## SIEMENS

## Data sheet

## 6AG1124-1QC02-4AX1

SIPLUS HMI KP1500 Comfort based on 6AV2124-1QC02-0AX1 with conformal coating, 0...+50 °C, Comfort Panel, key operation 15" widescreen TFT display, 16 million colors, PROFINET interface, MPI/PROFIBUS DP interface, 24 MB configuration memory, WEC 2013, configurable as of WinCC Comfort V14 SP1 with HSP



Figuresimilar

General information	
Product type designation	KP1500 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)	
<ul> <li>Horizontal image resolution</li> </ul>	1 280 pixel
<ul> <li>Vertical image resolution</li> </ul>	800 pixel
Backlighting	
<ul> <li>MTBF backlighting (at 25 °C)</li> </ul>	80 000 h
<ul> <li>Backlight dimmable</li> </ul>	Yes; LED, dimmable
Control elements	
Keyboard fonts	
<ul> <li>Function keys</li> </ul>	
<ul> <li>— Number of function keys</li> </ul>	36
<ul> <li>— Number of function keys with LEDs</li> </ul>	36
<ul> <li>Keys with LED</li> </ul>	Yes
<ul> <li>System keys</li> </ul>	Yes
<ul> <li>Numeric keyboard</li> </ul>	Yes
<ul> <li>alphanumeric keyboard</li> </ul>	Yes
Touch operation	
<ul> <li>Design as touch screen</li> </ul>	No; without
Expansions for operator control of the process	
<ul> <li>DP direct LEDs (LEDs as S7 output I/O)</li> </ul>	
— F1Fx	36
<ul> <li>Direct keys (keys as S7 input I/O)</li> </ul>	
— F1Fx	36
Installation type/mounting	
Mounting position	vertical
Mounting in portrait format possible	No
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)	1.7 A
Starting current inrush I <sup>2</sup> t	0.5 A <sup>2</sup> ·s
Power	
Active power input, typ.	41 W
Processor	
Processor type	X86
Memory	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
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 Number of RS 422 interfaces	1; RS 422 / 485 combined 0
Number of RS 232 interfaces	0
Number of USB interfaces	2; USB 2.0
Number of 20 mA interfaces (TTY)	0
Number of parallel interfaces	0
Number of other 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	
	Yes
Supports protocol for PROFINET IO	Yes
	Yes
PROFIBUS EtherNet/IP	Yes
MPI	Yes
Protocols (Ethernet)	
• TCP/IP	Yes
• DHCP	Yes
• SNMP	Yes
• DCP	Yes
• LLDP	Yes
WEB characteristics	Y.
• HTTP	Yes
• HTTPS	Yes
• HTML • 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	
Diagnoses	
Diagnostic information readable	Yes: S7 controller
EMC	
Emission of radio interference acc. to EN 55 011 • Limit class A, for use in industrial areas	Yes
Limit class A, for use in industrial areas     Limit class B, for use in residential areas	No
Degree and class of protection	INU
	IDAE
IP (at the front)	IP65 IP20
IP (rear) NEMA (front)	IP20
	Yes
<ul> <li>Enclosure Type 4 at the front</li> <li>Enclosure Type 4x at the front</li> </ul>	Yes
Ambient conditions	Vee
Suited for indoor use	Yes
Suited for outdoor use	No
Ambient temperature during operation	
Operation (vertical installation)	0 °C
<ul> <li>For vertical installation, min.</li> <li>For vertical installation, max.</li> </ul>	50 °C; (55 °C, see entry ID: 64847814)
Operation (max. tilt angle)	50° C, (55° C, See entry ID. 04047614)
— At maximum tilt angle, min.	0 °C
— At maximum tilt angle, max.	40 °C
Operation (vertical installation, portrait format)	
— For vertical installation, min.	0°C
— For vertical installation, max.	40 °C
Operation (max. tilt angle, portrait format)	
— At maximum tilt angle, min.	0°C
— At maximum tilt angle, max.	40 °C
Ambient temperature during storage/transportation	
• min.	-20 °C
• max.	60 °C
Altitude during operation relating to sea level	
<ul> <li>Installation altitude above sea level, max.</li> </ul>	5 000 m
<ul> <li>Ambient air temperature-barometric pressure-</li> </ul>	Tmin Tmax at 1 080 hPa 795 hPa (-1 000 m +2 000 m) // Tmin
altitude	(Tmax - 10 K) at 795 hPa 658 hPa (+2 000 m +3 500 m) // Tmin
Deletive humidity	(Tmax - 20 K) at 658 hPa 540 hPa (+3 500 m +5 000 m)
Relative humidity	100 % DH incl. condengation/front /no commissioning under
<ul> <li>With condensation, tested in accordance with IEC 60068-2-38, max.</li> </ul>	100 %; RH incl. condensation/frost (no commissioning under condensation conditions)
Resistance	
Coolants and lubricants	
— Resistant to commercially available coolants	Yes; Incl. diesel and oil droplets in the air
and lubricants	
Use in stationary industrial systems	
- to biologically active substances according to	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of
EN 60721-3-3	fauna); Class 3B3 on request
<ul> <li>to chemically active substances according to EN 60721 3 3</li> </ul>	Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52
EN 60721-3-3	(severity degree 3); * Yes; Class 3S4 incl. sand, dust, *
<ul> <li>— to mechanically active substances according to EN 60721-3-3</li> </ul>	1 co, 01200 004 1110. Saliu, UUSI,
Use on ships/at sea	
— to biologically active substances according to	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on
EN 60721-3-6	request
- to chemically active substances according to	Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52
EN 60721-3-6	(severity degree 3); *
<ul> <li>to mechanically active substances according to EN 60721 2 6</li> </ul>	Yes; Class 6S3 incl. sand, dust; *
EN 60721-3-6	
Usage in industrial process technology — Against chemically active substances acc. to	Yes; Class 3 (excluding trichlorethylene)

EN Noise1-4       Ves. Level CX group AB (excluding biodiomethylene, harmful gas transitions for process.		
