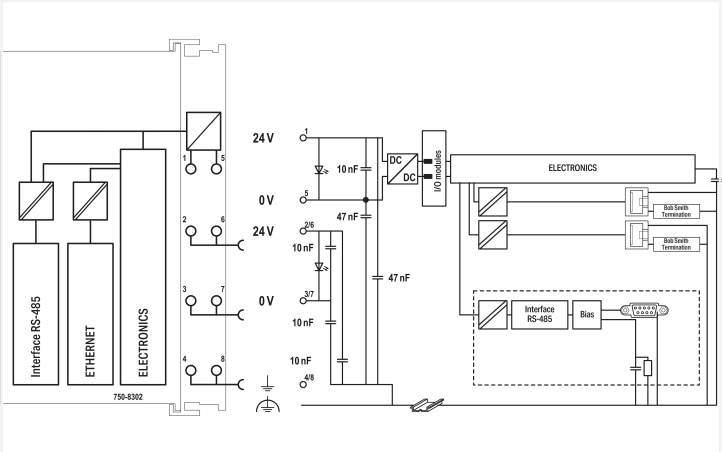
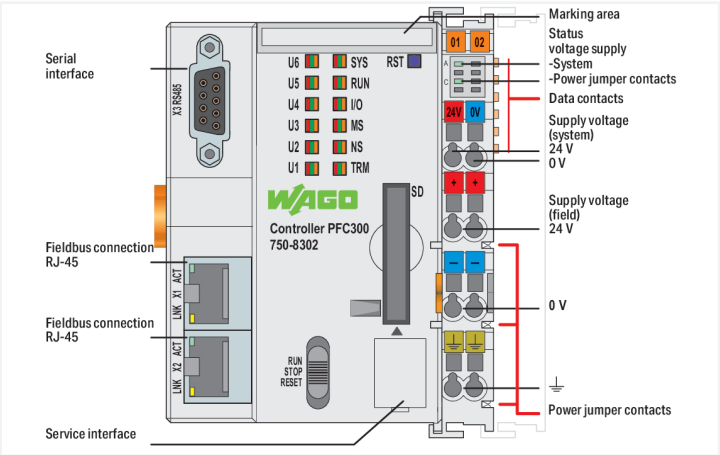
Data Sheet | Item Number: 750-8302
Controller PFC300; 2 x ETHERNET, RS-485
https://www.wago.com/750-8302





The PFC300 Controller is a compact controller designed for the modular WAGO I/O System. In addition to network and fieldbus interfaces, it supports digital and analog modules as well as specialty modules from the 750/753 Series.
Two Ethernet interfaces with an integrated switch enable line topology wiring or communication across two separate networks in distinct modes.
An integrated Webserver provides user configuration options, while displaying PFC300 status information.
In addition to the process industry and building automation, typical applications for the PFC300 include standard machinery and equipment control – such as packaging, bottling, and manufacturing systems, as well as textile, metal, and wood processing machines.

Key Benefits:
- Programmable per IEC 61131-3

- Programmable via CODESYS V3.5
- Direct connection of WAGO I/O Modules
- 2 x ETHERNET (configurable), RS-485
- Operating system: Linux with PREEMPT_RT patch
- Configuration via CODESYS or Web-Based Management user interface
- Maintenance-free

Technical data

Communications	ETHERNET RS-485 interface MQTT Telecontrol protocols, **requires an additional license** Fieldbuses integrated in CODESYS: Modbus TCP master/slave Modbus (UDP), WagoAppPlcModbus Library Modbus (RTU), WagoAppPlcModbus Library EtherNet/IP™ Adapter (slave) EtherNet/IP™ Scanner EtherCAT® Master PROFINET Controller (limited) OPC UA Server/Client OPC UA Pub/Sub (can be installed later)
ETHERNET protocols	DHCP DNS NTP SFTP FTP FTPS SNMP HTTP HTTPS SSH
Telecontrol protocols	IEC 60870 (additional license as slave or master) IEC 61850 (additional license as Client or Server) DNP3 (additional license as Slave or Master)
Visualization	Web-Visu
Operating system	Real-time Linux (with PREEMPT_RT patch)
CPU	Dual Core Cortex A53 1.4 GHz
Programming languages per IEC 61131-3	Instruction List (IL) Ladder Diagram (LD) Function Block Diagram (FBD) Continuous Function Chart (CFC) Structured Text (ST) Sequential Function Chart (SFC)
Programming environment	CODESYS V3.5 Includes the following CODESYS features: MULTICORE, WebVisu, IIoT Libraries license, OPC UA PUB/SUB license
Configuration options	CODESYS V3 WAGO-I/O-*CHECK* Web-Based Management CODESYS Library
Transmission rate	100/1000 Mbit/s
Transmission medium (communication/fieldbus)	Twisted Pair S-UTP; 100 Ω; CAT 5e; 100 m maximum cable length
Main memory (RAM)	2 GB, LPDDR.4 RAM
Internal memory (flash)	32 GB, eMMC flash
Non-volatile hardware memory	128 KB
Program memory	32 MB
Data memory	512 MB
Non-volatile software memory	128 KB
Type of memory card	SD, SDHC and SDXC (all guaranteed properties only valid with the WAGO memory card)
Memory Card Slot	Push-push mechanism; cover lid (sealable)
Number of modules per node (max.)	250
Number of modules without a bus extension (max.)	64
Input and output process image (internal) max.	1000 words/1000 words
Input and output process image (Modbus®) max.	CODESYS V3: 32000 words/32000 words
Indicators	LED (SYS, RUN, I/O, U1 … U7) red/green/orange: Status of system, program, local data bus, status programmable by user (can be used via CODESYS library); LED (A, B) green: Status of system power supply, field supply
Supply voltage (system)	24 VDC (-25 … +30 %); via pluggable connector (CAGE CLAMP® connection)
Input current (typ.) at nominal load (24 V)	550 mA

