Embedded Linux

Open Automation for the Future

PFC100 AND PFC200 CONTROLLERS

New Controller Family with Embedded Linux

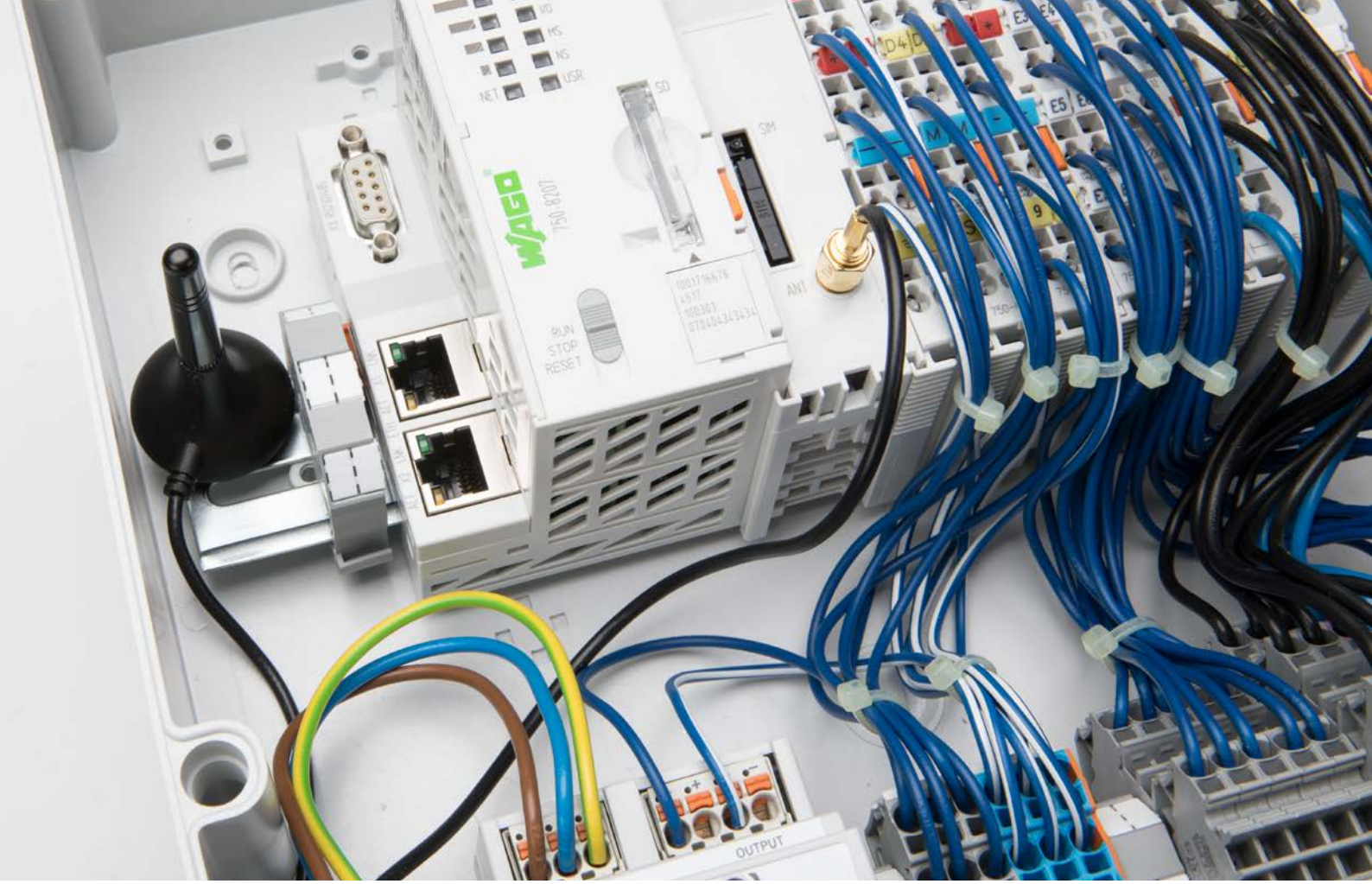
Due to the multiple variants of all PFC Controllers the and their various interfaces, users are also perfectly equipped for future tasks. These are the advantages at a glance:

The base image of all controllers with a Linux® operating system can be individually expanded with open-source packages.

