SIEMENS

Data sheet

6AV2124-0XC24-0AX0

SIMATIC HMI TP2200 Comfort Pro, for support arm (not expandable, flange on top), Comfort Panel, touch operation, 22" widescreen TFT display, 16 million colors, PROFINET interface, MPI/PROFIBUS DP interface, 24 MB configuration memory, WEC 2013, configurable from WinCC Comfort V14 SP1 with HSP



General information		
Product type designation	TP2200 Comfort PRO	
Display		
Design of display	TFT	
Screen diagonal	21.5 in	
Display width	475.2 mm	
Display height	267.3 mm	
Number of colors	16 777 216	
Resolution (pixels)		
 Horizontal image resolution 	1 920 pixel	
 Vertical image resolution 	1 080 pixel	
Backlighting		
 MTBF backlighting (at 25 °C) 	30 000 h	
 Backlight dimmable 	Yes; 0-100 %	
Control elements		
Keyboard fonts		
 Function keys 		
 — Number of function keys 	0	
 — Number of function keys with LEDs 	0	
 Keys with LED 	No	
 System keys 	No	
 Numeric keyboard 	Yes; Onscreen keyboard	
 alphanumeric keyboard 	Yes; Onscreen keyboard	
Touch operation		
 Design as touch screen 	Yes; Projective-capacitive	
Expansions for operator control of the process		
 Direct keys (touch buttons as S7 input I/O) 	40	
Installation type/mounting		
Mounting	Support arm	
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	

Active consumption (rated value) 1.8 A Starting current inpush Pt 0.5 Arts Processor Processor Processor Type X66 Memory Processor Fibal Yes FAdre power input, typ. Yes For LED No Accounts Yes - Signakar Yes - Signatin f	Input current	
Starting current innush Pt 0.5 A*s Prover 44 W Processor Processor Processor type X86 Memory Falsh Yes KaM Yes Yes RAM Yes Memory variable for user data 24 Mbyte Type of output No Info LED No Orwer LED No - Speaker Yes • Bucking Yes • Backing Yes • Speaker Yes • Speaker Yes • Backing Cook Yes • Software clock (real-line) Yes • Inderline Yes • Inderline Yes • Software clock Yes • Software clock Yes • Software clock Yes • Inderline Yes • Inderline Yes Number of R Soft Software clock 2 Number of R Soft Software clock 2 <td></td> <td>1.8 A</td>		1.8 A
Power 44 W Active power input. typ. 44 W Processor type X86 Memory Flash Flash Yes Memory available for user data 24 Mbyte Type of output Infinite Infinite No Processor No Prover ED No Costation No - Subvaria clock (real-time) Yes - Subvaria clock Yes Number of		
Active power input, typ. 44 W Processor Processor Processor X86 Memory Yes Fish Yes RAM Yes Memory variable for user data 24 Mbyte Type of output No Info LED No Orwert LED No - Spacer Yes - Buzzer No - Spacer Yes - Indriver Yes - Standard Yes - Instance clock Yes - Standard Yes Numbor of Nachard Interfaces 1.84 422 Interfaces Numbor of P		0.5 A 3
Processor type X86 Memory Flash Yes Flash Yes Memory available for user data 24 Mbyte Type of output Processor 24 Mbyte Yes Info LED No Processor No Form LED No Processor No - Suzzer No Separker Yes - Ruszer No Separker Yes - Clock Yes Set/ware clock Yes - Itard Mare clock (real-time) Yes Yes Set/ware clock - retentive Yes: Back up duration typically 6 weeks Yes - retentive Yes: Back up duration typically 6 weeks Yes - with rot of the dutation therfaces 2: 2 ports (witch) + independent port No Number of the dutation therfaces 1: R8 422: 485 combined No No Number of RS 425 interfaces 0 Number of RS 425 interfaces 0 Number of RS 425 interfaces 0 Number of PR 43 interfaces No 10 Number of PR 43 interfaces 0		44.101
