SIEMENS

Data sheet

6AV2144-8MC10-0AA0



SIMATIC HMI TP1200 Comfort INOX Stainless steel front, Con- tinuous decorative film, Degree of protection front IP66K, 12" widescreen TFT display, PROFINET interface, MPI/PROFIBUS DP interface, 12 MB configuration memory, Windows CE 6.0, (Microsoft Support included Security updates discontinued) configurable from WinCC Comfort V11

General information	
Product type designation	TP1200 Comfort INOX
Display	
Design of display	TFT
Screen diagonal	12.1 in
Display width	261.1 mm
Display height	163.2 mm
Number of colors	16 777 216
Resolution (pixels)	
 Horizontal image resolution 	1 280 pixel
Vertical image resolution	800 pixel
Backlighting	
 MTBF backlighting (at 25 °C) 	80 000 h
Backlight dimmable	Yes; 0-100 %
Control elements	
Keyboard 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
Expansions for operator control of the process	
 DP direct LEDs (LEDs as S7 output I/O) 	
— F1Fx	0
 Direct keys (keys as S7 input I/O) 	
— F1Fx	0
 Direct keys (touch buttons as S7 input I/O) 	40
Installation type/mounting	
Mounting position	vertical
Mounting in portrait format possible	Yes
Mounting in landscape format possible	Yes
maximum permissible angle of inclination without external ventilation	35°
Supply voltage	
Type of supply voltage	DC

Poted value (DC)	24.1/
Rated value (DC)	24 V
permissible range, lower limit (DC)	19.2 V 28.8 V
permissible range, upper limit (DC)	20.0 V
Input current	0.05.4
Current consumption (rated value)	0.85 A
Starting current inrush I ² t	0.5 A ² ·s
Power	
Active power input, typ.	20 W
Processor	
Processor type	X86
Memory	
Flash	Yes
RAM	Yes
Memory available for user data	12 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	1; 2 ports (switch)
	1, 2 porto (omion)
Number of RS 485 interfaces	1; RS 422 / 485 combined
Number of RS 485 interfaces Number of RS 422 interfaces	
Number of RS 485 interfaces	1; RS 422 / 485 combined 0; together with RS 485 0
Number of RS 485 interfaces Number of RS 422 interfaces Number of RS 232 interfaces Number of USB interfaces	1; RS 422 / 485 combined 0; together with RS 485 0 2; USB 2.0
Number of RS 485 interfaces Number of RS 422 interfaces Number of RS 232 interfaces Number of USB interfaces • USB Mini B	1; RS 422 / 485 combined 0; together with RS 485 0 2; USB 2.0 1; 5-pole
Number of RS 485 interfaces Number of RS 422 interfaces Number of RS 232 interfaces Number of USB interfaces • USB Mini B Number of 20 mA interfaces (TTY)	1; RS 422 / 485 combined 0; together with RS 485 0 2; USB 2.0 1; 5-pole 0
Number of RS 485 interfaces Number of RS 422 interfaces Number of RS 232 interfaces Number of USB interfaces • USB Mini B Number of 20 mA interfaces (TTY) Number of parallel interfaces	1; RS 422 / 485 combined 0; together with RS 485 0 2; USB 2.0 1; 5-pole 0 0
Number of RS 485 interfaces Number of RS 422 interfaces Number of RS 232 interfaces Number of USB interfaces • USB Mini B Number of 20 mA interfaces (TTY) Number of parallel interfaces Number of other interfaces	1; RS 422 / 485 combined 0; together with RS 485 0 2; USB 2.0 1; 5-pole 0 0 0
Number of RS 485 interfaces Number of RS 422 interfaces Number of RS 232 interfaces Number of USB interfaces • USB Mini B Number of 20 mA interfaces (TTY) Number of parallel interfaces Number of other interfaces Number of SD card slots	1; RS 422 / 485 combined 0; together with RS 485 0 2; USB 2.0 1; 5-pole 0 0 0 2
Number of RS 485 interfaces Number of RS 422 interfaces Number of RS 232 interfaces Number of USB interfaces • USB Mini B Number of 20 mA interfaces (TTY) Number of parallel interfaces Number of SD card slots With software interfaces	1; RS 422 / 485 combined 0; together with RS 485 0 2; USB 2.0 1; 5-pole 0 0 0
Number of RS 485 interfaces Number of RS 422 interfaces Number of RS 232 interfaces Number of USB interfaces • USB Mini B Number of 20 mA interfaces (TTY) Number of parallel interfaces Number of other interfaces Number of SD card slots With software interfaces Industrial Ethernet	1; RS 422 / 485 combined 0; together with RS 485 0 2; USB 2.0 1; 5-pole 0 0 0 2 2 No
