## 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)	
<ul> <li>Horizontal image resolution</li> </ul>	1 920 pixel
<ul> <li>Vertical image resolution</li> </ul>	1 080 pixel
Backlighting	
<ul> <li>MTBF backlighting (at 25 °C)</li> </ul>	30 000 h
<ul> <li>Backlight dimmable</li> </ul>	Yes; 0-100 %
Control elements	
Keyboard fonts	
<ul> <li>Function keys</li> </ul>	
<ul> <li>— Number of function keys</li> </ul>	0
<ul> <li>— Number of function keys with LEDs</li> </ul>	0
<ul> <li>Keys with LED</li> </ul>	No
<ul> <li>System keys</li> </ul>	No
<ul> <li>Numeric keyboard</li> </ul>	Yes; Onscreen keyboard
<ul> <li>alphanumeric keyboard</li> </ul>	Yes; Onscreen keyboard
Touch operation	
<ul> <li>Design as touch screen</li> </ul>	Yes; Projective-capacitive
Expansions for operator control of the process	
<ul> <li>Direct keys (touch buttons as S7 input I/O)</li> </ul>	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
Processor type         X88           Manacy         Fish           Fish         Yes           RAM         Yes           Memory available for user data         24 Mbyte           Type of output         No           Info LED         No           Prover LED         No           - Counting         No           - Speaker         Yes           - Speaker         Yes           - Clock         Yes           - Indivator clock (real-time)         Yes           - Speaker         Yes           - Statware clock (real-time)         Yes           - Software clock (real-time)         Yes           - Indivator clock (real-time)         Yes           - Indivator clock (real-time)         Yes           - Indivator clock (real-time)         Yes           - Ves         Status of day           Clock         Yes           - Indivator clock (real-time)         Yes           - Number of Indivator clock (real-time)         Yes           - Number of Indivator clock (real-time)         Yes           Number of Indivator clock (real-time)         Yes           Number of Indivator clock (real-time)         Yes           Number		44 VV
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		
Flash     Yes       RAM     Yes       RAM     Yes       Memory available for user data     24 Mityde       Type of output     Info LED       Info LED     No       Power LED     No       Accoustics     No       • Buzzar     No       • Speaker     Yes       Time of day     Clock       Clock     Yes       • Hardware clock (real-time)     Yes       • Sopeaker     Yes       • Sopeaker     Yes       • Software clock (real-time)     Yes       • Software clock     Yes       • Software clock     Yes       • Inderfaces     2: 2 ports (witch) + independent port       Number of Industrial Element interfaces     1: R4 22: 485 combined       Number of R4 380 interfaces     0       Number of R5 480 interfaces     1: UBS 2.0       Number of S1 Interfaces     0       Number of S23 interfaces     0       Number of S23 interfaces     0       Number of S23 interfaces     1: USB 2.0       Number of S1 Interfaces     0       Number of S23 interfaces     0       Number of S1 Interfaces     0       Number of Orb interfaces     0       Number of Orb Interfaces     0       Numb		X86
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
Power LED         No           Error LED         No           Acoustics         No           • Buzzer         No           • Speaker         Yes           Time of day         Yes           Clock         Yes           • Hardware clock (real-time)         Yes           • Soptware clock         Yes           • Software clock         Yes           • Software clock         Yes           • Inderfaces         Yes           Number of Industrial Ethernet Interfaces         2: 2 ports (switch) + independent port           Number of RS 455 interfaces         0           Number of S2 221 interfaces         0           Number of 250 rad interfaces         0           Number of 250 rad interfaces         0           Number of Deard slots         2           With software interfaces         No           Industrial Ethernet staus LED         3           • Number of ports of the integrated switch         2           Protocol         Yes           PROFIBUS         Yes	Type of output	
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 <ul> <li>Software clock</li> <li>Yes</li> <li>retentive</li> <li>yes; Back-up duration typically 6 weeks</li> <li>synchronizable</li> <li>Yes</li> <li>Number of Industrial Ethernet Interfaces</li> <li>2; 2 ports (switch) + independent port</li> <li>Number of RS 422 interfaces</li> <li>0; together with RS 485</li> <li>Number of RS 422 interfaces</li> <li>0; together with RS 485</li> <li>Number of RS 422 interfaces</li> <li>0; together with RS 485</li> <li>Number of RS 422 interfaces</li> <li>0; together with RS 485</li> <li>Number of Dam Interfaces</li> <li>10 An Interfaces<!--</td--><td></td><td>Yes</td></li></ul>		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	
retentive Yes; Back-up duration typically 6 weeks yes      reterive Yes      reterive Groutstrial Ethernet interfaces     2: 2 ports (switch) + independent port      Number of RS 435 interfaces     1; RS 422 / 485 combined      Number of RS 435 interfaces     0; together with RS 485      Number of RS 232 interfaces     0      Number of RS 232 interfaces     0      Number of PS 232 interfaces     0      Number of arallel interfaces     2; USB 2.0      Number of 2 parallel interfaces     0      Number of 2 parallel interfaces     0      Number of 2 parallel interfaces     0      Number of 20 card slots     2      Wth software interfaces     0      Number of soft soft be integrated switch     1     endustrial Ethernet status LED     industrial Ethernet status LED     industrial Ethernet status LED     industrial Ethernet status LED     industrial Ethernet status     Protocols      Protocols      Protocols      Protocols      Protocols      Protocols      Protocols      Protocols      Protocols      Yes      inft     interface      inft:      intPrice     Yes      intPrice     Yes      intPrice     Yes      intPrice     Yes      intPrice     interfaces     interinterface     interfaces     interfaces     interfaces     interi	Hardware clock (real-time)	Yes
• 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	<ul> <li>Industrial Ethernet status LED</li> </ul>	3
PROFINETYesSupports protocol for PROFINET IOYesIRTYesPROFIBUSYesEtherNet/IPYesMPIYes• TCP/IPYes• DHCPYes• DCPYes• LLDPYesWEB characteristics• HTTPSYes• HTMLYes• XMLYes• XMLYes• XMLYes• Active XYes	<ul> <li>Number of ports of the integrated switch</li> </ul>	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