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Memory Flash Yes FRAM Yes FRAM Flash Yes Accumption InfloctED No Flash Prover LED No Flash Entror LED No Flash Accuatios No Flash - Buzzer No Speaker Yes Speaker Yes Clock Yes Software clock (real-time) - Hardware dock (real-time) Yes Software clock - Istendiva Yes Software clock - Indevidate Ethernet Interfaces 2: 2 ports (switch) + independent port Number of Industrial Ethernet Interfaces 2: 2 ports (switch) + independent port Number of Industrial Ethernet Interfaces 0 Number of IS 22: Interfaces Number of Industrial Ethernet Interfaces 2; USB 2: 0 Number of IS 22: Interfaces Number of IS 22: Interfaces 0 No Industrial Ethernet Interfaces Number of IS 22: Interfaces 0 No Industrial Ethernet Interfaces Number of Interfaces 0		
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FAM Yes Memory available for user data 24 Mityte Type of output 24 Mityte Info LED No Power LED No Error LED No Accountios No • Buzzer No • Buzzer No • Buzzer No • Software clock (real-line) Yes • Inter of ady	Memory	
Memory available for user data 24 Mbyte Type of output No Info LED No Power LED No Error LED No - Speaker Yes Time of day Image: Clock Clock Yes - Speaker Yes Clock Yes - Interview Yes; Backup duration typically 6 weeks - speaker Yes - Interview Yes; Backup duration typically 6 weeks - synchronizable Yes Interfaces 2: 2 ports (switch) + independent port Number of RS 422 Interfaces 1: RS 422 448 combined Number of TS 232 Interfaces 0 Number of TS 422 Interfaces 0 Number of TS 422 Interfaces 0 Number of TS 232 Interfaces 0 Number of TS 232 Interfaces 0 Number of SD 2ard slots 2 Veth software interfaces 0 Number of SD acid slots 2 Veth software interfaces No Industrial Ethernet 3 - Industrial Ethernet 3 - Number of Of the interfaces No Industrial Ethernet 4 - Number of Of the interfaces No -		
Type of output No Info LED No Power LED No Acoustics No • Bizzer No • Speaker Yes Time of day Iter full Clock Yes • Hardware clock (real-time) Yes • Software clock Yes • Software clock Yes • Interfaces Yes Number of Industrial Ethemet interfaces 2:2 ports (switch) + independent port Number of RS 495 interfaces 0; together with RS 485 Number of RS 242 interfaces 0; together with RS 485 Number of RS 242 interfaces 0; together with RS 485 Number of RS 242 interfaces 0; together with RS 485 Number of RS 242 interfaces 0; Number of S 10 mA interfaces 0; Number of S 242 interfaces 0;		
Info LED No Prower LED No Acoustics No • Buzzar No • Speaker Yes Time of day Clock • Hardware clock (real-time) Yes • Software clock Yes • Software clock Yes • software clock Yes • software clock Yes • Interfaces 2: 2 ports (switch) + independent port Number of Industrial Ethemet Interfaces 1: RS 422 / 485 combined Number of RS 422 Interfaces 0 Number of RS 422 Interfaces 0 Number of RS 422 Interfaces 0 Number of PS 323 Interfaces 0 Number of DS Binterfaces 2; USB 2.0 Number of other interfaces 0 Number of other interfaces 0 Number of Darad slots 2 With software interfaces No Industrial Ethemet interfaces 0 • Industrial Ethemet interfaces 1 • Industrial Ethemet interfaces No Industrial Eth		24 Mbyte
