

XtrapulsPac AC Servo-Controller



Functions

- DS402 including capture and master-slave
- Camming function, stepper emulation
- Analog speed drive, stand-alone positioner

Power stage

- Rated current 2.5 A ... 8.5 A / 230 VAC
- Common DC-Bus operation

Interfaces

- RS-232
- CANopen, EtherCAT®
- Digital and analog I/Os

Safety

- Safe Torque Off SIL 2

Tools

- Project manager
- Setup assistant
- Multi-axis configuration and diagnostic
- Application templates for quick configuration

XtrapulsPac, AC Servo-controller

The XtrapulsPac Drive is a compact and flexible low power AC servo-controller with outstanding capabilities. It provides functions and interfaces to cover a wide range of single- and multi-axis applications.

Electrical specification

Drive types	PAC-230		
	/ 05	/ 11	/ 17
Peak current [Arms]	5.0	11	17
Cont. current [Arms]	2.5	5.5	8.5
Voltage	1x230 VAC, 50..60 Hz		

Control loops

- Digital drive for AC synchronous motors
- Current loop 62.5 μ s
- Speed and position loop 500 μ s
- Closed loop control of position, speed or torque
- Max. speed up to 25'000 rpm

Feedbacks

- Resolver
- Incremental encoder
- Hall sensor
- SinCos encoder
- Single and multi-turn Hiperface[®] encoder

Communication interfaces

- RS-232 up to 115.2 kbit/s baud rate
- CANopen or EtherCAT[®] fieldbus
- DIP switches for node address

Safety features

- Safe Torque Off SIL 2

I/O interfaces

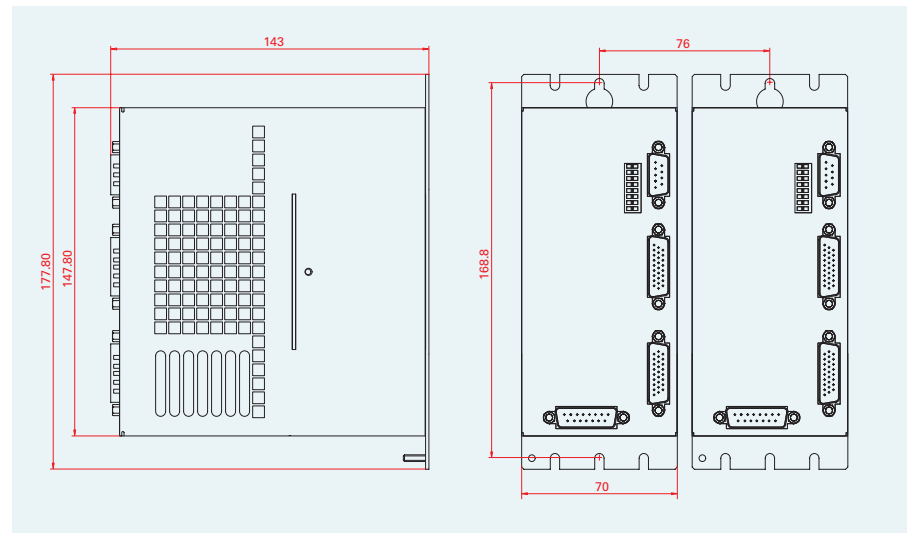
- User configurable digital I/Os
- All digital inputs opto-isolated
- Analog inputs ± 10 V / 12 bit resolution
- Analog output 0 - 5 V / 8 bit resolution
- "Amplifier OK" output
- Motor brake control
- Two channel STO function

Standards

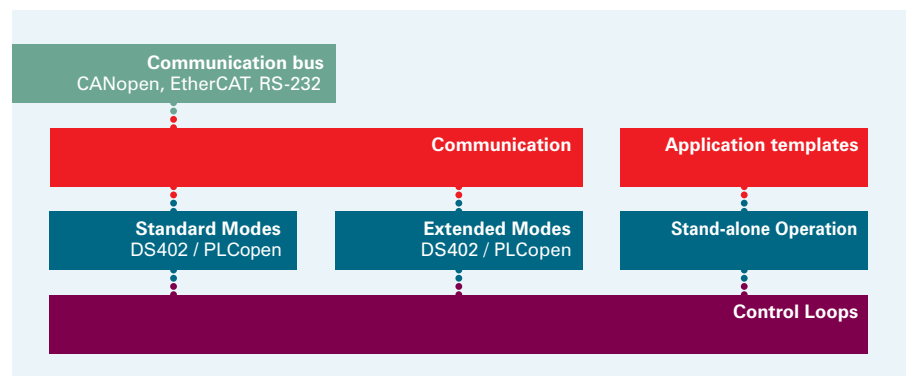
- CE
- UL listed (in preparation)