Number of RS 485 interfaces Number of RS 422 interfaces Number of RS 232 interfaces Number of USB interfaces • USB Mini B Number of 20 mA interfaces (TTY) Number of parallel interfaces Number of other interfaces Number of SD card slots With software interfaces Industrial Ethernet • Industrial Ethernet status LED	1; RS 422 / 485 combined 0; together with RS 485 0 2; USB 2.0 1; 5-pole 0 0 0 2 2 No
Number of RS 485 interfaces Number of RS 422 interfaces Number of RS 232 interfaces Number of USB interfaces • USB Mini B Number of 20 mA interfaces (TTY) Number of parallel interfaces Number of other interfaces Number of SD card slots With software interfaces Industrial Ethernet • Industrial Ethernet status LED • Number of ports of the integrated switch	1; RS 422 / 485 combined 0; together with RS 485 0 2; USB 2.0 1; 5-pole 0 0 0 2 2 No
Number of RS 485 interfaces Number of RS 422 interfaces Number of RS 232 interfaces Number of USB interfaces • USB Mini B Number of 20 mA interfaces (TTY) Number of parallel interfaces Number of other interfaces Number of SD card slots With software interfaces Industrial Ethernet • Industrial Ethernet status LED • Number of ports of the integrated switch	1; RS 422 / 485 combined 0; together with RS 485 0 2; USB 2.0 1; 5-pole 0 0 0 2 2 No 2 2 2 2
Number of RS 485 interfaces Number of RS 422 interfaces Number of RS 232 interfaces Number of USB interfaces • USB Mini B Number of 20 mA interfaces (TTY) Number of parallel interfaces Number of other interfaces Number of SD card slots With software interfaces Industrial Ethernet • Industrial Ethernet status LED • Number of ports of the integrated switch	1; RS 422 / 485 combined 0; together with RS 485 0 2; USB 2.0 1; 5-pole 0 0 0 2 2 No Yes
Number of RS 485 interfaces Number of RS 422 interfaces Number of RS 232 interfaces Number of USB interfaces • USB Mini B Number of 20 mA interfaces (TTY) Number of parallel interfaces Number of SD card slots With software interfaces Industrial Ethernet • Industrial Ethernet status LED • Number of ports of the integrated switch	1; RS 422 / 485 combined 0; together with RS 485 0 2; USB 2.0 1; 5-pole 0 0 0 2 No 2 2 2 2 Yes
Number of RS 485 interfaces Number of RS 422 interfaces Number of RS 232 interfaces Number of USB interfaces • USB Mini B Number of 20 mA interfaces (TTY) Number of parallel interfaces Number of other interfaces Number of SD card slots With software interfaces Industrial Ethernet • Industrial Ethernet status LED • Number of ports of the integrated switch Protocols PROFINET Supports protocol for PROFINET IO IRT	1; RS 422 / 485 combined 0; together with RS 485 0 2; USB 2.0 1; 5-pole 0 0 0 2 No 2 2 2 2 2 2 Yes Yes Yes Yes; As of WinCC V12
Number of RS 485 interfaces Number of RS 422 interfaces Number of RS 232 interfaces Number of USB interfaces • USB Mini B Number of 20 mA interfaces (TTY) Number of parallel interfaces Number of other interfaces Number of SD card slots With software interfaces Industrial Ethernet • Industrial Ethernet status LED • Number of ports of the integrated switch Protocols PROFINET Supports protocol for PROFINET IO IRT PROFIBUS	1; RS 422 / 485 combined 0; together with RS 485 0 2; USB 2.0 1; 5-pole 0 0 0 2 No 2 Yes Yes Yes Yes; As of WinCC V12 Yes
Number of RS 485 interfaces Number of RS 422 interfaces Number of RS 232 interfaces Number of USB interfaces • USB Mini B Number of 20 mA interfaces (TTY) Number of parallel interfaces Number of other interfaces Number of SD card slots With software interfaces Industrial Ethernet • Industrial Ethernet status LED • Number of ports of the integrated switch Protocols PROFINET Supports protocol for PROFINET IO IRT PROFIBUS EtherNet/IP	1; RS 422 / 485 combined 0; together with RS 485 0 2; USB 2.0 1; 5-pole 0 0 0 0 2 No 2 2 2 2 Yes Yes Yes; As of WinCC V12 Yes Yes