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Error LED No Accustics No • Buzzer No • Speaker Yes Time of day Clock Clock Yes • Software clock (real-lime) Yes • software clock Yes • retentive Yes; Backup duration typically 6 weeks • synchronizable Yes; Backup duration typically 6 weeks Interfaces 2: 2 ports (switch) + independent port Number of RS 4456 interfaces 1: RS 422 / 485 combined Number of RS 1456 interfaces 0 Number of RS 1456 interfaces 0 Number of RS 151 interfaces 0 Number of RS 151 interfaces 0 Number of RS 1100 interfaces 0 Number of SD interfaces 10 Vith software intenfaces 0	Info LED	No
Acoustics No • Buzzer No • Speaker Yes Time of day Clock • Hardware clock (real-time) • Yes, Back-up duration typically 6 weeks • synchronizable Yes • Number of Industrial Ethernet interfaces Yes Number of Industrial Ethernet interfaces 1: R5 422 / 485 combined Number of RS 485 interfaces 0: together with RS 485 Number of RS 222 interfaces 0; together with RS 485 Number of RS 422 interfaces 0 Number of Day Interfaces (TTY) 0 Number of Day Interfaces 0 <t< td=""><td>Power LED</td><td>No</td></t<>	Power LED	No
• Buzzer No • Speaker Yes • Hardware clock (real-time) Yes • Software clock Yes • estentive Yes, Back-up duration typically 6 weeks • synchronizable Yes Interfaces 2: 2 ports (switch) + independent port Number of industrial Ethernet interfaces 2: 2 ports (switch) + independent port Number of RS 422 interfaces 0: together with RS 485 Number of RS 422 interfaces 0 Number of Dis Binterfaces 0 Number of RS 422 interfaces 0 Number of S 422 interfaces 0 Number of RS 422 interfaces 0	Error LED	No
Speaker Time of day Time of day Clock Hardware clock (real-lime) Yes Software clock So	Acoustics	
Time of day Clock • Hardware clock (real-time) Yes • software clock Yes • ettentive Yes • synchronizable Yes Interfaces 1: R5 422 / 485 combined Number of R5 425 Interfaces 1: R5 422 / 485 combined Number of R5 425 Interfaces 0: together with RS 485 Number of R5 425 Interfaces 0 Number of USB Interfaces 0 Number of DS 422 Interfaces 0 Number of DS 425 Interfaces 0 Number of DS 425 Interfaces 0 Number of JS 23 Interfaces 0 Number of JS card slots 2 With software interfaces 0 Number of Doral slots 2 • Number of DFPOFINET Yes Supports protocol for PROFINET IO Yes PROFINET Yes DFPOP Yes PROFI	• Buzzer	No
Clock Yes Software clock Yes retentive yes; Back-up duration typically 6 weeks synchronizable Yes Number of Industrial Ethernet Interfaces 2; 2 ports (switch) + independent port Number of RS 422 interfaces 0; together with RS 485 Number of RS 422 interfaces 0; together with RS 485 Number of RS 422 interfaces 0; together with RS 485 Number of RS 422 interfaces 0; together with RS 485 Number of Dam Interfaces 10 An Interfaces<!--</td--><td></td><td>Yes</td>		Yes