measuring and control systems sice. to ANS/IGA T1.04 controls of EV 60721-3-3 class 3C4 permissible): tere IL C3 (statis pray) and level LB3 (of) tere IL C3 (statis pray) and level LB3 (of) tere IL C3 (statis pray) and level LB3 (of) tere IL C3 (statis pray) and level LB3 (of) tere IL C3 (statis pray) and level LB3 (of) tere IL C3 (statis pray) and level LB3 (of) The supplied plug covers must remain in place over the unused infrateas curing operation: the statis provide the operation of the statis event of the statis provide of the statis event of the statis provide of the statis event of the statis provide of the statis event of the st	EN 60654-4	
71.04     Invest C3 (pait spray) and level LB3 (oit)       Remark		
conditions acc. ID EN 60721. EN 60654.4 and ANSUSA-71.04 Conformal casaing • Coalings for printed crical board assemblies acc. Io EN 61086 • Protection against fouling acc. Io EN 60664-3 • Miltary testing according to MLL-146058C, Amendment 7 • Qualification and Performance of Electrical Insulating Compound for Printel Board Assemblies according to PP-C-0400A <b>Deprinted Electrical System</b> • Windows CE • Wind	Remark	
ANSINSA-71.04 Continued carding Content of control board assemblies acc. to EX 10106 Protection against fouling acc. to EX 0064-3 Yes; Tiscoloration of conting possible during service life Amendment 7 Guarding Compound for Printed Board Assemblies according to IP-C-C-0.430 Continued according to IP-C-0.430 Contiput to IP-C-0.430 Continued according to IP-C		
Conformal cooling       Yes: Class 2 for high reliability <ul> <li>Contingent op printed circuit board assemblies act. to</li> <li>Protection against foulling act. to EN 60864-3</li> <li>Yes: Class 2 for high reliability</li> <li>Protection against foulling act. to EN 60864-3</li> <li>Yes: Discoloration of coating possible during service life</li> <li>Amondment 7</li> <li>Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies</li> <li>Protection 2</li> <li>Yes: Conformal coating. Class A</li> <li>Yes: Conformal coating. Class A</li> <li>Protecting system</li> <li>Vindox CE</li> <li>Yes: Windows Embedded Compact 2013</li> <li>Configuration / feador</li> <li>Windox CE</li> <li>Yes: Vindows Embedded Compact 2013</li> <li>Configuration / feador</li> <li>Vindox CE</li> <li>Yes: Vindows Embedded Compact 2013</li> <li>Configuration software</li> <li>STEP 7 Foressional (TLA Portal)</li> <li>VinC Classible Standard</li> <li>No</li> <li>VinC Classible Compact</li> <li>VinC Classible Classible Vince Vince Classible</li> <li>Vince Classible Classible Vince Vince Classible</li> <li>Vince Classible Classible Vince Vince</li></ul>		interfaces during operation!
• Catalog for printed circuit baard assemblies a.c. to EN 81096     Yes; Class 2 for high reliability       • Protection against fouling a.c. to EN 6084-3     Yes; Type 1 protection       • Military testing according to MILI-46058C, Amendment 7     Yes; Discoloration of coating possible during service life       • Qualification and Performance of Electrical Insulating Compound for Printed Baard Assemblies according to IPC-CC-30A     Yes; Conformal coating, Class A       • Windows CE     Yes; Windows Embedded Compact 2013       • Windows CE     Yes; Windows Embedded Compact 2013       • Orifiguration / hadar     Yes       • Non     Yes       • Process value display (output)     Yes       • STEP 7 Professional (TA Portal)     No       • STEP 7 Professional (TA Portal)     No       • STEP 7 Professional (TA Portal)     No       • WinCC Resible Compact     No       • WinCC Control (TIA Portal)     No       • WinCC Control (TIA Portal)     Yes, Y14 SP1 HSP and higher       • WinCC Control (TIA Portal)     Yes, Y14 SP1 HSP and higher       • WinCC Control (TIA Portal)     Yes, Y14 SP1 HSP and higher       • WinCC Control (TIA Portal)     Yes, Y14 SP1 HSP and higher       • WinCC Control (TIA Portal)     Yes, Y14 SP1 HSP and higher		
EN 1088       Yes; Type 1 protection         • Miltary testing according to Mill146058C, Arrendment 7       Yes; Discoloration of coating possible during service life         • Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A       Yes; Conformal coating, Class A         Properting systems       Ves; Windows Embedded Compact 2013         Properties (Systems)       Yes         Properties (Systems)       Yes         • Windows CE       Yes; Windows Embedded Compact 2013         Configuration / header       Yes         • Middows CE       Yes; Windows Embedded Compact 2013         Configuration / header       Yes         Message indicator       Yes         • STEP 7 Basic (TIA Portal)       No         • STEP 7 Professional (TIA Portal)       No         • WinCC Insubic Compact       No         • WinCC Conford (TIA Portal)       Yes         • WinCC Professional (TIA Portal)       Yes <t< td=""><td></td><td>Vac: Class 2 for high reliability</td></t<>		Vac: Class 2 for high reliability
• Protection against fouling ace. Is 0.0064-3         Yes; Type 1 protection           • Multary testing according to MIL-140058C, Amendment 7         Yes; Discolaration of coating possible during service life           • Protection and Preformance of Electical recording to IPC-CC-330A         Yes; Conformal coating, Class A           • Preinstalled operating system         Yes; Windows Embedded Compact 2013           • Windows CE         Yes; Windows Embedded Compact 2013           • Oriniguration, I header         Yes;           • Mark system (inc), buffer and acknowledgment)         Yes;           • Process value default (input) possible         Yes;           • Process value default (input) possible         Yes;           • STEP 7 Professional (TIA Portal)         No           • WinCC Reable Standard         No           • WinCC Reable Compact         No           • WinCC Reable Standard         No           • WinCC Reable Compact         No           • WinCC Reable Standard         No           • WinCC Reable Standard         No           • WinCC Advanced (TIA Portal)         Yes; V14 SP1 HSP and higher           • WinCC Professional (TIA Portal)         Y		res, class 2 for high reliability
