Siemens 6AV2124-0QC02-0AX0

TP1500 Comfort Panel

Siemens 6AV2124-0QC02-0AX0 is the SIMATIC HMI TP1500 Comfort touch-operated panel for machine-level operator control and monitoring. It brings process values, alarms and recipe handling to a 15.4-inch widescreen interface, with both PROFINET and MPI/PROFIBUS DP communication for the configured control system. This complete order number identifies the earlier Windows CE 6.0 version; Siemens lists it as a spare-part product and names 6AV2124-0QC02-0AX1 as its successor.



Technical Specifications

Product Identity	
Manufacturer	Siemens
Complete order number	6AV2124-0QC02-0AX0
Product type	TP1500 Comfort touch HMI panel
Housing front (W × H)	415 × 310 mm
Mounting cutout (W × H)	396 × 291 mm
Mounting depth	75 mm
Functional Configuration	
Display	15.4-inch widescreen TFT; 1280 × 800 pixels; 16,777,216 colors
Operator input	Analog-resistive touchscreen; no physical function keys
Industrial Ethernet	2 Industrial Ethernet interfaces: 2 switched ports plus 1 independent port
Serial interface	1 combined RS422/RS485 interface; MPI/PROFIBUS DP
USB / card slots	2 USB 2.0 interfaces; 2 SD card slots
Operating system	Windows CE 6.0
Engineering software	WinCC Comfort / Advanced / Professional from V11 SP2
Performance & Power	
Processor / user memory	X86 / 24 MB
Rated supply / permitted range	24 V DC / 19.2–28.8 V DC
Rated current / typical power	1.5 A / 36 W
Project capacity	4,096 variables; 750 screens; 500 recipes
Environment	
Protection	Front IP65; rear IP20
Operating temperature	0–50 °C, vertical landscape mounting; lower limits apply to tilt/portrait operation

Selected original manufacturer pages follow on pages 3–5.

Compatibility & Selection Guide

Software and system compatibility. The 6AV2124-0QC02-0AX0 runs Windows CE 6.0 and is configured with WinCC Comfort, Advanced or Professional in TIA Portal from V11 SP2. The data sheet lists SIMATIC S7-1200, S7-1500, S7-200 and S7-300/400 connections, together with other supported drivers. Project limits include 4,096 variables, 750 configurable screens and 500 recipes. Match the installed panel order number, device image, engineering version and controller driver before transferring a replacement project.

Wiring & Installation Reference

Power and communication

DC24V X80. Pin 1: +24 V DC; pin 2: Ground · 19.2–28.8 V DC; SELV/PELV

PROFINET / Industrial Ethernet. 3 physical ports · Use the configured network and shielded cable

MPI/PROFIBUS DP. Combined RS422/RS485 interface · Match the configured driver and bus wiring

Panel mounting

Prepare the enclosure.. Use the current data-sheet cutout of 396 × 291 mm and allow 75 mm mounting depth. The support surface must be rigid, clean and flat.

Keep ventilation clear.. Allow at least 15 mm at each side of the cutout, 50 mm above and below, and 10 mm behind the rear panel.

Secure the panel.. Fit an undamaged seal and install the specified 12 steel mounting clips in the stamped positions. Tighten the clip screws to 0.5 Nm. Use 2–6 mm panel thickness for the stated front protection.

Connect and commission.. Establish functional ground and equipotential bonding, then connect the isolated 24 V DC supply and configured data network. Verify device image and project settings before operation.

Installation precautions. Use only a safely isolated SELV/PELV 24 V DC power supply within the specified voltage range. Switch off power and wire the removable connector while it is unplugged; observe polarity. Tighten the power-connector screws to 0.5–0.6 Nm. Use shielded data cables and suitable equipotential bonding; cable shields do not replace bonding conductors. Secure cables against strain. Follow the complete Siemens operating instructions and any conditions on the actual unit rating plate. For Comfort V1/V1.1 devices, Siemens requires an external protective circuit for 24 V DC operation; use the referenced lightning and overvoltage protection guidance.

View connection reference (PDF) · PDF page 2 | View dimensions reference (PDF) · PDF page 5

Manufacturer sources: Siemens 6AV2124-0QC02-0AX0 data sheet / Comfort Panels Operating Instructions, 07/2022, A5E36770603-AE / Comfort Panels Operating Instructions, 07/2022, A5E36770603-AE — applicable order-code table.