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Technical data

Total current (system supply)	1700 mA
Supply voltage (field)	24 VDC (-25 … +30 %); via power jumper contacts
Current carrying capacity (power jumper contacts)	10 A
Number of outgoing power jumper contacts	3
Isolation	500 VDC system/field

Connection Data

Connection technology: communication/fieldbus	Modbus (TCP, UDP): 2 x RJ-45; Modbus RTU: 1 x D-sub 9 socket; RS-485 interface: 1 x D-sub 9 socket
Connection technology: system supply	2 x CAGE CLAMP®
Connection technology: field supply	6 x CAGE CLAMP®
Connectable conductor materials	Copper
Connection type	System/field supply
Solid conductor	0.08 … 2.5 mm² / 28 … 14 AWG
Fine-stranded conductor	0.08 … 2.5 mm² / 28 … 14 AWG
Strip length	8 … 9 mm / 0.31 … 0.35 inches
Connection technology: device configuration	1 x USB-C 2.0

Physical data

Width	78.6 mm / 3.094 inches
Height	100 mm / 3.937 inches
Depth	71.9 mm / 2.831 inches
Depth from upper-edge of DIN-rail	64.7 mm / 2.547 inches

Mechanical data

Mounting type	DIN-35 rail

Material data

Housing material	Polycarbonate; polyamide 6.6
Fire load	2.09 MJ
Weight	207.9 g
Conformity marking	CE

Environmental requirements

Ambient temperature (operation)	-25 … +60 °C
Ambient temperature (storage)	-25 … +85 °C
Protection type	IP20
Pollution degree	2 per IEC 61131-2
Operating altitude	without temperature derating: 0 … 2000 m; with temperature derating: 2000 … 5000 m (0.5 K/100 m); 5000 m (max.)
Mounting position	Horizontal left, horizontal right, horizontal top, horizontal bottom, vertical top and vertical bottom
Relative humidity (without condensation)	95 %
Vibration resistance	4g per IEC 60068-2-6
Shock resistance	15g per IEC 60068-2-27
EMC immunity to interference	Per EN 61000-6-2, marine applications pending
EMC emission of interference	Per EN 61000-6-3, marine applications pending
Exposure to pollutants	per IEC 60068-2-42 and IEC 60068-2-43
Permissible H_2S contaminant concentration at a relative humidity 75 %	10 ppm
Permissible SO_2 contaminant concentration at a relative humidity 75 %	25 ppm

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Commercial data

PU (SPU)	1 pcs
Packaging type	Box
Country of origin	DE
GTIN	4066966650594
Customs tariff number	85371091990

Product Classification

UNSPSC	32151705
ETIM 9.0	EC000236
ETIM 10.0	EC000236
ECCN	NO US CLASSIFICATION

Environmental Product Compliance

RoHS Compliance Status	Compliant,No Exemption

Approvals / Certificates

General approvals

Approval	Standard	Certificate Name
KC National Radio Research Agency	Article 58-2, Clause 3	MSIP-REM-W43-PFC750
UL Underwriters Laboratories Inc. (ORDINARY LOCATIONS)	-	E175199

Declarations of conformity and manufacturer's declarations

Approval	Standard	Certificate Name
EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-
UK-Declaration of Conformity WAGO GmbH & Co. KG	-	-

Approvals for marine applications

Approval	Standard	Certificate Name
DNV DNV GL SE	DNV-CG-0339,Aug.2021	TAA0000194

Approvals for hazardous areas

Approval	Standard	Certificate Name
ATEX TUEV Nord Cert GmbH	EN 60079-0	TUEV14ATEX148929X (II 3 G Ex ec IIC T4 Gc)
IECEx TUEV Nord Cert GmbH	IEC 60079-0	IECEx TUN 14.0035 X (Ex ec IIC T4 Gc)
UL Underwriters Laboratories Inc. (HAZARDOUS LOCATIONS)	-	E198726

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Downloads

Environmental Product Compliance

Compliance Search			
Environmental Product Compliance 750-8302			

Documentation

Manual			
Function Manual for PFC100 2nd Generation, PFC200 2nd Generation and PFC300	3621366155 | 5 | en-US | 2026-02-03 07:08 06.02.2026	pdf 2460.24 KB	
Controller PFC300; 2 x ETHERNET, RS-485	3130953995 | 3 | en-US | 2024-12-16 12:40 16.12.2024	pdf 4126.21 KB	

CAD/CAE-Data

CAD data			
2D/3D Models 750-8302			

Engineering-Software

Configuration and Commissioning Software			
CODESYS V3.5		png 315.13 KB	