• Miltary testing secording to MIL-1460S8C, Amendment 7         Yes; Discoloration of coating possible during service life           • Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A         Yes; Conformal coating, Class A           opportating system         •           • Windows CE         Yes; Windows Embedded Compact 2013           configuration / header         •           Message indicator         Yes           Alarm system (ind. buffer and acknowledgment)         Yes           Process value display (output)         Yes           No         Yes           Step 7 Professional (TA Portal)         No           WinCC Advanced		Yes: Type 1 protection
Amendment 7		
Insulating Compound for Printed Board Assemblies according to IPC-CC-830A Proprietary proprietary proprietary Professional of Insolar • Windows CE • Windows CH •		
according to IPS-CC-830A  Operating systems  proprietary proprietary No  preinstalled operating system  Windows CE Yes: Windows Embedded Compact 2013  configuration / header  Message indicator Alam system (incl. buffer and acknowledgment) Yes Adam system (incl. buffer and acknowledgment) Yes Process value display (output) Yes Process value display (output) Yes Process value display (output) Yes Configuration system  STEP 7 Basic (TIA Portal) No STEP 7 Professional (TIA Portal) No WinCC fexible Standard No WinCC Gexible Standard No WinCC Cadvanced (TIA Portal) Yes; V14 SP1 HSP and higher WinCC Cadvanced (TIA Portal) Yes; V14 SP1 HSP and higher Unince Comfort (TIA Portal) Yes; V14 SP1 HSP and higher Unince Confort (TIA Portal) Yes; V14 SP1 HSP and higher Unince Confort (TIA Portal) Yes; V14 SP1 HSP and higher Unince Confort (TIA Portal) Yes; V14 SP1 HSP and higher Unince Confort (TIA Portal) Yes; V14 SP1 HSP and higher Unince Professional (TIA Portal) Yes; V14 SP1 HSP and higher Unince Professional (TIA Portal) Yes; V14 SP1 HSP and higher Unince Professional (TIA Portal) Yes; V14 SP1 HSP and higher Unince Professional (TIA Portal) Yes; V14 SP1 HSP and higher Unince Professional (TIA Portal) Yes; V14 SP1 HSP and higher Yes Yota SP1 HSP AND HIGH Yes Yota		Yes; Conformal coating, Class A
Operating systems         No           preprintalized operating system         No           • Windows CE         Yes, Windows Embedded Compact 2013           configuration / header         Yes           Alarn system (incl. biffer and acknowledgment)         Yes           Process value display (output)         Yes           Process value display (output)         Yes           excipe management         Yes           • STEP 7 Basic (TIA Portal)         No           • WinCC flexible Compact         No           • WinCC Combact         No           • WinCC Combact         No           • WinCC Control (TIA Portal)         Yes; V14 SP1 HSP and higher           • WinCC Professional (TIA Portal)         Yes; V14 SP1 HSP and higher           • WinCC Professional (TIA Portal)         Yes; V14 SP1 HSP and higher           • Under of online/runtime languages         32           • Project languages         42           • Languages per project         32           • Probet Word		
proprietary         No           preinstalled operating system         •           •         Windows CE         Yes; Windows Embedded Compact 2013           configuration / heador         Yes           Message indicator         Yes           Aarm system (incl. buffer and acknowledgment)         Yes           Process value display (output)         Yes           Process value display (output)         Yes           Process value display (output)         Yes           Configuration software         •           • STEP 7 Basic (TIA Portal)         No           • STEP 7 Intofessional (TIA Portal)         No           • WinCC flexible Standard         No           • WinCC Cabasic CIAP Portal)         Yes; V14 SP1 HSP and higher           • WinCC Cabasic CIAP Portal)         Yes; V14 SP1 HSP and higher           • WinCC Comfort (TIA Portal)         Yes; V14 SP1 HSP and higher           • WinCC Confort (TIA Portal)         Yes; V14 SP1 HSP and higher           • WinCC Protestional (TA Portal)         Yes; V14 SP1 HSP and higher           • WinCC Protestional (TA Portal)         Yes; V14 SP1 HSP and higher           • Under WinCC (TIA Portal)         Yes; V14 SP1 HSP and higher           • Under More of onliner/runtime languages         32           Protectinguages		
pre-installed operating system           • Windows CE         Yes; Windows Embedded Compact 2013           Configuration / Neador         Yes;           Message indicator         Yes;           Alam system (incl. buffer and acknowledgment)         Yes;           Process value default (input) possible         Yes;           Recipe management         Yes;           • STEP 7 Basic (TIA Portal)         No           • STEP 7 Fordessional (TIA Portal)         No           • WinCC flexible Compact         No           • WinCC flexible Compact         No           • WinCC flexible Advanced         No           • WinCC Control (TIA Portal)         Yes; V14 SP1 HSP and higher           • WinCC Control (TIA Portal)         Yes; V14 SP1 HSP and higher           • WinCC Control (TIA Portal)         Yes; V14 SP1 HSP and higher           • WinCC Control (TIA Portal)         Yes; V14 SP1 HSP and higher           • WinCC Control (TIA Portal)         Yes; V14 SP1 HSP and higher           • WinCC Control (TIA Portal)         Yes; V14 SP1 HSP and higher           • Uncol Control (TIA Portal)         Yes; V14 SP1 HSP and higher           • Uncol control (TIA Portal)         Yes; V14 SP1 HSP and higher           • Uncol control (TIA Portal)         Yes; V14 SP1 HSP and higher           • Nunber of		