• Hardware clock (real-time) Yes • Software clock Yes • etenthive Yes: Back-up duration typically 6 weeks • synchronizable Yes Intorfaces Yes Number of Industrial Ethernet interfaces 1; RS 422 / 485 combined Number of RS 485 interfaces 0; together with RS 486 Number of RS 482 interfaces 0 Number of RS 482 interfaces 0 Number of RS 232 interfaces 0 Number of RS 232 interfaces 0 Number of Dariallel interfaces 0 Number of Dariallel interfaces 0 Number of other interfaces No Industrial Ethernet 2 • Industrial Ethernet status LED 3 • Number of protocol for PROFINET IO Yes PROFIBUS Yes EtherNet/IP Yes MPI Yes • DHCP Yes • DHCP Yes • LLDP Yes • LTML Ye	Time of day	
Software clock Ves etentive Ves Ves etentive Ves Ves Surber of industrial Ethernet interfaces Z 2 ports (switch) + independent port Number of RS 485 interfaces 1; RS 422 / 485 combined Number of RS 422 interfaces U together with RS 485 Number of RS 22 interfaces U together with RS 485 Number of RS 22 interfaces U together with RS 485 Number of RS 22 interfaces U together with RS 485 Number of AS 22 interfaces U together with RS 485 Number of RS 22 interfaces U together with RS 485 Number of AS 22 interfaces U together with RS 485 Number of AS 22 interfaces U together with RS 485 Number of 20 mA interfaces Ves Number of SD card slots Z USB 2.0 Number of SD card slots Z Ves Number of SD card slots Z Ves Number of SD card slots Z Ves Number of ports of the integrated switch PROFINET Number of ports of the integrated switch PROFINET Ves Number of ports of the integrated switch PROFINET Ves Number of PROFINET IO Yes Ves Number of PROFINET Ves Number of	Clock	
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• synchronizable Yes Interfaces Number of Industrial Ethernet interfaces 2; 2 ports (switch) + independent port Number of RS 425 interfaces 1; RS 422 / 485 combined Number of RS 425 interfaces 0 Number of RS 425 interfaces 0; together with RS 485 Number of USB interfaces 0 Number of USB interfaces 2; USB 2.0 Number of 20 mÅ interfaces (TTY) 0 Number of 3D card slots 2 With software interfaces 0 Number of 5D card slots 2 With software interfaces 0 Number of soft the integrated switch 2 Protocols * Protocols * PROFINET Yes Supports protocol or PROFINET IO Yes PROFIBUS Yes EtherNetIP Yes PROFIBUS Yes EtherNetIP Yes • OCP Yes • DCP Yes • ULDP Yes • HTTP Yes • HTTP Yes • HTTPS Yes • HTTPS Yes • HTTML Yes • HTTML Yes • HTTML Yes <	Software clock	Yes
Interfaces Number of Industrial Ethernet interfaces 2; 2 ports (switch) + independent port Number of RS 485 interfaces 0; together with RS 485 Number of RS 232 interfaces 0 Number of USB interfaces 0; USB interfaces Number of USB interfaces 0; USB 2.0 Number of 20 mA interfaces (TTY) 0 Number of Data interfaces 0 Number of Data interfaces 0 Number of Data isols 2 With software interfaces 0 Number of Data isols 2 With software interfaces 0 Industrial Ethernet 3 • Industrial Ethernet status LED 3 • Number of pros of the integrated switch 2 Protocols Yes PROFINET Yes Supports protocol for PROFINET IO Yes IRT Yes PROFIBUS Yes Protocols (Ethernet) Yes • DCP Yes • SNMP Yes • DCP Yes • LLDP Yes </td <td>retentive</td> <td>Yes; Back-up duration typically 6 weeks</td>	retentive	Yes; Back-up duration typically 6 weeks
