01 / Identity and job scope

SIEMENS

6AV6648-0CE11-3AX0

Touch Operator Panel

Product role

Siemens 6AV6648-0CE11-3AX0 is a Smart 1000 IE V3 touch panel with a 10.1-inch TFT display, Ethernet and RS-422/485 connectivity.

Controller	>	Smart 1000 IE V3	>	Operator
Configured process connection		Touch HMI project		Values, alarms and recipes

Applicability

Specifications apply to Smart 1000 IE V3; V4 and V5 hardware values and capabilities are not transferred to this model.

Hardware and configuration

The 6AV6648-0CE11-3AX0 is the SIMATIC HMI Smart 1000 IE V3. Its TFT touch display has 1024 × 600 pixels and 65,536 colors, with onscreen numeric and alphanumeric entry. The panel includes a 600 MHz ARM processor, flash and RAM storage, and a retentive, synchronizable real-time clock for configured operator functions.

Planning basis

This Apter Power guide supports identification and engineering planning. Apply the complete manufacturer and machine-builder procedures for the actual installation.

02 / Configuration and interface readiness

Item	Configuration relationship
Product designation	Smart 1000 IE V3
Display	10.1-inch TFT touch screen
Resolution	1024 × 600 pixels
Colors	65,536
Supply	24 V DC; permissible 19.2–28.8 V DC
Current consumption	230 mA rated; 370 mA maximum
Processor	ARM, 600 MHz

Technical context

The panel operates from 24 V DC within a permissible range of 19.2–28.8 V DC. Rated current consumption is 230 mA and maximum consumption is 370 mA. Communication connections comprise one Industrial Ethernet port, one shared RS-422/485 interface and one USB host interface; it has no RS-232 interface or SD card slot. Ethernet connectivity does not make it a PROFINET IO device.

What DC supply does 6AV6648-0CE11-3AX0 require?

Nominal supply is 24 V DC, with a permissible range of 19.2–28.8 V DC.

Which communication ports are fitted to 6AV6648-0CE11-3AX0?

It provides one Industrial Ethernet port, a shared RS-422/485 interface and one USB host port. RS-232 and an SD card slot are not fitted.

03 / Installation and connection decisions

Isolate the panel

Switch off and isolate the panel supply and place the connected machine in a safe state before removal.

Preserve the project

Back up the HMI project and communication settings before changing the installed panel.

Check DC power

Use the specified 19.2–28.8 V DC range and account for maximum current consumption of 370 mA.

Match the interface

Check Ethernet or RS-422/485 wiring and the selected communication driver; do not treat this panel as a PROFINET IO device.

Installation context

WinCC flexible SMART V3 supports configuration of process-value displays and entries, alarm handling and recipe management. Device limits include 800 variables, 150 configurable screens and ten recipes with up to 100 records per recipe. Front protection is IP65 and rear protection is IP20 under the installation conditions. Temperature limits depend on mounting orientation and inclination, so check the cabinet arrangement before replacement.

Which software configures 6AV6648-0CE11-3AX0?

The specified engineering software is WinCC flexible SMART V3. Match the project and panel runtime before transfer.

Does 6AV6648-0CE11-3AX0 support PROFINET IO?

No. Industrial Ethernet is present, but the data sheet does not specify PROFINET or PROFINET IO support.

04 / Functional acceptance planning

Application	Controlled review
Operator visualization	Display and enter configured process values on the touch screen, with communication matched to the controller.
Alarm handling	Use configured bit and analog alarms with acknowledgment and the retentive message buffer.
Recipe selection	Manage process recipes within the panel limits and validate transferred values against the machine application.
Legacy HMI replacement	Retain the V3 identity, project backup and communication settings when replacing an installed panel.

What protection ratings apply to 6AV6648-0CE11-3AX0?

The front is IP65 and the rear is IP20 when the installation meets the applicable mounting conditions.

What recipe and screen limits apply to 6AV6648-0CE11-3AX0?

The device supports 150 configurable screens and ten recipes with up to 100 records per recipe; each record can contain 50 entries.

Release boundary

Test touch input, process values, alarms and recipe transfer under controlled conditions before returning the machine to service.

Record
Keep the original configuration

>

Test
Observe controlled response

>

Release
Authorize normal operation

05 / Technical handover and support

Retained information

Keep the complete 6AV6648-0CE11-3AX0 marking, host identity, connection photographs, configuration backup and controlled-test results in the service record.

Support planning

Confirm current support and replacement guidance with Siemens for the installed identity and configuration. Apter Power availability and dispatch are separate quotation matters.

Reference basis

Siemens 6AV6648-0CE11-3AX0 data sheet, 28 September 2026.

Apter Power technical summary; not a manufacturer-issued manual. Apply the original instructions for the actual installation.

Related industrial automation products

Navigation only; no substitution or compatibility claim.

Siemens 6AV8100-0BB00-0AA1

Siemens 6AV6640-0CA01-0AX0

Siemens 6ES5734-1BD20

Discuss your installed configuration

Send the full unit marking and connection details.

sales13@apterpower.com | +86 18030235313