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Data sheet 6AV2124-0QC02-0AX0

*** spare part *** SIMATIC HMI TP1500 Comfort, Comfort Panel, touch operation, 15" widescreen TFT display, 16 million colors, PROFINET interface, MPI/PROFIBUS DP interface, 24 MB configuration memory, Windows CE 6.0, configurable as of WinCC Comfort V11 SP2, successor: 6AV2124-0QC02-0AX1 configurable from V14 SP1

General information	
Product type designation	TP1500 Comfort
Display	
Design of display	TFT
Screen diagonal	15.4 in
Display width	331.2 mm
Display height	207 mm
Number of colors	16 777 216
Resolution (pixels)	
● Horizontal image resolution	1 280 pixel
● Vertical image resolution	800 pixel
Backlighting	
● MTBF backlighting (at 25 °C)	80 000 h
● Backlight dimmable	Yes; 0-100 %
Control elements	
Keyboard	
● Function keys	
— Number of function keys	0
— Number of function keys with LEDs	0
● Keys with LED	No
● System keys	No
● Numeric keyboard	Yes
● alphanumeric keyboard	Yes
Touch operation	
● Design as touch screen	Yes; Analog-resistive
Expansions for operator control of the process	
● Direct keys (touch buttons as S7 input I/O)	40
Installation type/mounting	
Mounting position	vertical
Wall mounting/direct mounting	No
Mounting in portrait format possible	Yes
Mounting in landscape format possible	Yes
maximum permissible angle of inclination without external ventilation	35°
Supply voltage	
Type of supply voltage	DC
Rated value (DC)	24 V
permissible range, lower limit (DC)	19.2 V
permissible range, upper limit (DC)	28.8 V
Input current	
Current consumption (rated value)	1.5 A
Starting current inrush I²t	0.5 A²·s
Power	
Active power input, typ.	36 W
Processor	
Processor type	X86
Storage	

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Flash	Yes
RAM	Yes
Memory available for user data	24 Mbyte
Type of output	
Info LED	No
Power LED	No
Error LED	No
Acoustics	
● Buzzer	No
● Speaker	Yes
Time of day	
Clock	
● Hardware clock (real-time)	Yes
● Software clock	Yes
● retentive	Yes; Back-up duration typically 6 weeks
● synchronizable	Yes
Interfaces	
Number of industrial Ethernet interfaces	2; 2 ports (switch) + independent port
Number of RS 485 interfaces	1; RS 422 / 485 combined
Number of RS 422 interfaces	0; together with RS 485
Number of RS 232 interfaces	0
Number of USB interfaces	2; USB 2.0
● USB Mini B	1; 5-pole
Number of 20 mA interfaces (TTY)	0
Number of parallel interfaces	0
Number of SD card slots	2
With software interfaces	No
Industrial Ethernet	
● Industrial Ethernet status LED	3
● Number of ports of the integrated switch	2
Protocols	
PROFINET	Yes
PROFINET IO	Yes
IRT	Yes; As of WinCC V12
PROFIBUS	Yes
EtherNet/IP	Yes
MPI	Yes
Protocols (Ethernet)	
● TCP/IP	Yes
● DHCP	Yes
● SNMP	Yes
● DCP	Yes
● LLDP	Yes
WEB characteristics	
● HTTP	Yes
● HTTPS	Yes
● HTML	Yes
● XML	Yes
● CSS	Yes
● Active X	Yes
● JavaScript	Yes
● Java VM	No
Redundancy mode	
Media redundancy	
— MRP	Yes
Further protocols	
● CAN	No
● MODBUS	Yes
Interrupts/diagnostics/status information	

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Mechanics/material	
Enclosure material (front)	
● Plastic	No
● Aluminum	Yes
● Stainless steel	No
Dimensions	
Width of the housing front	415 mm
Height of housing front	310 mm
Mounting cutout, width	396 mm
Mounting cutout, height	291 mm
mounting depth	75 mm
Weights	
Weight (without packaging)	5.2 kg

Classifications

	Version	Classification
eClass	16	27-33-02-01
eClass	14	27-33-02-01
eClass	12	27-33-02-01
eClass	9.1	27-33-02-01
eClass	9	27-33-02-01
eClass	8	27-24-23-02
eClass	7.1	27-24-23-02
eClass	6	27-24-23-02
ETIM	10	EC001412
ETIM	9	EC001412
ETIM	8	EC001412
ETIM	7	EC001412
IDEA	4	6607
UNSPSC	15	43-21-15-06

Approvals / Certificates

General Product Approval

Miscellaneous | Manufacturer Declaration

General Product Approval | **EMV** | **For use in hazardous locations**

China RoHS | FM

For use in hazardous locations | **Maritime application**

FM | CCS (China Classification Society)

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