Number of RS 485 interfaces Number of RS 422 interfaces Number of RS 232 interfaces Number of USB interfaces • USB Mini B Number of 20 mA interfaces (TTY) Number of parallel interfaces Number of other interfaces Number of SD card slots With software interfaces Industrial Ethernet • Industrial Ethernet status LED • Number of ports of the integrated switch Protocols PROFINET Supports protocol for PROFINET IO IRT PROFIBUS EtherNet/IP MPI	1; RS 422 / 485 combined 0; together with RS 485 0 2; USB 2.0 1; 5-pole 0 0 0 2 No 2 Yes Yes Yes Yes; As of WinCC V12 Yes
Number of RS 485 interfaces Number of RS 422 interfaces Number of RS 232 interfaces Number of USB interfaces • USB Mini B Number of 20 mA interfaces (TTY) Number of parallel interfaces Number of other interfaces Number of SD card slots With software interfaces Industrial Ethernet • Industrial Ethernet status LED • Number of ports of the integrated switch Protocols PROFINET Supports protocol for PROFINET IO IRT PROFIBUS EtherNet/IP MPI Protocols (Ethernet)	1; RS 422 / 485 combined 0; together with RS 485 0 2; USB 2.0 1; 5-pole 0 0 0 0 2 No 2 Yes Yes Yes Yes; As of WinCC V12 Yes Yes Yes Yes
Number of RS 485 interfaces Number of RS 422 interfaces Number of RS 232 interfaces Number of USB interfaces • USB Mini B Number of 20 mA interfaces (TTY) Number of parallel interfaces Number of other interfaces Number of SD card slots With software interfaces Industrial Ethernet • Industrial Ethernet status LED • Number of ports of the integrated switch Protocols PROFINET Supports protocol for PROFINET IO IRT PROFIBUS EtherNet/IP MPI Protocols (Ethernet) • TCP/IP	1; RS 422 / 485 combined 0; together with RS 485 0 2; USB 2.0 1; 5-pole 0 0 0 0 2 No 2 2 2 2 2 2 Yes Yes Yes Yes Yes Yes Yes Yes
Number of RS 485 interfaces Number of RS 422 interfaces Number of RS 232 interfaces Number of USB interfaces • USB Mini B Number of 20 mA interfaces (TTY) Number of parallel interfaces Number of other interfaces Number of SD card slots With software interfaces Industrial Ethernet • Industrial Ethernet status LED • Number of ports of the integrated switch Protocols PROFINET Supports protocol for PROFINET IO IRT PROFIBUS EtherNet/IP MPI Protocols (Ethernet) • TCP/IP • DHCP	1; RS 422 / 485 combined 0; together with RS 485 0 2; USB 2.0 1; 5-pole 0 0 0 0 0 2 Yes Yes Yes Yes
Number of RS 485 interfaces Number of RS 422 interfaces Number of RS 232 interfaces Number of USB interfaces • USB Mini B Number of 20 mA interfaces (TTY) Number of parallel interfaces Number of other interfaces Number of SD card slots With software interfaces Industrial Ethernet • Industrial Ethernet status LED • Number of ports of the integrated switch Protocols PROFINET Supports protocol for PROFINET IO IRT PROFIBUS EtherNet/IP MPI Protocols (Ethernet) • TCP/IP • DHCP • SNMP	1; RS 422 / 485 combined 0; together with RS 485 0 2; USB 2.0 1; 5-pole 0 0 0 0 0 2 No 2 2 2 2 2 Yes Yes Yes Yes Yes Yes Yes Yes
Number of RS 485 interfaces Number of RS 422 interfaces Number of RS 232 interfaces Number of USB interfaces • USB Mini B Number of 20 mA interfaces (TTY) Number of parallel interfaces Number of SD card slots With software interfaces Industrial Ethernet • Industrial Ethernet • Number of ports of the integrated switch Protocols PROFINET Supports protocol for PROFINET IO IRT PROFIBUS EtherNet/IP MPI Protocols (Ethernet) • TCP/IP • DHCP • SNMP • DCP	1; RS 422 / 485 combined 0; together with RS 485 0 2; USB 2.0 1; 5-pole 0 0 0 0 0 2 No 2 2 2 2 2 7 Yes Yes Yes Yes Yes Yes Yes Yes
Number of RS 485 interfaces Number of RS 422 interfaces Number of RS 232 interfaces Number of USB interfaces • USB Mini B Number of 20 mA interfaces (TTY) Number of parallel interfaces Number of other interfaces Number of SD card slots With software interfaces Industrial Ethernet • Industrial Ethernet status LED • Number of ports of the integrated switch Protocols PROFINET Supports protocol for PROFINET IO IRT PROFIBUS EtherNet/IP MPI Protocols (Ethernet) • TCP/IP • DHCP • SNMP • DCP • LLDP	1; RS 422 / 485 combined 0; together with RS 485 0 2; USB 2.0 1; 5-pole 0 0 0 0 0 0 0 0 0 0 0 0 0 2 No 2 Yes Yes Yes Ye