• Windows CE         Yes; Windows Embedded Compact 2013           configuration / heador         ////////////////////////////////////		NO
configuration / header     Yes       Message indicator     Yes       Alarm system (incl. buffer and acknowledgment)     Yes       Process value default (input) possible     Yes       Process value default (input) possible     Yes       Configuration software     Yes       • STEP 7 Professional (TIA Portal)     No       • WinCC flexible Compact     No       • WinCC flexible Advanced     No       • WinCC Casic (TIA Portal)     No       • WinCC Casic (TIA Portal)     No       • WinCC Comfort (TIA Portal)     Yes; V14 SP1 HSP and higher       • WinCC Confort (TIA Portal)     Yes; V14 SP1 HSP and higher       • WinCC Confort (TIA Portal)     Yes; V14 SP1 HSP and higher       • WinCC Confort (TIA Portal)     Yes; V14 SP1 HSP and higher       • WinCC Confort (TIA Portal)     Yes; V14 SP1 HSP and higher       • WincC Confort (TIA Portal)     Yes; V14 SP1 HSP and higher       • Uanguages     •       • Uanguages     32       Project languages     32       Functionality under WinCC (TIA Portal)     Yes       • Languages per project     32       Functionality under WinCC (TIA Portal)     Yes       • Edit Brayer     Yes       • Pocket Word     Yes       • SiMATIC WinCC Smg/tServer     Yes       • SiMATIC WinCC Audit<		Vec: Windows Embedded Compact 2012
Message indicator     Yes       Alarm system (incl. buffer and acknowledgment)     Yes       Process value default (input) possible     Yes       Recipe management     Yes       Configuration software     Yes       • STEP 7 Basic (TIA Portal)     No       • STEP 7 Professional (TIA Portal)     No       • WinCC flexible Compact     No       • WinCC flexible Standard     No       • WinCC flexible Standard     No       • WinCC flexible Standard     No       • WinCC Comfort (TIA Portal)     No       • WinCC Combot (TIA Portal)     No       • WinCC Comfort (TIA Portal)     Yes; V14 SP1 HSP and higher       • WinCC Comfort (TIA Portal)     Yes; V14 SP1 HSP and higher       • WinCC Professional (TIA Portal)     Yes; V14 SP1 HSP and higher       • WinCC Professional (TIA Portal)     Yes; V14 SP1 HSP and higher       • WinCC Professional (TIA Portal)     Yes; V14 SP1 HSP and higher       • Under of online/runtime languages     32       • Number of online/runtime languages     12       • Languages     Yes       • Languages     Yes       • Languages     Yes       • Number of Nice (TIA Portal)     Yes       • Languages     Yes       • Number of Nice (TIA Portal)     Yes       • Number of Nice (TIA Portal)     <		
Alarm system (incl. buffer and acknowledgment)     Yes       Process value display (output)     Yes       Process value display (output)     Yes       Recipe management     Yes       Configuration software		
Process value display (output)     Yes       Process value display (output)     Yes       Recipe management     Yes       • STEP 7 Porfessional (TIA Portal)     No       • STEP 7 Porfessional (TIA Portal)     No       • WinCC fiexible Compact     No       • WinCC fiexible Advanced     No       • WinCC fiexible Advanced     No       • WinCC Comfort (TIA Portal)     Yes; V14 SP1 HSP and higher       • WinCC Comfort (TIA Portal)     Yes; V14 SP1 HSP and higher       • WinCC Comfort (TIA Portal)     Yes; V14 SP1 HSP and higher       • WinCC Comfort (TIA Portal)     Yes; V14 SP1 HSP and higher       • WinCC Comfort (TIA Portal)     Yes; V14 SP1 HSP and higher       • WinCC Inscience     Z       Project languages     32       • Unce Advanced (TIA Portal)     Yes; V14 SP1 HSP and higher       • Languages     32       • Languages per project     32       • Project languages     32       • Languages per project     Yes       • Occket Word     Yes       • Pocket Excel     Yes       • Pocket Excel     Yes       • Number of slam classes     Yes       • SIMATIC WinCC Sm@rtServer     Yes       • SiMATIC WinCC Addit     Yes       • Number of slam classes     32       • Number of slam clas	•	
Process value defauit (input) possible     Yes       Recipe management     Yes       Configuration software		
Recipe management     Yes       Configuration software		
Configuration software         • STEP 7 Basic (TIA Portal)       No         • WinCC flexible Compact       No         • WinCC flexible Standard       No         • WinCC flexible Standard       No         • WinCC flexible Standard       No         • WinCC Basic (TIA Portal)       No         • WinCC Basic (TIA Portal)       No         • WinCC Comfort (TIA Portal)       Yes; V14 SP1 HSP and higher         • WinCC Comfort (TIA Portal)       Yes; V14 SP1 HSP and higher         • WinCC Professional (TIA Portal)       Yes; V14 SP1 HSP and higher         • WinCC Professional (TIA Portal)       Yes; V14 SP1 HSP and higher         Languages       -         Online languages       32         Profect languages       -         • Languages per project       32         Functionality under WinCC (TIA Portal)       Yes         • Languages per project       32         Functionality under WinCC (TIA Portal)       Yes         • Veb browser       Yes         • Pocket Excel       Yes         • Pocket Excel       Yes         • Pocket Excel       Yes         • SIMATIC WinCC Sm@rtServer       Yes         • SIMATIC WinCC Sm@rtServer       Yes         • SIMAT		