Another advantage of the Linux®-based controllers: You can also integrate external CODESYS libraries written in C-code or complex mathematical functions to quickly and easily expand the PLC functions.

Alternatively, the PLC runtime environment can be completely replaced by your own C/C++ programs, with which you have access to the entire hardware.

With the PFC200 XTR Controller, WAGO offers a rugged device that is second to none and excels in extreme environments. Requiring no additional protective equipment, the controller defies temperature fluctuations of −40 to +70°C (−40 … +158°F), has extreme resistance to impulse voltage up to 5 kV, is immune to interference and vibration-proof up to 5g.



EMBEDDED LINUX

In Industrial Environments

Real-time Linux® is a widely used operating system in the industry. For example, the real-time extension offers full priority-controlled processes in the real-time area or the possibility of using processes in the user area with the CFS scheduler (Completely Fair Scheduling).

WAGO's Linux® BSP distribution benefits from the open-source concept: For almost any task, software tools are available as open-source solutions that are continually developed by the Linux® community. Linux® is quite mature and extremely stable thanks to the open-source concept.

In addition, Linux® provides more security than other operating systems, because the system can be quickly adapted to the respective cybersecurity requirement. WAGO's PFC Controllers already have selected security features as standard onboard (e.g., OperaVPN, IPSec, SCEP, IEEE702.1x and a firewall).

AUTOMOTIVE INDUSTRY - RAILWAY SYSTEMS - POWER ENGINEERING - MANUFACTURING INDUSTRY

Open Automation for the Future

We bring together what belongs together and combine high-performance WAGO hardware with a future-ready Linux® operating system. In addition to their scalability through the open-source community, WAGO's controllers with open-source operating system are continually developed and maintained.

WAGO offers its registered customers the following benefits:

- Current firmware image in compliled and source code form
- All published images (history)
- Descriptions "How To …"
- Build System PTXdist (builds the target system directly from the original source code)
- Cross compiler toolchain
- Access to the local bus and fieldbus interfaces

For additional information, visit:
wago.com/linux

ADVANTAGES OF EMBEDDED LINUX

In WAGO Controllers

With Linux® on the controller side, the user is independent of updates as well as the licensing policy of a single software vendor. To use any C or Linux® functionalities in CODESYS, an import interface is available that dynamically loads and uses Linux® libraries in the CODESYS runtime system.

The native real-time capability is a further advantage. New functionalities are continually added or expanded because of an open source community behind Linux®. The user benefits, for example, when special security requirements are to be met or a specific database must be accessed.

Linux® as the operating system for PFC100 and PFC200 Controllers also makes it possible to program in C or C++. Programs can also be written in any programming language for which Linux® support is available and used on the controller directly.

WAGO Kontakttechnik GmbH & Co. KG
Postfach 2880 · 32385 Minden
Hansastrasse 27 · 32423 Minden
info@wago.com
www.wago.com

Headquarters	+49 571/ 887 - 0
Sales	+49 571/ 887 - 222
Orders	+49 571/ 887 - 44 333
Fax	+49 571/ 887 - 844 169

WAGO is a registered trademark of WAGO Verwaltungsgesellschaft mbH.
"Copyright – WAGO Kontakttechnik GmbH & Co. KG – All rights reserved. The content and structure of the WAGO websites, catalogs, videos and other WAGO media are subject to copyright. Distribution or modification to the contents of these pages and videos is prohibited. Furthermore, the content may neither be copied nor made available to third parties for commercial purposes. Also subject to copyright are the images and videos that were made available to WAGO Kontakttechnik GmbH & Co. KG by third parties."

0888-0132/0101-6901 - LINUX FLYER 1.1 US - 01/2018-00 - Printed in Germany - Subject to changes