Number of RS 485 interfaces Number of RS 422 interfaces Number of RS 232 interfaces Number of USB interfaces • USB Mini B Number of 20 mA interfaces (TTY) Number of parallel interfaces Number of SD card slots With software interfaces Industrial Ethernet • Industrial Ethernet • Industrial Ethernet • Number of ports of the integrated switch Protocols PROFINET Supports protocol for PROFINET IO IRT PROFIBUS EtherNet/IP MPI Protocols (Ethernet) • TCP/IP • DHCP • SNMP • DCP • LLDP WEB characteristics	1; RS 422 / 485 combined 0; together with RS 485 0 2; USB 2.0 1; 5-pole 0 0 0 0 2 No 2 Yes Yes Yes Yes Yes Yes Yes Yes
Number of RS 485 interfaces Number of RS 232 interfaces Number of RS 232 interfaces Number of USB interfaces • USB Mini B Number of 20 mA interfaces (TTY) Number of parallel interfaces Number of other interfaces Number of SD card slots With software interfaces Industrial Ethernet • Industrial Ethernet status LED • Number of ports of the integrated switch Protocols PROFINET Supports protocol for PROFINET IO IRT PROFIBUS EtherNet/IP MPI Protocols (Ethernet) • TCP/IP • DHCP • SNMP • DCP • LLDP WEB characteristics • HTTP	1; RS 422 / 485 combined 0; together with RS 485 0 2; USB 2.0 1; 5-pole 0 0 0 0 2 No 2 Yes Yes Yes Yes Yes Yes Yes Yes
Number of RS 485 interfaces Number of RS 422 interfaces Number of RS 232 interfaces Number of USB interfaces • USB Mini B Number of 20 mA interfaces (TTY) Number of parallel interfaces Number of SD card slots With software interfaces Industrial Ethernet • Industrial Ethernet • Industrial Ethernet • Number of ports of the integrated switch Protocols PROFINET Supports protocol for PROFINET IO IRT PROFIBUS EtherNet/IP MPI Protocols (Ethernet) • TCP/IP • DHCP • SNMP • DCP • LLDP WEB characteristics	1; RS 422 / 485 combined 0; together with RS 485 0 2; USB 2.0 1; 5-pole 0 0 0 0 2 No 2 Yes Yes Yes Yes Yes Yes Yes Yes

• XML	Yes
• CSS	Yes
Active X	Yes
 JavaScript 	Yes
● Java VM	No
Redundancy mode	
Media redundancy	
MRP	Yes; As of WinCC V12
Further protocols	
• CAN	No
MODBUS	Yes
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)	IP66K
IP (rear)	IP20
NEMA (front)	_
Enclosure Type 4 at the front	No
Enclosure Type 4x at the front	Yes; indoor use only
Standards, approvals, certificates	
CE mark	Yes
cULus	Yes
FM approval	Yes
RCM (formerly C-TICK)	Yes
KC approval	Yes
EAC (formerly Gost-R)	Yes
Use in hazardous areas	163
ATEX Zone 2	Yes
• ATEX Zone 22	Yes
IECEx Zone 2	Yes
IECEX Zone 22	Yes
cULus Class I Zone 1	No
cULus Class I Zone 2, Division 2	Yes
EM Class I Division 2	Yes
Marine approval	Tes
Germanischer Lloyd (GL)	No
American Bureau of Shipping (ABS)	No
Bureau Veritas (BV) Det Nerska Varitas (DNN)	No
Det Norske Veritas (DNV) Kereen Desister of China ing (KDC)	No
Korean Register of Shipping (KRS)	No
Lloyds Register of Shipping (LRS)	No
Nippon Kaiji Kyokai (Class NK)	No
Polski Rejestr Statkow (PRS)	No
Ambient conditions	
Ambient temperature during operation	
Operation (vertical installation)	
— For vertical installation, min.	0°C
— For vertical installation, max.	50 °C
Operation (max. tilt angle)	
— At maximum tilt angle, min.	0°C
— At maximum tilt angle, min.	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° 0
— At maximum tilt angle, min.	35 °C

Ambient temperature during storage/transportation	
• min.	-20 °C
• max.	0° C
Relative humidity	
Operation, max.	80 %; no condensation
Operating systems	
proprietary	No
pre-installed operating system	
Windows CE	Yes
configuration / header	
Message indicator	Yes
Alarm system (incl. buffer and acknowledgment)	Yes
Process value display (output)	Yes
Process value default (input) possible	Yes
Recipe management	Yes
Configuration software	
 STEP 7 Basic (TIA Portal) 	No
 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; from V11
 WinCC Advanced (TIA Portal) 	Yes; from V11
 WinCC Professional (TIA Portal) 	Yes; from V11
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
 SIMATIC WinCC Sm@rtServer 	Yes
SIMATIC WinCC Audit	Yes
Number of Visual Basic Scripts	Yes
Task planner	
• time-controlled	Yes
task-controlled	Yes