Number of Industrial Ethernet interfaces 2; 2 ports (switch) + independent port Number of RS 435 interfaces 1; RS 422 / 485 combined Number of RS 232 interfaces 0 Number of RS 232 interfaces 0 Number of USB interfaces 0 Number of DS 232 interfaces 0 Number of other interfaces 0 Number of other interfaces 0 Number of SD card slots 2 Vith software interfaces 0 Number of parallel interfaces 0 Number of other interfaces 0 Number of other interfaces 0 Number of other interfaces No Industrial Ethernet 3 • Industrial Ethernet status LED 3 • Number of ports of the integrated switch 2 Protocols Protocols for PROFINET IO Yees Yees PROFIBUS Yees EtherNet/IP Yees MPI Yees Protocols (Ethernet) Yees • DHCP Yees • SNMP Yees • LLDP Yees • HTTPS Yees <td>synchronizable</td> <td>Yes</td>	synchronizable	Yes
Number of RS 425 interfaces 1; RS 422 / 485 combined Number of RS 422 interfaces 0; together with RS 485 Number of USB interfaces 0 Number of USB interfaces 0 Number of USB interfaces 2; USB 2.0 Number of DusB interfaces 0 Number of DusB interfaces 0 Number of other interfaces 0 Industrial Ethernet 0 • Industrial Ethernet 3 • Industrial Ethernet 3 • Number of PROFINET Yes Supports protocol for PROFINET IO Yes IRT Yes PROFIBUS Yes EtherNet/IP Yes MPI Yes • DHCP Yes • DHCP Yes • SIMMP Yes • DCP Yes • LLDP Yes • HTTPS Yes • HTTML Yes • XML Yes • Active X Yes	Interfaces	
Number of RS 422 interfaces 0; together with RS 485 Number of RS 232 interfaces 0 Number of USB interfaces 2; USB 2.0 Number of Darallel interfaces 0 Number of parallel interfaces 0 Number of other interfaces 0 Number of SD card slots 2 With software interfaces 0 Number of ports of the integrated switch 2 Protocols 1 PROFINET Yes PROFINET Yes PROFIBUS Yes PROFIBUS Yes Protocols Yes PROFIBUS Yes PROFOSOS (Ethernet) Yes • TCP/IP Yes • DHCP Yes • DHCP Yes • DHCP Yes • LLDP Yes • HTTIP Yes • HTTP Yes • HTTP Yes • HTTIP Yes • HTML Yes • HTML Yes • Active X Yes	Number of industrial Ethernet interfaces	2; 2 ports (switch) + independent port
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 0 Number of SD card slots 2 With software interfaces No Industrial Ethernet • • Industrial Ethernet 3 • Number of ports of the integrated switch 2 PROFINET Yes Supports protocol for PROFINET IO Yes IRT Yes PROFIBUS Yes EtherNet/IP Yes MPI Yes Protocols (Ethernet) Yes • TCP/IP Yes • DHCP Yes • SIMNP Yes • DLCP Yes • LLDP Yes • HTTPS Yes • HTTPS Yes • HTTP Yes • Active X Yes	Number of RS 485 interfaces	1; RS 422 / 485 combined
Number of USB interfaces2; USB 2.0Number of 20 mA interfaces (TTY)0Number of parallel interfaces0Number of other interfaces0Number of SD card slots2With software interfacesNoIndustrial Ethernet0• Industrial Ethernet status LED3• Number of ports of the integrated switch2Protocols7PROFINETYesSupports protocol for PROFINET IOYesIRTYesPROFIBUSYesEtherNet/IPYesMPIYesOHCPYesUPCOCOISYesPROFIBUSYesUPCOYesUPCOYesUPCOYesUPCOYes• TCP/IPYes• DHCPYes• DCPYes• LLDPYes• HTTPYes• HTTPSYes• HTTPSYes• Attive XYes• Active XYes	Number of RS 422 interfaces	0; together with RS 485