• STEP 7 Basic (TIA Portal)     No       • STEP 7 Professional (TIA Portal)     No       • WinCC flexible Standard     No       • WinCC flexible Standard     No       • WinCC Basic (TIA Portal)     No       • WinCC Basic (TIA Portal)     No       • WinCC Comfort (TIA Portal)     Yes; V14 SP1 HSP and higher       • WinCC Comfort (TIA Portal)     Yes; V14 SP1 HSP and higher       • WinCC Comfort (TIA Portal)     Yes; V14 SP1 HSP and higher       • WinCC Comfort (TIA Portal)     Yes; V14 SP1 HSP and higher       • WinCC Professional (TIA Portal)     Yes; V14 SP1 HSP and higher       • WinCC Professional (TIA Portal)     Yes; V14 SP1 HSP and higher       • Under of online/runtime languages     32       • Project languages     32       • Ianguages per project     32       • Project languages     Yes       • Applications/options     Yes       • Web browser     Yes       • Pocket Excel     Yes       • Pocket Word     Yes       • Pocket Word     Yes       • SIMATIC WinCC Sm@rtServer     Yes       • SIMATIC WinCC Audit     Yes       • Winder of alarm classes     32       • Bitme-controlled     Yes       • Iask-controlled     Yes       • Number of alarm classes     32       • Number		Yes
• STEP 7 Professional (TIA Portal)No• WinCC flexible StandardNo• WinCC flexible AdvancedNo• WinCC Basic (TIA Portal)No• WinCC Comfort (TIA Portal)Yes; V14 SP1 HSP and higher• WinCC Comfort (TIA Portal)Yes; V14 SP1 HSP and higher• WinCC Professional (TIA Portal)Yes; V14 SP1 HSP and higher• WinCC Professional (TIA Portal)Yes; V14 SP1 HSP and higher• WinCC Professional (TIA Portal)Yes; V14 SP1 HSP and higher• WinCC Professional (TIA Portal)Yes; V14 SP1 HSP and higher• Umber of online/runtime languages2• Number of online/runtime languages32• Languages per project32• Languages per project32• LibrariesYes• Web browserYes• Pocket WordYes• Pocket WordYes• Pocket ExcelYes• Number of Nisual Basic ScriptsYes• SIMATIC WinCC Sm@rtServerYes• SIMATIC WinCC AdditYes• Number of latarn classes32• Number of bit messages6 000• Analog messages6 000• Analog messages20• S7 alarn number procedureYes		No
• WinCC flexible Compact     No       • WinCC flexible Advanced     No       • WinCC Basic (TIA Portal)     No       • WinCC Comfort (TIA Portal)     Yes; V14 SP1 HSP and higher       • WinCC Confort (TIA Portal)     Yes; V14 SP1 HSP and higher       • WinCC Professional (TIA Portal)     Yes; V14 SP1 HSP and higher       • WinCC Professional (TIA Portal)     Yes; V14 SP1 HSP and higher       • WinCC Professional (TIA Portal)     Yes; V14 SP1 HSP and higher       • WinDer of online/runtime languages     32       Project languages     12       • Languages per project     32       Functionality under WinCC (TIA Portal)     Yes       Applications/options     Yes       • Web browser     Yes       • Pocket Word     Yes       • Pocket Word     Yes       • Pocket Word     Yes       • SIMATIC WinCC Sm@rtServer     Yes       • SIMATIC WinCC Sm@rtServer     Yes       • SIMATIC WinCC Audit     Yes       • Number of alarm classes     32       • Task planner     Yes       • time-controlled     Yes       • Bit messages     6 0000       • Analog messages     6 000       • Analog messages     200       • S7 alarm number procedure     Yes		
• WinCC flexible StandardNo• WinCC flexible AdvancedNo• WinCC Basic (TIA Portal)No• WinCC Comfort (TA Portal)Yes; V14 SP1 HSP and higher• WinCC Advanced (TIA Portal)Yes; V14 SP1 HSP and higher• WinCC Professional (TIA Portal)Yes; V14 SP1 HSP and higher• UncC Advanced (TA Portal)Yes; V14 SP1 HSP and higher• UncC fordessional (TA Portal)Yes; V14 SP1 HSP and higher• Languages0• Languages per project32Project languages per project32• Languages per project32• Veb browserYes• Veb browserYes• Pocket ExcelYes• Pocket ExcelYes• Number of nalary classerYes• SIMATIC WINCC AuditYesNumber of Visual Basic ScriptsYes• Staks controlledYes• Number of alarm classes32• Basege system-• Number of analog messages6 000• Analog messages6 000• ST alarm number procedureYes		
• WinCC flexible AdvancedNo• WinCC Basic (TIA Portal)No• WinCC Comfort (TIA Portal)Yes; V14 SP1 HSP and higher• WinCC Advanced (TIA Portal)Yes; V14 SP1 HSP and higher• WinCC Professional (TIA Portal)Yes; V14 SP1 HSP and higher• WinCC Professional (TIA Portal)Yes; V14 SP1 HSP and higher• WinCC Inferior InferiorYes; V14 SP1 HSP and higher• Number of online/runtime languages32• Number of online/runtime languages32• Languages per project32• Cuber WordYes• Veb browserYes• Pocket WordYes• Pocket ExcelYes• Pocket ExcelYes• SIMATIC WinCC Sm@rtServerYes• SIMATIC WinCC AuditYesNumber of Visual Basic ScriptsYesTask planner		
• WinCC Basic (TIA Portal)No• WinCC Confort (TIA Portal)Yes; V14 SP1 HSP and higher• WinCC Advanced (TIA Portal)Yes; V14 SP1 HSP and higher• WinCC Professional (TIA Portal)Yes; V14 SP1 HSP and higherLanguages• Number of online/runtime languages32Project languages32• Languages per project32• Languages per project32Functionality under WinCC (TIA Portal)LibrariesYes• Applications/optionsYes• Web browserYes• Pocket ExcelYes• Pocket ExcelYes• Media PlayerYes• SIMATIC WinCC AuditYesNumber of Visual Basic ScriptsYesTask plannerYes• time-controlledYes• Bases system32• Number of alarm classes32• Number of alarm classes6000• Analog messages6000• S7 alarm number procedureYes		
