

6ES5304-3UB11

SIMATIC S5 IM 304 central-to-expansion interface

Two symmetrical links connect documented S5 central controllers with compatible expansion-side interfaces. The manufacturer instructions identify this complete order number in the IM 304 jumper-settings section.

TWO LINKS

X3 and X4 front interfaces

PARTNER

IM 314 family expansion module

CABLE SPAN

Up to 600 m to final IM 314

SIGNALLING

RS-485 differential path

Functional path

S5 central controller

IM 304 / X3 or X4



Specified cable and terminations

X11 range matches route



Expansion controller / rack

Matched IM 314 variant

Engineering data at a glance

DOMAIN	VALUE	DOMAIN	VALUE
Power	5 V DC ±5%	Current	Approximately 1.2 A
Cable span	Up to 600 m to IM 314	Transmission	100 kbytes/s to 2 Mbytes/s
Front ports	Two 50-pin symmetrical links	Signal type	Differential, RS-485 based
Operation	0 to +55 °C	Humidity	95% at 25 °C, non-condensing

Connection decisions

HOST PAIRING

Confirm the installed S5 central-controller family and expansion-side IM 314 variant.

CABLE SELECTION

Match the actual X3/X4 route and approved cable to the X11 jumper range.

TERMINATION

Fit the specified terminator at the final expansion interface of each group.

Installation and acceptance logic

STEP	CONTROL	REQUIRED EVIDENCE
01	Identify host and partner	Record 6ES5304-3UB11, controller type and partner IM 314 / H / R.
02	Measure cable route	Use the longest X3 or X4 route to select the approved X11 range.
03	Check electrical boundary	Keep the linked-device potential difference within 7 V and confirm bonding.
04	Verify interface enables	X21 enables X4; X22 enables X3 only for connected branches.
05	Inspect terminations	The last IM 314 of each group needs the specified terminating plug.
06	Check status	Resolve X3 / X4 fault indicators before controlled release.

IMPORTANT NOTICE

The source manual differentiates several S5 and expansion configurations. Do not transfer jumper or cable settings from another IM 304 installation without checking this host and route.

Model-specific questions

Which host accepts IM 304?

The Siemens instructions list the compatible S5 central-controller families; confirm the exact installed host variant.

How far can X3 or X4 reach?

Up to 600 m to the final IM 314 with the specified cable and X11 selection.

What protects the expansion link?

Use the documented terminator at the final IM 314 and check X3/X4 fault indicators.

How is the cable range selected?

Set X11 to the range that contains the longest connected branch; inspect the exact jumper table.

MANUFACTURER SOURCE

Siemens AG, IM 304 / IM 314 Instructions, C79000-B8576-C716-02, sections 1-3. The excerpt in Manuals retains the original Siemens diagrams and jumper figures.

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