<ul> <li>WinCC Advanced (TIA Portal)</li> </ul>	Yes; V14 SP1 HSP and higher
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)	
Libraries	Yes
Applications/options	
Web browser	Yes
Pocket Word	Yes
Pocket Excel	Yes
PDF Viewer	Yes
Media Player	Yes
<ul> <li>SIMATIC WinCC Sm@rtServer</li> </ul>	Yes
SIMATIC WinCC Audit	Yes
Number of Visual Basic Scripts	Yes
Task planner	
time-controlled	Yes
task-controlled	Yes
Message system	
<ul> <li>Number of alarm classes</li> </ul>	32
<ul> <li>Bit messages</li> </ul>	
<ul> <li>Number of bit messages</li> </ul>	6 000
<ul> <li>Analog messages</li> </ul>	
<ul> <li>Number of analog messages</li> </ul>	200
<ul> <li>S7 alarm number procedure</li> </ul>	Yes
System messages HMI	Yes
• System event, more (SIMATIC S7, SINUMERIK, SIMOTION, )	Yes
<ul> <li>Number of characters per message</li> </ul>	80
<ul> <li>Number of process values per message</li> </ul>	8
<ul> <li>Acknowledgment groups</li> </ul>	Yes
Message indicator	Yes
Recipe management	
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
<ul> <li>Number of variables per screen</li> <li>Limit values</li> </ul>	Yes
	Yes
Multiplexing     Structures	Yes
Arrays	Yes
Images	
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 number in the PLC	Yes
Image objects	
Number of objects per image	600
• Text fields	Yes
<ul> <li>I/O fields</li> </ul>	Yes

- Oranhia 1/0 fields (graphics list)	Vee
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	
<ul> <li>Number of complex objects per screen</li> </ul>	40
Alarm view	Yes
Trend view	Yes
User view	Yes
<ul> <li>Status/control</li> </ul>	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
<ul> <li>PDF display</li> </ul>	Yes
• IP camera display	Yes
Bar graphs	Yes
• Sliders	Yes
<ul> <li>Pointer instruments</li> </ul>	Yes
<ul> <li>Analog/digital clock</li> </ul>	Yes
Lists	
<ul> <li>Number of text lists per project</li> </ul>	500
Number of entries per text list	500
Number of graphics lists per project	500
Number of entries per graphics list	500
Archiving	500
Number of archives per device	50
Number of entries per archive	50 000
Message archive	Yes
Process value archive	Yes
	165
Archiving methods	Vee
— Sequential archive	Yes
— Short-term archive	Yes
Memory location	N
— Memory card	Yes
— USB memory	Yes
— Ethernet	Yes
Data storage format	
— CSV	Yes
— TXT	Yes
— RDB	Yes
Security	
<ul> <li>Number of user groups</li> </ul>	50
<ul> <li>Number of user rights</li> </ul>	32
Number of users	50
<ul> <li>Password export/import</li> </ul>	Yes
SIMATIC Logon	Yes
Logging through printer	
• Alarms	Yes
<ul> <li>Report (shift log)</li> </ul>	Yes
Hardcopy	Yes
<ul><li>Hardcopy</li><li>Electronic print to file</li></ul>	
Electronic print to file	Yes Yes; PDF, HTML

— US English	Yes
Transfer (upload/download)	
MPI/PROFIBUS DP	Yes
• USB	Yes
• Ethernet	Yes
<ul> <li>using external storage medium</li> </ul>	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
<ul> <li>Allen Bradley (EtherNet/IP)</li> </ul>	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	
<ul> <li>Backup/Restore manually</li> </ul>	Yes
<ul> <li>Backup/Restore automatically</li> </ul>	Yes
Simulation	Yes
Device switchover	Yes
Peripherals/Options	
Printer	Yes
SIMATIC HMI MM memory card: Multi Media Card	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	
Weight (without packaging)	8.5 kg
last modified:	3/2/2021 🖸