

APTER POWER PRODUCT PAGE DASHBOARD

6AU1455-2AD00-0AA0

SIMOTION D455-2 DP/PN

A complete-page engineering view of product identity, control role, technical data, integration, applications, precautions, FAQs and validation.

128

motion-control axes max.

0.25 ms

minimum interpolation cycle

24 V DC

nominal supply

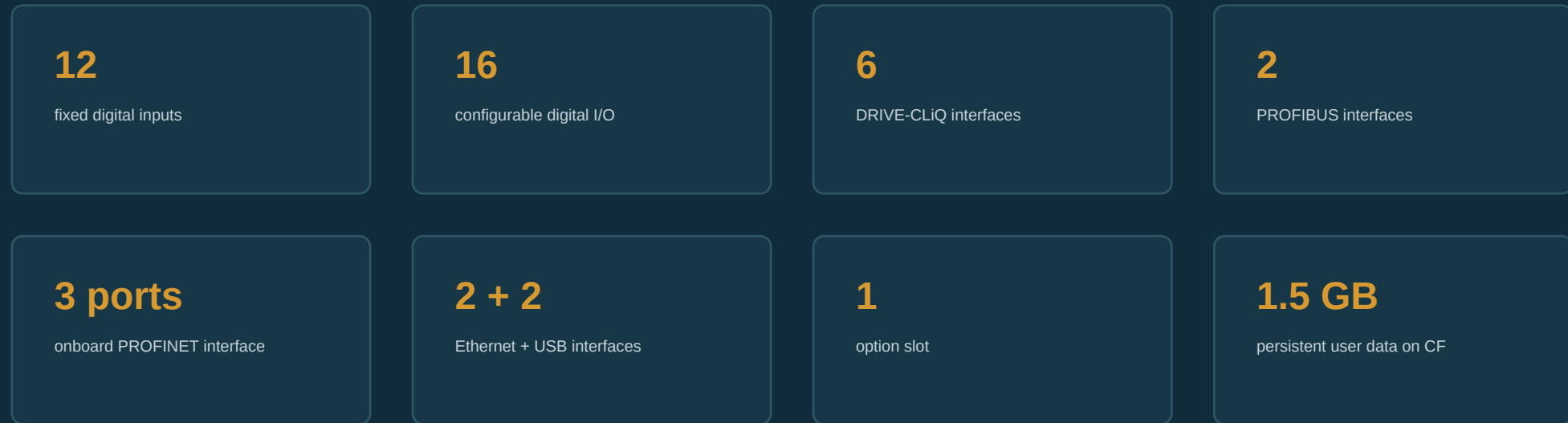
388 MB

working RAM

SYSTEM ROLE

- Machine logic and coordinated motion
- SINAMICS S120 integrated drive control
- Digital I/O and industrial network exchange

Control resources and interfaces



SIGNAL FLOW



Engineering sequence

01**Identify**

Confirm article, D455-2 DP/PN hardware product version, installed accessories and previous project record.

02**Install**

Use a released mounting position, required fan/battery module, cabinet cooling and ventilation clearances.

03**Connect**

Restore 24 V supply, grounding, shields, digital terminals and the engineered bus topology.

04**Configure**

Match CompactFlash, kernel, firmware, engineering project, network roles and runtime licenses.

05**Validate**

Review diagnostics, enable drives in stages and test axis feedback, direction and machine functions.

MODEL-SPECIFIC SAFETY AND COMMISSIONING CHECK

For documented safety functions controlled through TM54F or PROFIBUS/PROFINET with PROFIsafe, Siemens lists product version C as the minimum for 6AU1455-2AD00-0AA0. Use either PROFIsafe or TM54F control as specified by the manual, not mixed operation, and verify the complete safety configuration before axis enable.

Application map

6AU1455-2AD00-0AA0 coordinated packaging motion

Runs sequenced machine logic and coordinated motion for packaging equipment whose axes must remain synchronized through production cycles.

6AU1455-2AD00-0AA0 printing and converting lines

Supports registration, synchronous operation and cam-based motion in printing and web-converting machines with tightly timed material movement.

6AU1455-2AD00-0AA0 textile and polymer processing

Coordinates machine sections in textile, plastics and rubber equipment where several drive axes and the process sequence share one control project.

6AU1455-2AD00-0AA0 handling and distributed drives

Connects centralized motion tasks with distributed drive stations for material handling systems that require synchronized transport and positioning.

FIELD PRECAUTIONS

- 1

Isolate the 24 V supply and SINAMICS power circuit; use ESD-safe handling.
- 2

Match the full article and hardware version before replacement.
- 3

Use a released mounting position, required fan module and cooling clearance.
- 4

Restore supply, grounding, shields, terminals and I/O reference potentials.
- 5

Reproduce DRIVE-CLiQ, PROFIBUS and PROFINET port assignments.
- 6

Match CompactFlash, kernel, firmware, project and runtime licenses.
- 7

Review diagnostics, then enable and test axes in controlled stages.

Related SIMOTION product	Apter navigation only (not technical evidence)
6AU1435-2AD00-0AA0 - SIMOTION D435-2 DP/PN	Open verified product page

Engineer FAQ

Which drive system is 6AU1455-2AD00-0AA0 designed to control?

Use it with the SINAMICS S120 drive architecture. DRIVE-CLiQ connects the engineered drive components; CX32-2 or supported control units can add drive-processing capacity.

What must be matched before loading a project into 6AU1455-2AD00-0AA0?

Match hardware version, CompactFlash, SIMOTION kernel, SINAMICS software, engineering project and runtime licenses before restoring the project.

Can 6AU1455-2AD00-0AA0 be mounted horizontally?

Yes. Siemens releases horizontal installation for this article with the double fan/battery module, 80 mm ventilation clearance and compliant cabinet cooling.

How can the onboard digital signals of 6AU1455-2AD00-0AA0 be used?

The configurable channels can operate as inputs, outputs, measuring inputs or cam outputs. Follow the assigned terminal functions and reference potentials.

How does 6AU1455-2AD00-0AA0 integrate with PROFIBUS and PROFINET networks?

PROFIBUS supports master/slave and isochronous roles. PROFINET supports controller/device operation with RT and IRT; the project defines the actual settings.

What commissioning sequence should be used after replacing 6AU1455-2AD00-0AA0?

Verify identity, mounting, cooling, supply, grounding and bus topology; restore the matched project, review diagnostics and test drives and axes in stages.

What should be checked if 6AU1455-2AD00-0AA0 does not start correctly after replacement?

Check indicators and diagnostics, then compare CompactFlash, firmware, project, 24 V supply, DRIVE-CLiQ topology, network settings and connected I/O.

What hardware-version rule applies to safety-related use of 6AU1455-2AD00-0AA0?

For TM54F or PROFIsafe safety control, Siemens lists product version C as the minimum and states that TM54F and PROFIsafe control are not mixed.

OFFICIAL SOURCE REGISTER

Siemens Technical Data Sheet for 6AU1455-2AD00-0AA0, generated 2025-12-23.

SIMOTION D4x5-2 Commissioning and Hardware Installation Manual, 04/2023, A5E33441636B.

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