• WinCC Comfort (TIA Portal)       Yes; V14 SP1 HSP and higher         • WinCC Advanced (TIA Portal)       Yes; V14 SP1 HSP and higher         • WinCC Professional (TIA Portal)       Yes; V14 SP1 HSP and higher         Languages       Itanguages         Online languages       32         Project languages per project       32         Functionality under WinCC (TIA Portal)       Yes         Libraries       Yes         • Ves browser       Yes         • Ves browser       Yes         • Pocket Word       Yes         • Pocket Excel       Yes         • Pocket Excel       Yes         • SIMATIC WinCC Aduit       Yes         • Task planner       Yes         • Time-controlled       Yes         • Poster Wince Aduit       Yes         • Base Scripts       Yes         • Task planner       Itime-controlled         • Task planner       Stask-controlled         • Number of analog messages       6 000         •		
<ul> <li>WinCC Advanced (TIA Portal)</li> <li>Yes; V14 SP1 HSP and higher</li> <li>WinCC Professional (TIA Portal)</li> <li>Yes; V14 SP1 HSP and higher</li> <li>Languages</li> <li>Online languages</li> <li>Number of online/runtime languages</li> <li>Languages per project</li> <li>S2</li> <li>Project languages</li> <li>Languages per project</li> <li>S2</li> <li>Functionality under WinCC (TIA Portal)</li> <li>Libraries</li> <li>Yes</li> <li>Applications/options</li> <li>Web browser</li> <li>Yes</li> <li>Pocket Word</li> <li>Yes</li> <li>Pocket Excel</li> <li>Yes</li> <li>PDF Viewer</li> <li>Yes</li> <li>SIMATIC WinCC Sm@rtServer</li> <li>Yes</li> <li>SIMATIC WinCC Audit</li> <li>Yes</li> <li>Task planer</li> <li>time-controlled</li> <li>Yes</li> <li>Task planer</li> <li>time-controlled</li> <li>Yes</li> <li>Bit messages</li> <li>Online dating messages</li> <li>Glu0</li> <li>Analog messages</li> <li>Mumber of analog messages</li> <li>Sonon</li> <li>Analog messages</li> <li>Sonon</li> <li>Siman number procedure</li> <li>Yes</li> </ul>		
• WinCC Professional (TIA Portal)       Yes; V14 SP1 HSP and higher         Languages       32         • Number of online/nuttime languages       32         Project languages       32         • Languages per project       32         Functionality under WinCC (TIA Portal)       32         Libraries       Yes         Applications/options       Yes         • Veb browser       Yes         • Pocket Word       Yes         • Pocket Excel       Yes         • Decket Excel       Yes         • Mumber of visual Basic Scripts       Yes         • SiMATIC WinCC Audit       Yes         Number of alam classes       32         Message system       Yes         • Number of alam classes       32         • Number of alam classes       32         • Bit messages       6 000         • Analog messages       6 000         • Analog messages       200         • S7 alam number procedure       Yes		-
Languages         Online languages         • Number of online/runtime languages         2         Project languages         • Languages per project         32         Functionality under WinCC (TIA Portal)         Libraries       Yes         Applications/options       Yes         • Veb browser       Yes         • Pocket Word       Yes         • Pocket Excel       Yes         • Pocket Excel       Yes         • Media Player       Yes         • SIMATIC WinCC Audit       Yes         • time-controlled       Yes         • time-controlled       Yes         • time-controlled       Yes         • timescage system       -         • Number of alarm classes       32         • Bit messages       6 000         • Analog messages       -         - Number of analog messages       200         • S7 alarm n		
Ontine languages       32         Project languages       32         • Languages per project       32         Functionality under WinCC (TIA Portal)       32         Libraries       Yes         Applications/options       Yes         • Veb browser       Yes         • Pocket Word       Yes         • Pocket Excel       Yes         • Pocket Excel       Yes         • Media Player       Yes         • Media Player       Yes         • SIMATIC WinCC Audit       Yes         • SIMATIC WinCC Audit       Yes         • SIMATIC WinCC Audit       Yes         • Number of Visual Basic Scripts       Yes         • time-controlled       Yes         • task-controlled       Yes         • Message system       .         • Number of alarm classes       32         • Bit messages       .         - Number of bit messages       6 000         • Analog messages       .         - Number of analog messages		
• Number of online/runtime languages       32         Project languages       32         • Languages per project       32         Functionality under WinCC (TIA Portal)       1         Libraries       Yes         Applications/options       Yes         • Web browser       Yes         • Pocket Word       Yes         • Pocket Excel       Yes         • Poket Excel       Yes         • Media Player       Yes         • SIMATIC WinCC Sm@rtServer       Yes         • SIMATIC WinCC Audit       Yes         Number of Visual Basic Scripts       Yes         Task planner       Yes         • time-controlled       Yes         • Number of alarm classes       32         • Bit messages       6000         • Analog messages       -         • Number of analog messages       200         • S7 alarm number procedure       Yes		