Message system	
Number of alarm classes	32
Bit messages	4.000
— Number of bit messages	4 000
Analog messages	200
— Number of analog messages	200
S7 alarm number procedure	Yes
System messages HMI System event, more (SIMATIC S7, SINIUMER)K	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
	Yes
Message indicator	Yes
	Yes 300

i Enrise per dat regen menory 2 AMbyte Regen menory expandable 7 %8 Variables Variables Number of variables per screen 400 Number of configurable images 76 Number of configurable images 400 Number of configurable image 400 Number of configurable inter PLC 400 Number of configurable inter 10 Number of configurable per screen 400 Number of ter 11 sper propiet 400 Number of ter 11 s	Data records per regine	500
 Size of internal relige memory 2 Alkyle Recige memory expandable Yes Variables Number of variables per serveen 400 Init values Yes Mumber of variables per serveen 400 Init values Yes Structures Yes Structures<td>Data records per recipe Entries per data record</td><td>500</td>	Data records per recipe Entries per data record	500
• Recipe memory expandable Yes Variables 2 048 • Number of variables per screen 400 • Linit values Yes • Multiploxing Yes • Multiploxing Yes • Structures Yes • Structures Yes • Number of configurable images 500 • Permanent windowlefault Yes • Isline in image Yes • Rompe selection by PLC Yes • Isline in images Yes • Isline in images Yes • Isline in images Yes • Isline in image number in the PLC Yes • Isline in images Yes • Isline in image number in the PLC Yes • Text fields Yes • Of fields Yes • Text fields Yes • Staticities Yes		
Variables - • Number of variables per soreen 400 • Limit values Yes • Mutplexing Yes • Structures Yes • Structures Yes • Arrays Yes • Number of configurable images 500 • Permanent window/default Yes • Structures Yes • Number of configurable images Yes • Structures Yes • Number of configurable images Yes • Structures Yes • Image stellation by PLC Yes • Image stellation by PLC Yes • Image stellation by PLC Yes • Number of objects per image Yes • Or test fladts Yes • Or test fladts Yes • Or test fladts Yes • Graphic IO Fields (test list) Yes • Graphic display Yes • Graphic display Yes • Structures Yes • Graphic display Yes • Structures		
• Number of variables per screen 2.048 • Number of variables per screen 400 • Limit variaes Yes • Mutiplexing Yes • Structures Yes • Arrays Yes • Number of configurable images 500 • Permanent windowidefault Yes • Global image Yes • Op-up images Yes • Number of configurable images Yes • Number of configurable images Yes • Image number in the PLC Yes • Image number in the PLC Yes • Number of objects per image 400 • Number of objects per image 400 • Text fields Yes • Of fields (graphics list) Yes • Of fields (graphics list) Yes • Symbolic UD fields (lext list) Yes • Date Imme fields Yes • Sittleich Yes • Somethic objects Yes • Corniber of complex objects per screen 20 • Alarm view Yes • Status/control Yes • Status/control Yes • Status/control Yes • Status/control Yes • Roge neview Yes • Stat		100
• Number of variables per screen400• Limit valuesYes• MultiplexingYes• StructuresYes• ArraysYes• TransportYes• Number of configurable images500• Permanent windowidefaultYes• Sidie-In imagesYes• Sidie-In imagesYes• Sidie-In imagesYes• Sidie-In imagesYes• Sidie-In imagesYes• Image selectan by PLCYes• Image solectasYes• Number of objects per image400• Tract fieldsYes• Offields (graphics list)Yes• Offields (graphics list)Yes• Symbolic I/O fields (graphics list)Yes• Symbolic I/O fields (lext list)Yes• Symbolic I/O fields (lext list)Yes• Singer bipetsYes• Singer bipetsYes		2 048
• Linit valuesYes• MutiplexingYes• StructuresYes• Number of configurable images500• Permanent window/defaultYes• Global imageYes• Global imageYes• Forp-up imagesYes• StructuresYes• StructuresYes• Image structuresYes• StructuresYes• Image structuresYes• Or foldsYes• Or foldsYes• Or foldsYes• Or foldsYes• Or foldsYes• StructuresYes• StructuresYes• StructuresYes• StructuresYes• StructuresYes• Oraptic displayYes• Complex displayYes• Tord viewYes• StructuresYes• StructuresYes• StructuresYes• StructuresYes• StructuresYes• StructureYes• StructureYes• StructuresYes• StructuresYes• StructuresYes• StructuresYes• StructuresYes• StructuresYes• S		
