DOCUMENT
CPU 230 datasheet
LADV-DS-230

PROJECT
Wartens LADV virtual PLCs
Rev 1.0

CPU 230 datasheet

LADV200 compact controller. Order number LV200-C230-40DDT-A12.

Document	CPU 230 datasheet
Code	LADV-DS-230
Revision	1.0, 1 November 2026
Firmware	V1.0.0
Issued by	Wartens, makers of LADX

> Wartens LADV controllers are virtual PLCs that run in a web browser, for learning, for testing logic and for preparing for commissioning. They are not real time, not safety rated, and they cannot control equipment.

Overview

Compact controllers for a whole machine: more channels, analog inputs and outputs, and room for a program split into routines. The series to test real machine logic against a digital twin before the panel is built.

24 DI, 16 DO, 8 AI, 4 AO, twice the memory.

Technical data

Property	Value
Series	LADV200 Compact
CPU	CPU 230
Order number	LV200-C230-40DDT-A12
Variant, as printed	DC/DC/DC
Digital inputs	24
Digital outputs	16
Analog inputs	8 (INT, 0 to 1000 is 0 to 100 percent)
Analog outputs	4 (INT, 0 to 1000 is 0 to 100 percent)
Expansion slots	None, fixed I/O
Program memory, ladder	1024 tags, 512 rungs, 32 routines
Program memory, Structured Text	1024 variables, 4096 statements, 64 program organisation units
Fastest scan	10 ms
Watchdog	150 ms per scan
Retentive memory	Yes. A warm restart keeps RETAIN variables, and ladder memory
Languages	Ladder (LADX), IEC 61131-3 Structured Text
Tasks	Cyclic and event tasks, priorities from 0, non-preemptive

Property	Value
Online functions	Watch, modify, force I/O, 64-entry diagnostic buffer
Status lamps	RUN, STOP, ERROR, MAINT
Firmware	V1.0.0
Serial number, as printed	WL26-230-21370
Availability	Available in the VPLC lab

Addressing

Structured Text names a channel by its IEC 61131-3 direct address. Ladder wires tags to channels in the order the tags are listed.

Channels	Count	Structured Text addresses
Digital inputs	24	%IX0.0 to %IX2.7
Digital outputs	16	%QX0.0 to %QX1.7
Analog inputs	8	%IW0 to %IW7
Analog outputs	4	%QW0 to %QW3

Status lamps

Lamp	Colour	Meaning
RUN	Green	The program is executing and outputs are live.
STOP	Amber	Stopped. Outputs are off.
ERROR	Red	Faulted. Outputs are off until the fault is reset. The diagnostic buffer gives the code.
MAINT	Amber	At least one I/O point is forced.

Not included

- No fieldbus, no network protocols and no physical I/O.
- No hard real-time guarantee: scans run on simulated time in the browser.
- No safety rating. Safety functions belong in a safety-rated controller.

Related documents

- LADV system manual, LADV-SM
- Structured Text programming manual, LADV-PM-ST
- Ladder instruction reference, LADV-IR-LD
- Diagnostic and fault codes, LADV-DC