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 0 • Industrial Ethernet 3 • Number of ports of the integrated switch 2 Protocols 2 PROFINET Yes Supports protocol for PROFINET IO Yes IRT Yes PROFIBUS Yes EtherNet/IP Yes MPI Yes • CP/IP Yes • SIMP Yes • DLCP Yes • LLDP Yes WEB characteristics Ves • HTTPS Yes • HTTPS Yes • HTML Yes • Active X Yes	Number of RS 232 interfaces	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 3 • Number of ports of the integrated switch 2 PROFINET Yes Supports protocol for PROFINET IO Yes PROFIBUS Yes EtherNet/IP Yes PROcoils (Ethernet) Yes • TCP/IP Yes • DHCP Yes • SIMP Yes • DCP Yes • LLDP Yes • HTTP Yes • HTTPS Yes • HTTPS Yes • HTTPS Yes • HTTPS Yes • HTML Yes • Addite X Yes	Number of USB interfaces	2; USB 2.0
Number of other interfaces0Number of SD card slots2With software interfacesNoIndustrial Ethernet-Industrial Ethernet status LED3• Number of ports of the integrated switch2ProtocolsPROFINETYesSupports protocol for PROFINET IOYesIRTYesPROFIBUSYesEtherNet/IPYesProtocols (Ethernet)Yes• TCP/IPYes• DHCPYes• DHCPYes• LLDPYes• MTPYes• CP/IPYes• MTPYes• MTPYes• CSSYes• HTTPSYes• Active XYes• Active XYes	Number of 20 mA interfaces (TTY)	0
Number of SD card slots2With software interfacesNoIndustrial Ethernet3• Industrial Ethernet status LED3• Number of ports of the integrated switch2ProtocolsPROFINETYesSupports protocol for PROFINET IOYesIRTYesPROFIBUSYesEtherNet/IPYesProtocols (Ethernet)Yes• TCP/IPYes• DHCPYes• DCPYes• LLDPYesWEB characteristicsYes• HTTPYes• HTTPSYes• MILYes• MILYes• Active XYes	Number of parallel interfaces	0
With software interfaces No Industrial Ethernet 3 • Industrial Ethernet status LED 3 • Number of ports of the integrated switch 2 Protocols * PROFINET Yes Supports protocol for PROFINET IO Yes IRT Yes PROFIBUS Yes EtherNet/IP Yes MPI Yes Protocols (Ethernet) Yes • TCP/IP Yes • DHCP Yes • SIMMP Yes • LLDP Yes WEB characteristics Yes • HTTPS Yes • HTTPS Yes • KML Yes • Active X Yes	Number of other interfaces	0
Industrial Ethernet• Industrial Ethernet status LED3• Number of ports of the integrated switch2ProtocolsPROFINETYesSupports protocol for PROFINET IOYesIRTYesPROFIBUSYesEtherNet/IPYesMPIYesOLCPYes• LLDPYes• HTTPYes• MELYes• CCPYes• SNMPYes• SNMPYes• CCPYes• MELYes• CCPYes• MTHYes• MELYes• CCPYes• CCPYes• MTHYes• MELYes• MTTPYes• MTHYes• Active XYes• Active XYes	Number of SD card slots	2
Industrial Ethernet status LED 3 Number of ports of the integrated switch 2 Protocols PROFINET Yes Supports protocol for PROFINET IO Yes IRT Yes PROFIBUS Yes EtherNet/IP Yes EtherNet/IP Yes Protocols (Ethernet) TCP/IP Yes SNMP Yes SNMP Yes SNMP Yes ULDP Yes ULDP Yes WEB characteristics HTTP Yes HTTPS Yes XML Yes XML Yes XML Yes XML Yes Yes XML Yes Yes	With software interfaces	No
• Number of ports of the integrated switch2ProtocolsPROFINETYesSupports protocol for PROFINET IOYesIRTYesPROFIBUSYesEtherNet/IPYesMPIYesProtocols (Ethernet)Yes• TCP/IPYes• DHCPYes• DLCPYes• LLDPYesWEB characteristicsYes• HTTPYes• HTTPSYes• HTTPSYes• MILYes• Active XYes	Industrial Ethernet	
ProtocolsPROFINETYesSupports protocol for PROFINET IOYesIRTYesPROFIBUSYesEtherNet/IPYesMPIYes• TCP/IPYes• DHCPYes• DHCPYes• DLDPYes• LLDPYesWEB characteristics• HTTPSYes• HTMLYes• XMLYes• Active XYes	 Industrial Ethernet status LED 	3
PROFINETYesSupports protocol for PROFINET IOYesIRTYesPROFIBUSYesEtherNet/IPYesMPIYes• TCP/IPYes• DHCPYes• DCPYes• LLDPYesWEB characteristics• HTTPSYes• HTMLYes• XMLYes• XMLYes• XMLYes• Active XYes	 Number of ports of the integrated switch 	2
