Data Sheet | Item Number: 750-8110
Controller PFC100; 2nd Generation; 2 x ETHERNET; ECO
https://www.wago.com/750-8110

The PFC100 Controller is a compact PLC for the modular WAGO I/O System. Besides network and fieldbus interfaces, the controller supports all digital, analog and specialty I/O modules found within the 750/753 Series.
Two ETHERNET interfaces and an integrated switch enable line topology wiring.
An integrated Webserver provides user configuration options, while displaying PFC100 status information.
Besides the processing industry and building automation, typical applications for the PFC100 include standard machinery and equipment control (e.g., packaging, bottling and manufacturing systems, as well as textile, metal and wood processing machines).
The DIP switch configures the last byte of the IP address and may be used for IP address assignment.
Programmable per IEC 61131-3
- Programmable via CODESYS V3.5
- Direct connection of WAGO I/O Modules
- 2 x ETHERNET (configurable)
- Linux operating system with RT-Preempt patch
- Configuration via CODESYS, Ethernet Settings or Web-Based Management interface
- Maintenance-free

Technical data

Communication	Modbus TCP master/slave Modbus (UDP), WagoAppPlcModbus Library Modbus (RTU), WagoAppPlcModbus Library ETHERNET EtherNet/IP™ Adapter (slave) EtherNet/IP™ Scanner EtherCAT® Master OPC UA Server/Client OPC UA Pub/Sub (can be installed later) MQTT BACnet/IP, **requires an additional license** Telecontrol protocols, **requires an additional license**
ETHERNET protocols	DHCP DNS NTP FTP FTPS SNMP HTTP HTTPS SSH
Visualization	Web-Visu
Operating system	Real-time Linux (with RT-Preempt patch)
CPU	Cortex A8; 600 MHz
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
Configuration options	CODESYS V3 CODESYS Library Ethernet Settings WAGO-I/O-*CHECK* Web-Based Management
Baud rate (communication/fieldbus 1)	10/100 Mbit/s
Baud rate	ETHERNET: 10/100 Mbit/s
Transmission medium (communication/fieldbus)	ETHERNET: Twisted pair S-UTP; 100 Ω; Cat. 5; 100 m maximum cable length
Main memory (RAM)	512 MB
Internal memory (flash)	4096 MB
Non-volatile hardware memory	128 KB
Program memory	32 MB (Program and data memory (dynamically distributed))
Data memory	128 MB Program and data memory (dynamically distributed)
Non-volatile software memory	128 KB
Type of memory card	microSD up to 32 GB (all guaranteed properties only valid with WAGO's memory card)

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Technical data

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, USR) red/green/orange: Status system, program, local data bus, status programmable by user (can be used via CODESYS library)
Supply voltage (system)	24 VDC (-25 … +30 %); via pluggable connector
Input current (typ.) at nominal load (24 V)	300 mA
Total current (system supply)	700 mA
Isolation	500 V system/field

Connection data

Connection technology: communication/fieldbus	2 x RJ-45
Connection technology: system supply	2 x CAGE CLAMP®
Connection type 1	System supply
Solid conductor	0.08 … 1.5 mm² / 28 … 14 AWG
Fine-stranded conductor	0.08 … 1.5 mm² / 28 … 14 AWG
Strip length	5 … 6 mm / 0.2 … 0.24 inches
Connection technology: device configuration	1 x Male connector; 4-pole

Environmental requirements

Ambient temperature (operation)	0 … +55 °C
Ambient temperature (storage)	-25 … +85 °C
Protection type	IP20
Pollution degree	2 per IEC 61131-2
Operating altitude	0 … 2000 m / 0 … 6562 ft
Relative humidity (without condensation)	95 %
Mounting position	any
Mounting type	DIN-35 rail
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
EMC emission of interference	per EN 61000-6-3, marine applications
Exposure to pollutants	per IEC 60068-2-42 and IEC 60068-2-43
Fire load	1.458 MJ
Permissible H_2S contaminant concentration at a relative humidity 75 %	10 ppm
Permissible SO_2 contaminant concentration at a relative humidity 75 %	25 ppm