Project languages• Languages per project32Functionality under WinCC (TIA Portal)LibrariesYesApplications/optionsYes• Web browserYes• Pocket WordYes• Pocket ExcelYes• Pocket ExcelYes• DDF ViewerYes• SIMATIC WinCC Sm@rtServerYes• SIMATIC WinCC AuditYesNumber of Visual Basic ScriptsYesTask plannerYes• time-controlledYes• task-controlledYes• Number of alarm classes32• Bit messages6000• Analog messages200• S7 alarm number procedureYes		32
• Languages per project       32         Functionality under WinCC (TIA Portal)         Libraries       Yes         Applications/options       Yes         • Web browser       Yes         • Pocket Word       Yes         • Pocket Word       Yes         • Pocket Excel       Yes         • Pocket Excel       Yes         • Media Player       Yes         • SIMATIC WinCC Sm@rtServer       Yes         • SIMATIC WinCC Audit       Yes         • SIMATIC WinCC Audit       Yes         • SIMATIC WinCC Audit       Yes         • Simarre       Yes         • Simarre       Yes         • Simarre       Yes         • Number of Visual Basic Scripts       Yes         Task planner       Yes         • time-controlled       Yes         • task-controlled       Yes         • Number of alarm classes       32         • Bit messages       32         • Number of bit messages       6 000         • Analog messages       -         - Number of analog messages       200         • S7 alarm number procedure       Yes		52
Functionality under WinCC (TIA Portal)         Libraries       Yes         Applications/options       Yes         • Web browser       Yes         • Pocket Word       Yes         • Pocket Excel       Yes         • PDF Viewer       Yes         • PDF Viewer       Yes         • SIMATIC WinCC Sm@rtServer       Yes         • SIMATIC WinCC Audit       Yes         Number of Visual Basic Scripts       Yes         Task planner       Yes         • time-controlled       Yes         • Bit messages       32         • Bit messages       6 000         • Analog messages       6 000         • Analog messages       200         • S7 alarm number procedure       Yes		32
Libraries       Yes         Applications/options       Yes         • Web browser       Yes         • Pocket Word       Yes         • Pocket Excel       Yes         • PDF Viewer       Yes         • Media Player       Yes         • SIMATIC WinCC Sm@rtServer       Yes         • SIMATIC WinCC Audit       Yes         Number of Visual Basic Scripts       Yes         Task planner       Yes         • time-controlled       Yes         • task-controlled       Yes         • Bit messages       32         • Bit messages       6 000         • Analog messages       600         • Analog messages       200         • S7 alarm number procedure       Yes		02
Applications/options• Web browserYes• Pocket WordYes• Pocket ExcelYes• PDF ViewerYes• Media PlayerYes• SIMATIC WinCC Sm@rtServerYes• SIMATIC WinCC AuditYes• SIMATIC WinCC AuditYes• SilmATIC WinCC AuditYes• Number of Visual Basic ScriptsYes• SilmATIC WinCC AuditYes• SilmATIC WinCC AuditYes• SilmATIC WinCC AuditYes• Number of Visual Basic ScriptsSe• SilmATIC WinCC AuditYes• Number of Visual Basic ScriptsSe• AuditYes• Number of alarm classes32• Number of bit messages6 000• Analog messages200• Silt Analog messages200• Silt am number procedureYes		Vee
• Web browserYes• Pocket WordYes• Pocket ExcelYes• PDF ViewerYes• Media PlayerYes• SIMATIC WinCC Sm@rtServerYes• SIMATIC WinCC AuditYes• SIMATIC WinCC AuditYes• Simaric CauditYes• Simaric Visual Basic ScriptsYes• time-controlledYes• time-controlledYes• time-controlledYes• times of alarm classes32• Bit messages6 000• Analog messages6 000• Analog messages200• S7 alarm number procedureYes		T es
Pocket WordYesPocket ExcelYesPDF ViewerYes• Media PlayerYes• SIMATIC WinCC Sm@rtServerYes• SIMATIC WinCC AuditYes• SIMATIC WinCC AuditYes• SIMATIC WinCC AuditYes• time-controlledYes• time-controlledYes• task-controlledYes• Number of alarm classes32• Bit messages6 000• Analog messages6 000• Analog messages200• S7 alarm number procedureYes		Ves
Pocket ExcelYesPDF ViewerYesMedia PlayerYesSIMATIC WinCC Sm@rtServerYesSIMATIC WinCC AuditYesNumber of Visual Basic ScriptsYesTask plannerYestime-controlledYestask-controlledYesMumber of alarm classes32Bit messages6 000Analog messages6 000Analog messages200S7 alarm number procedureYes		
• PDF ViewerYes• Media PlayerYes• SIMATIC WinCC Sm@rtServerYes• SIMATIC WinCC AuditYes• SIMATIC WinCC AuditYesNumber of Visual Basic ScriptsYesTask plannerYes• time-controlledYes• task-controlledYes• Message system32• Number of alarm classes6 000• Analog messages6 000• Analog messages200• S7 alarm number procedureYes		
Media PlayerYesSIMATIC WinCC Sm@rtServerYesSIMATIC WinCC AuditYesNumber of Visual Basic ScriptsYesTask plannerYes• time-controlledYes• task-controlledYesMessage systemYes- Number of alarm classes32Bit messages6 000- Number of bit messages6 000• Analog messages200• S7 alarm number procedureYes		
SIMATIC WinCC Sm@rtServerYesSIMATIC WinCC AuditYesNumber of Visual Basic ScriptsYesTask plannerYes• time-controlledYes• task-controlledYesMessage systemYesImage: Stript		
• SIMATIC WinCC AuditYesNumber of Visual Basic ScriptsYesTask plannerYes• time-controlledYes• task-controlledYes• task-controlledYes• Message systemYes• Number of alarm classes32• Bit messages6 000• Analog messages6 000• Analog messages200• S7 alarm number procedureYes	•	
Number of Visual Basic ScriptsYesTask plannerYes• time-controlledYes• task-controlledYesMessage systemYes• Number of alarm classes32• Bit messages6 000• Number of bit messages6 000• Analog messages200• S7 alarm number procedureYes	-	
Task plannerYes• time-controlledYes• task-controlledYesMessage systemYes• Number of alarm classes32• Bit messages6 000• Number of bit messages6 000• Analog messages-• Number of analog messages200• S7 alarm number procedureYes		