Supports protocol for PROFINET IOYesIRTYesPROFIBUSYesEtherNet/IPYesMPIYesProtocols (Ethernet)Yes• TCP/IPYes• DHCPYes• DCPYes• LLDPYesWEB characteristicsYes• HTTPYes• HTTPSYes• KMLYes• KMLYes• KMLYes• KMLYes• KMLYes• KMLYes• KMLYes• KMLYes• Active XYes	Protocols	
IRTYesPROFIBUSYesEtherNet/IPYesMPIYesProtocols (Ethernet)Yes• TCP/IPYes• DHCPYes• SNMPYes• DCPYes• LLDPYesWEB characteristicsYes• HTTPYes• HTTPSYes• KMLYes• XMLYes• KMLYes• Active XYes	PROFINET	Yes
PROFIBUSYesEtherNet/IPYesMPIYesProtocols (Ethernet)Yes• TCP/IPYes• DHCPYes• SNMPYes• DCPYes• LLDPYesWEB characteristicsYes• HTTPYes• HTTPSYes• HTMLYes• XMLYes• XMLYes• Active XYes	Supports protocol for PROFINET IO	Yes
EtherNet/IPYesMPIYesProtocols (Ethernet)Yes• TCP/IPYes• DHCPYes• SNMPYes• DCPYes• LLDPYesWEB characteristicsYes• HTTPYes• HTTPSYes• HTMLYes• XMLYes• XMLYes• Active XYes	IRT	Yes
MPIYesProtocols (Ethernet)Yes• TCP/IPYes• DHCPYes• SNMPYes• DCPYes• LLDPYesWEB characteristicsYes• HTTPSYes• HTTPSYes• HTMLYes• XMLYes• CSSYes• Active XYes	PROFIBUS	Yes
Protocols (Ethernet)• TCP/IPYes• DHCPYes• SNMPYes• DCPYes• LLDPYesWEB characteristicsYes• HTTPYes• HTTPSYes• HTMLYes• KMLYes• Active XYes	EtherNet/IP	Yes
• TCP/IPYes• DHCPYes• SNMPYes• DCPYes• LLDPYes• KEB characteristicsYes• HTTPYes• HTTPSYes• HTTPSYes• HTMLYes• CSSYes• Active XYes	MPI	Yes
• DHCPYes• SNMPYes• DCPYes• LLDPYes• KEB characteristicsYes• HTTPYes• HTTPSYes• HTMLYes• KMLYes• CSSYes• Active XYes	Protocols (Ethernet)	
• SNMPYes• DCPYes• LLDPYesWEB characteristicsYes• HTTPYes• HTTPSYes• HTMLYes• SNMLYes• CSSYes• Active XYes		
• DCPYes• LLDPYesWEB characteristicsYes• HTTPYes• HTTPSYes• HTMLYes• KMLYes• CSSYes• Active XYes		
LLDPYesWEB characteristics• HTTPYes• HTTPSYes• HTMLYes• XMLYes• CSSYes• Active XYes		
WEB characteristics• HTTPYes• HTTPSYes• HTMLYes• XMLYes• CSSYes• Active XYes		
HTTPYesHTTPSYesHTMLYesXMLYesCSSYesActive XYes		Yes
HTTPS Yes HTML Yes XML Yes CSS Yes Active X Yes		
HTMLYesXMLYesCSSYesActive XYes		
• XML Yes • CSS Yes • Active X Yes		
CSS Yes Active X Yes		
Active X Yes		
• JavaScript 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 B, for use in residential areas	No
Degree and class of protection	
IP (at the front)	IP65
IP (rear)	IP65
NEMA (front)	
Enclosure Type 4 at the front	Yes
Enclosure Type 4x at the front	Yes
Standards, approvals, certificates	
CE mark	Yes
cULus	Yes
RCM (formerly C-TICK)	Yes
KC approval	No; Available soon
EAC (formerly Gost-R)	No; Available soon
Ambient conditions	
Suited for indoor use	Yes
Suited for outdoor use	No
Ambient temperature during operation	
Operation (vertical installation)	
— For vertical installation, min.	0°0
— For vertical installation, max.	45 °C
Operation (max. tilt angle)	
— At maximum tilt angle, min.	0°0
— At maximum tilt angle, max.	40 °C
Ambient temperature during storage/transportation	
• min.	-20 °C
• max.	60 °C
Relative humidity	
Operation, max.	90 %; no condensation
Operating systems	
proprietary	No
pre-installed operating system	Vee Windows Embedded Comment 0040
Windows CE	Yes; Windows Embedded Compact 2013
configuration / header	No.