• MultiplexingYes• StructuresYes• ArraysYes• Multiplexing500• Permanent windowidefaultYes• Oliobal imageYes• Oliobal imageYes• Oliobal imageYes• Stide-in imagesYes• Stide-in imagesYes• Stide-in imagesYes• Image aciection by PLCYes• Image aciection by PLCYes• Number of objects per image400• Text fieldsYes• IoficitsYes• Conflects (graphics list)Yes• Symbolic U/O fields (text list)Yes• Complex image objectsYes• Complex image objectsYes• Complex image objectsYes• Complex image objectsYes• Symbolic U/O fields (text list)Yes• Status/ControlYes• Status/ControlYes• Signofic list VerviewYes• Complex image objectsYes• Status/ControlYes• Status/ControlYes• Status/ControlYes• Signofic list VerviewYes• Status/ControlYes• Status/ControlYes• Status/ControlYes• Status/ControlYes• Status/ControlYes• Status/Contr		
 Structures Yes Yarays Yes Yes Number of configurable images Solo Permanent windowledault Yes Global image Perpuip images Yes Slobel image Yes Slobel images Yes Slobel image image Yes Slobel image image Yes Image solectos per image Yes Image solectos per image Yes Yes Image solectos per image Yes Ye		Yes
Images 500 • Number of configurable images 500 • Permanent window/default Yes • Global image Yes • Opo-pip images Yes • Silde-in images Yes • Image solection by PLC Yes • Image solection by PLC Yes • Number of objects per image 400 • Text Helds Yes • Or ophic U/O fields (graphics list) Yes • Symbolic U/O fields (graphics list) Yes • Symbolic U/O fields (graphics list) Yes • Date/time fields Yes • Buttons Yes • Buttons Yes • Graphic display Yes • Complex image objects Yes • Number of complex objects per screen 20 • Alarm view Yes • Status/control Yes • Status/control Yes • Situs/control Y		
• Number of configurable images 500 • Permanent window/default Yes • Global image Yes • Pop-up images Yes • Silde-in images Yes • Image selection by PLC Yes • Number of objects per image 400 • Text fields Yes • I/D fields Yes • I/D fields Yes • Symbolic U/D fields (graphics list) Yes • Symbolic U/D fields (text list) Yes • Symbolic U/D fields (text list) Yes • Somotic U/D fields Yes • Complex image objects Yes • Complex image objects Yes • Number of complex objects per screen 20 • Alarm view Yes • Siders Yes • Site View Yes • Site	Arrays	Yes
- Permanent window/defaultYes• Global imageYes• Slobal imagesYes• Slobal imagesYes• Image selection by PLCYes• Image number in the PLCYes• Number of objects per image400• Text fieldsYes• U/D fields (graphics list)Yes• Symbolic I/O fields (graphics list)Yes• Symbolic I/O fields (text list)Yes• Complex minage objectsYes• Complex minage objectsYes• Complex minage objectsYes• Complex minage objectsYes• System diagnostics viewYes• Status/controlYes• Sindigrif Client viewYes• System diagnostics viewYes• Number of endings viewYes• POF displayYes• Firdt LievserYes• POF displayYes• Portier instrumentsYes• Portier instrumentsYes• Portier instrumentsYes• Portier instrumentsYes• Portier instrumentsYes• Portier		
Global imageYesPop-up imagesYesImage selection by PLCYesImage selection by PLCYesImage number in the PLCYesImage objects400Text fieldsYesI/O fields (graphics list)YesSymbolic I/O fields (graphics list)YesSymbolic I/O fields (training)YesSymbolic I/O fields (training)YesSoutchesYesSeconetric objectsYesComplex image objectsYesNumber of complex objects per screen20Alarm viewYesStatus/controlYesStatus/controlYesStatus/controlYesSystem lidgnostics viewYesSystem lidgnostics viewYesSystem lidgnostics viewYesSystem lidgnostics viewYesSiddersYesPDF displayYesPDF displayYesPDF displayYesPDF displayYesPDF displayYesPDF displayYesPDF displayYesPDF displayYesPDF displayYes <td> Number of configurable images </td> <td>500</td>	 Number of configurable images 	500