• time-controlledYes• task-controlledYesMessage system9• Number of alarm classes32• Bit messages6000• Number of bit messages6000• Analog messages9• Number of analog messages200• S7 alarm number procedureYes		
• task-controlledYesMessage system32• Number of alarm classes32• Bit messages6 000- Number of bit messages6 000• Analog messages Number of analog messages200• S7 alarm number procedureYes	•	Yes
Number of alarm classes32Bit messages6000- Number of bit messages6000Analog messages Number of analog messages200S7 alarm number procedureYes	task-controlled	Yes
Number of alarm classes32Bit messages6000- Number of bit messages6000Analog messages Number of analog messages200S7 alarm number procedureYes	Message system	
<ul> <li>Number of bit messages</li> <li>Analog messages</li> <li>Number of analog messages</li> <li>S7 alarm number procedure</li> <li>Yes</li> </ul>		32
Analog messages     Number of analog messages     S7 alarm number procedure     Yes	Bit messages	
- Number of analog messages     200       • S7 alarm number procedure     Yes	<ul> <li>— Number of bit messages</li> </ul>	6 000
S7 alarm number procedure Yes	<ul> <li>Analog messages</li> </ul>	
	<ul> <li>— Number of analog messages</li> </ul>	200
System messages HMI Yes	<ul> <li>S7 alarm number procedure</li> </ul>	
	<ul> <li>System messages HMI</li> </ul>	Yes

System event more (SIMATIC S7 SINI IMEDIV	Yes
<ul> <li>System event, more (SIMATIC S7, SINUMERIK, SIMOTION, )</li> </ul>	100
<ul> <li>Number of characters per message</li> </ul>	80
<ul> <li>Number of process values per message</li> </ul>	8
Acknowledgment groups	Yes
Message indicator	Yes
Recipe management	
Number of recipes	500
<ul> <li>Data records per recipe</li> </ul>	1 000
<ul> <li>Entries per data record</li> </ul>	2 000
<ul> <li>Size of internal recipe memory</li> </ul>	4 Mbyte
<ul> <li>Recipe memory expandable</li> </ul>	Yes
Variables	
<ul> <li>Number of variables per device</li> </ul>	4 096
<ul> <li>Number of variables per screen</li> </ul>	400
Limit values	Yes
Multiplexing	Yes
Structures	Yes
Arrays	Yes
Images	750
Number of configurable images	750
Permanent window/default	Yes
Global image	Yes
Pop-up images	Yes
Slide-in images	Yes
Image selection by PLC	Yes Yes
Image number in the PLC	Tes
Image objects <ul> <li>Number of objects per image</li> </ul>	600
Text fields	Yes
I/O fields	Yes
Graphic I/O fields (graphics list)	Yes
Symbolic I/O fields (text list)	Yes
Date/time fields	Yes
Switches	Yes
Buttons	Yes
Graphic display	Yes
• Icons	Yes
Geometric objects	Yes
Complex image objects	
Number of complex objects per screen	40
Alarm view	Yes
Trend view	Yes
User view	Yes
Status/control	Yes
<ul> <li>Sm@rtClient view</li> </ul>	Yes
Recipe view	Yes
• f(x) trend view	Yes
<ul> <li>System diagnostics view</li> </ul>	Yes
Media Player	Yes
HTML browser	Yes
PDF display	Yes
<ul> <li>IP camera display</li> </ul>	Yes
Bar graphs	Yes
Sliders	Yes
Pointer instruments	Yes
Analog/digital clock	Yes
Lists	
Number of text lists per project	500
Number of entries per text list	500
Number of graphics lists per project	500
Number of entries per graphics list	500
Archiving	50
<ul> <li>Number of archives per device</li> </ul>	50

- Number of antring non-problem	
Number of entries per archive     50 000	
Message archive Yes	
Process value archive     Yes	
Archiving methods	
- Sequential archive Yes	
- Short-term archive Yes	
Memory location	
— Memory card Yes	
- USB memory Yes	
— Ethernet Yes	
Data storage format	
— CSV Yes	
— TXT Yes	
— RDB Yes	
Security	
Number of user groups 50	
Number of user rights     32	
Number of users     50	
Password export/import     Yes	
SIMATIC Logon Yes	
Logging through printer	
• Alarms Yes	
Report (shift log)     Yes	
• Hardcopy Yes	
Electronic print to file     Yes; PDF, HTML	
Character sets	
Keyboard fonts	
– US English Yes	
Transfer (upload/download)	
MPI/PROFIBUS DP Yes	
• USB Yes	
• Ethernet Yes	
using external storage medium Yes	
Process coupling	
• S7-1200 Yes	
• S7-1500 Yes	
• S7-200 Yes	
• S7-300/400 Yes	
• LOGO! Yes	
• WinAC Yes	
SINUMERIK Yes; With SINUMERIK option package	as from WinCC V15 or higher
• SIMOTION Yes	
Allen Bradley (EtherNet/IP)     Yes	
Allen Bradley (DF1)     Yes	
Mitsubishi (MC TCP/IP)     Yes	
• Mitsubishi (FX) Yes	
OMRON (FINS TCP)     No	
OMRON (LINK/Multilink)     Yes	
Modicon (Modbus TCP/IP)     Yes	
Modicon (Modbus)     Yes	
• OPC UA Client Yes	
• OPC UA Server Yes	
Service tools/configuration aids	
Backup/Restore manually Yes	
Backup/Restore automatically Yes	
Simulation     Yes	
Device switchover     Yes	
Deviations	
Peripherals/Options	
Printer Yes	
Printer     Yes       SIMATIC HMI MM memory card: Multi Media Card     Yes; Up to 128 MB	
PrinterYesSIMATIC HMI MM memory card: Multi Media CardYes; Up to 128 MBSIMATIC HMI SD memory card: Secure Digital memoryYes; Up to 2 GB	
PrinterYesSIMATIC HMI MM memory card: Multi Media CardYes; Up to 128 MBSIMATIC HMI SD memory card: Secure Digital memory cardYes; Up to 2 GB	
PrinterYesSIMATIC HMI MM memory card: Multi Media CardYes; Up to 128 MBSIMATIC HMI SD memory card: Secure Digital memoryYes; Up to 2 GB	

SIMATIC IPC USB Flashdrive (USB stick)	Yes; Up to 16 GB
SIMATIC HMI USB stick	Yes; Up to 8 GB
Network camera	Yes
Mechanics/material	
Enclosure material (front)	
Plastic	No
Aluminum	Yes
Stainless steel	No
Dimensions	
Width of the housing front	483 mm
Height of housing front	310 mm
Mounting cutout, width	450 mm
Mounting cutout, height	291 mm
Overall depth	75 mm
Weights	
Weight (without packaging)	4.7 kg
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