e!COCKPIT version: V1.4.0

### Delivery

License type	Single-user license
Delivery type	Installation file (download)
License type note	Single license allows installation on one computer.
License type note (2)	Internet connection may be required for license activation.

Subject to changes. Please also observe the further product documentation!

WAGO Kontakttechnik GmbH & Co. KG  
Hansastr. 27  
32423 Minden  
Phone: +49571 887-0 | Fax: +49571 887-169  
Email: [info.de@wago.com](mailto:info.de@wago.com) | Web: [www.wago.com](http://www.wago.com)

Do you have any questions about our products?  
We are always happy to take your call at +49 (571) 887-44222.



## Commercial data

Packaging type	0
Country of origin	QU
GTIN	4055143708296
Customs Tariff No.	88888888888

## Counterpart

## Downloads

### Documentation

#### Bid Text

2759-404/1420-1000 GAEB X81 - Datei	Feb 19, 2019	xml 7.4 kB	Download
2759-404/1420-1000 GAEB docx - Datei	Jan 10, 2019	docx 18.4 kB	Download

### System Description

Software – General Product Information	pdf 485.7 kB	Download
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## Engineering-Software

### e!COCKPIT Add-On

e!COCKPIT Profiler V 1.2.0	V 1.2.0 Feb 26, 2018	URL 2.8 MB	Download
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## Installation Notes

Subject to changes. Please also observe the further product documentation!