Mechanical dimensions [mm]



Functional architecture



Modes of operation

DS402 standard modes

- Interpolated Position Mode
- Profile Position Mode
- Profile Velocity Mode
- Profile Torque Mode
- Homing Mode

DS402 extended modes

- Analog Speed Mode
- Stepper Emulation Mode
- Sequence Mode

Stand-alone operation

- Analog speed drive
- Positioner
- Stepper emulation

Multi-axis tool box

Configuration tools

- Motor and drive configuration
- Application configuration
- Interface configuration
- Auto-tuning, auto-phasing
- Sequencer programming

Project tools

- Project creation
- Project management
- File handling services
- Motor libraries, EDS
- PLCopen library

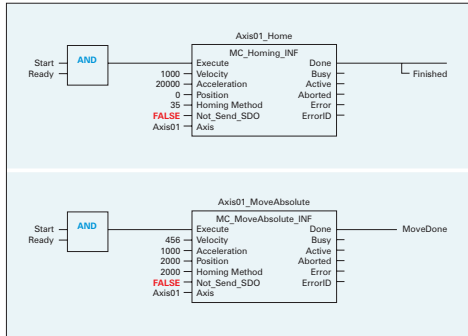
Diagnostic tools

- Device control
- Device monitoring
- Object dialog window
- Multi-axis oscilloscope

XtrapulsPac can easily be configured as stand-alone controller in various modes of operation. It can also be integrated into an automation system with PLC, CNC or motion-controller via the field-bus and uses well-known standard functions available in libraries. This flexibility makes it suitable for use in a wide field of machines and applications.

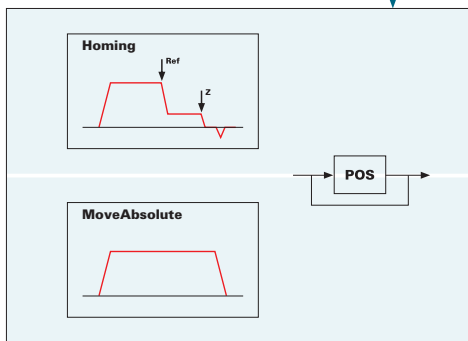
DS402 / PLCopen example

PLC



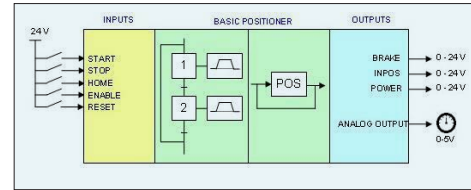
Drive

CANopen ↔ EtherCAT

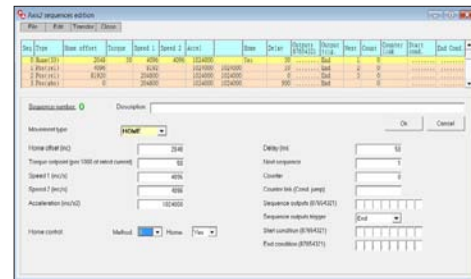


Stand-alone positioner example

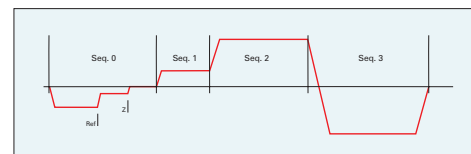
Step 1: Select template



Step 2: Parametrize sequences



Step 3: Start execution



Multi-axis tool box (Gem Drive Studio)

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The Infranor Group

Infranor creates added value for its customers by providing tailor-made motion solutions.

Based on strong working relationships, Infranor offers extensive market know-how, comprehensive engineering skills and a wide range of high-quality products leading to productivity gains and therefore to comparative advantages for its customers in their respective markets.

The Infranor Brand

The Infranor Brand is a synonym for:

- Excellence
- Cooperation
- Added value