Pop-up imagesYesSilde-in imagesYesImage selection by PLCYesImage number in the PLCYesImage objects400• Number of objects per image400• Text fieldsYes• I/O fields (graphics list)Yes• Graphic I/O fields (graphics list)Yes• Date/time fieldsYes• Date/time fieldsYes• Date/time fieldsYes• Date/time fieldsYes• ButtonsYes• Graphic I/O fields (text list)Yes• Date/time fieldsYes• Caraphic displayYes• Caraphic displayYes• Complex image objectsYes• Complex image objectsYes• Complex image objects per screen20• Alarm viewYes• Trend viewYes• Status/controlYes• Sistus/controlYes• System diagnostics viewYes• Recipe viewYes• Kith YersYes• If Text viewYes• Bar graphsYes• IF Camera displayYes• IF Camera displayYes• Differ instrumentsYes• Date instrumentsYes• Date instrumentsYes• Differ instrumentsYes• Date of text lists per project500• Number of entries per text list500• Number of entries per graphics lists per project500• Number of entries per graphics list500 <tr< td=""><td> Permanent window/default </td><td>Yes</td></tr<>	 Permanent window/default 	Yes
• Silde-in images Yes • Image number in the PLC Yes Image objects 400 • Text fields Yes • I/O fields Yes • I/O fields Yes • Graphic I/O fields (graphics list) Yes • Symbolic I/O fields (text list) Yes • Symbolic I/O fields (text list) Yes • Date/time fields Yes • Symbolic I/O fields (text list) Yes • Date/time fields Yes • Buttons Yes • Buttons Yes • Complex image objects Yes • Complex indige objects Yes • Complex indige objects Yes • Status/scontrol Yes • Singlic/Client view Yes • Singlic/Client view Yes • Rocipe view Yes <tr< td=""><td>Global image</td><td>Yes</td></tr<>	Global image	Yes
Image selection by PLC Yes Image number in the PLC Yes Image objects Number of objects per image 400 Text fields Yes Vor fields Yes Vor fields Yes Symbolic I/O fields (graphics list) Yes Symbolic I/O fields (text list) Yes Symbolic I/O fields (text list) Yes Symbolic I/O fields (text list) Yes Subtches Yes Subtches Yes Buttons Yes Complex infinite fields Yes Complex infinite fields Yes Complex infinite fields Yes Subtches Yes Subtches Yes Subtches Yes Complex infinite fields Yes Subtches Subtches Yes Subtches Yes Subtches Yes Subtches Yes Subtches Yes Subtches Yes Subtches Yes Subtches Subtches Yes Subtches Subtches Yes Subtches Yes Subtches Subtche		Yes
Image number in the PLC Yes Image objects Number of objects per image 400 Text fields Yes Vor fields Yes Vor fields Yes Oraphic I/O field (graphics list) Yes Symbolic I/O field (start list) Yes Symbolic I/O field (start list) Yes Symbolic I/O field (start list) Yes Subtract Part of the PLC Yes Subtract Part of the PLC Yes Subtract Part of the PLC Yes Yes Subtract Part of the PLC Yes Yes Subtract Part of the PLC Yes	-	Yes
Image objects 400 T ext fields Yes U/O fields Yes Craphic U/O fields (graphics list) Yes Symbolic U/O fields (text list) Yes Symbolic U/O fields (text list) Yes Subtributes Yes Subtributes Yes Switches Yes Buttons Yes Graphic display Yes Complex inage objects Yes Complex inage objects Yes Obserview Yes Complex inage objects Yes Number of complex objects per screen 20 Alarm view Yes Tered view Yes Status/control Yes Status/control Yes Sing@rtClient view Yes System diagnostics view Yes System diagnostics view Yes Pic diral Player Yes PiD'f display Yes PiD'f display Yes Bar graphs Yes Piointer instruments Yes Piointer instruments		
• Number of objects per image 400 • Text fields Yes • I/O fields (graphics list) Yes • Symbolic I/O fields (text list) Yes • Date/time fields Yes • Date/time fields Yes • Date/time fields Yes • Switches Yes • Buttons Yes • Complex image objects Yes • Complex image objects Yes • Number of complex objects per screen 20 • Alarm view Yes • User view Yes • Status/control Yes • Sing/tClient view Yes • Sing/tClient view Yes • Sing/tClient view Yes • Status/control Yes • Sing/tClient view Yes • Sing/tClient view Yes • Sing/tClient view Yes • Status/control Yes • Sitalus/control Yes • Bear graphs Yes • Differ instruments Yes • Differ instruments Yes • Didenter instrument		Yes