Message indicator	Yes
Alarm system (incl. buffer and acknowledgment)	Yes
Process value display (output)	Yes
Process value default (input) possible	Yes
Recipe management Configuration software	100
STEP 7 Basic (TIA Portal)	No
STEP 7 Basic (TIA Portal) STEP 7 Professional (TIA Portal)	No
WinCC flexible Compact	No
WinCC flexible Standard	No
WinCC flexible Advanced	No
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 Advanced (TA Portal) WinCC Professional (TIA Portal)	Yes; V14 SP1 HSP and higher
Languages	
Online languages	
Number of online/runtime languages	32
Project languages	
Languages per project	32
Functionality under WinCC (TIA Portal)	
	Yes
Applications/options	
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	
• time-controlled	Yes
task-controlled	Yes
Help system	
Number of characters per info text	320
Message system	
Number of alarm classes	32
Bit messages	
 Number of bit messages 	6 000
 Analog messages 	
 — Number of analog messages 	200
 S7 alarm number procedure 	Yes
 System messages HMI 	Yes
 System event, more (SIMATIC S7, SINUMERIK, SIMOTION,) 	Yes
 Number of characters per message 	80
 Number of process values per message 	8
 Acknowledgment groups 	Yes
 Message indicator 	Yes
 Message buffer 	
— Number of entries	1 024
— Circulating buffer	Yes
— retentive	Yes
— maintenance-free	Yes
Recipe management	500
Number of recipes	500
Data records per recipe	1 000
Entries per data record	2 000
Size of internal recipe memory	4 Mbyte
Recipe memory expandable	Yes
Variables	4.006
Number of variables per device Number of variables per screen	4 096 400
 Number of variables per screen Limit values 	Yes
	Yes
 Multiplexing Structures 	Yes
Arrays	Yes
Images	100
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
Image selection by PLC Image number in the PLC	Yes
Image objects	
Number of objects per image	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
Sm@rtClient view	Yes
Recipe view	Yes
• f(x) trend view	Yes
System diagnostics view	Yes
Media Player	Yes
HTML browser	Yes
PDF display	Yes
• IP camera display	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	
 Number of archives per device 	50
 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
	50
Number of users	
 Number of users Password export/import SIMATIC Logon 	Yes

Logging through printer	
Alarms	Yes
Report (shift log)	Yes
Hardcopy	Yes
Electronic print to file	
Character sets	Yes; PDF, HTML
Keyboard fonts	
– US English	Yes
Transfer (upload/download)	165
MPI/PROFIBUS DP	Yes
USB	Yes
Ethernet	Yes
	Yes
using external storage medium Process coupling	165
• S7-1200	Yes
• S7-1200 • S7-1500	Yes
• S7-200	Yes
• S7-300/400	Yes
LOGO! WinAC	Yes
WINAC SINUMERIK	
	Yes; With SINUMERIK option package as from WinCC V15 or higher
SIMOTION Aller Bredley (EtherNet/ID)	Yes
Allen Bradley (EtherNet/IP)	Yes
Allen Bradley (DF1)	
Mitsubishi (MC TCP/IP)	Yes
Mitsubishi (FX) ONDON (FINO TOD)	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	Vee
Backup/Restore automatically	Yes
Simulation	Yes
Device switchover	Yes
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Peripherals/Options	Vec
Printer SIMATIC HMI MM memory card: Multi Media Card	Yes
	Yes; Up to 128 MB
SIMATIC HMI SD memory card: Secure Digital memory card	Yes; Up to 2 GB
SIMATIC HMI CF memory card Compact Flash Card	No
USB memory	Yes
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	527 mm
Height of housing front	330 mm; Without basic adapter
Overall depth	101 mm; Without basic adapter
Weights	
Weights Weight (without packaging)	8.5 kg
weight (without packaging)	
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