Text fieldsYesI/O fieldsYesGraphic VO fields (graphics list)YesSymbolic I/O fields (text list)YesDate/time fieldsYesSwitchesYesButtonsYesGraphic displayYesi consYesGeometric objectsYesComplex image objects20Alarm viewYesTend viewYesUser viewYesStatus/controlYesSitus/controlYesNerviewYesI consYesUser viewYesUser viewYesOgen viewYesI consYesUser viewYesI cons viewYesStatus/controlYesSystem diagnostics viewYesI conserveYesI conserveSoute		
I/O fieldsYesGraphic I/O fields (graphics list)YesSymbolic I/O fields (text list)YesDate/time fieldsYesSwitchesYesSwitchesYesButtonsYesGraphic displayYesGeometric objectsYesComplex inage objectsYesOumber of complex objects per screen20Alarm viewYesTrend viewYesUser viewYesStatus/controlYesStatus/controlYesSystem diagnostics viewYesNumber of dignal per viewYesStatus/controlYesStatus/controlYesSystem diagnostics viewYesNedia PlayerYesHTML browserYesPDF displayYesPDF displayYesPDF displayYesPointer instrumentsYesPointer instrumentsYesNumber of entries per project500Number of entries per project500Number of entries per project500Number of entries per graphics list500Number of entries per project500Number of entries per graphics list500ArchivingYesVersion500Number of entries per graphics list500Number of entries per graphics list		
 Graphic I/O fields (graphics list) Symbolic I/O fields (text list) Symbolic I/O fields (text list) Yes Date/time fields Switches Switches Switches Graphic display Cons Geometric objects Yes Geometric objects ves Complex image objects Number of complex objects per screen Alarm view Yes Status/control Yes System diagnostics view Yes Media Player Yes HTML browser Yes Bar graphs Yes PoF display Yes Polinter instruments Yes Polaty lists per project Stot Number of text lists per project Stot Number of entries per text list Stot Number of entries per text list Stot Number of entries per project Stot Number of		
 Symbolic I/O fields (text list) Yes Date/time fields Yes Switches Yes Buttons Yes Graphic display Yes Corns Yes Geometric objects Yes Complex objects Yes Complex objects per screen 20 Alarm view Yes Trand view Yes User view Yes Status/control Yes Status/control Yes Secipe view Yes Skattor view Yes Status/control Yes System diagnostics view Yes Becipe view Yes System diagnostics view Yes System diagnostics view Yes PDF display Yes PDF display Yes Bar graphs Yes Sidiers Yes Pointer instruments Yes Analoydigital clock Yes Number of text lists per project 500 Number of entries per graphics list 500 Number of entries per graphics list 500 Number of entries per graphics list 500 Archiving 		
• Date/time fieldsYes• SwitchesYes• SwitchesYes• Graphic displayYes• IconsYes• IconsYes• Geometric objectsYesComplex image objectsYes• Number of complex objects per screen20• Alarm viewYes• Trend viewYes• Status/controlYes• Status/controlYes• Status/controlYes• Recipe viewYes• Recipe viewYes• Recipe viewYes• Bar graphsYes• IP displayYes• SlidersYes• SlidersYes• SlidersYes• Number of text lists per project500• Number of entries per graphics list500• Number of entries per graphics list500<		
SwitchesYesButtonsYesGraphic displayYesiconsYesGeometric objectsYesComplex image objectsVesComplex index objects per screen20Alarm viewYesTrend viewYesUser viewYesStatus/controlYesStatus/controlYesSecipe viewYesStatus/controlYesSystem diagnostics viewYesVefal PlayerYesHTML browserYesPDF displayYesPDF displayYesSlidersYesSlidersYesPointer instrumentsYesPointer instrumentsYesItissYesNumber of entries per graphics lists per project500Number of entries per graphics lists per project500Number of entries per graphics lists500Number of entries per graphics lists500Number of entries per graphics list500Number		
ButtonsYesGraphic displayYesIconsYesIconsYesGeometric objectsYesComplex image objects20Alarm viewYesIter viewYesUser viewYesStatus/controlYesSing@rtClient viewYesSm@rtClient viewYesSing@rtClient viewYesIten diewYesSystem diagnostics viewYesIten diagnostics viewYesIten diagnostics viewYesSystem diagnostics viewYesIten diagnostics viewYesIten diagnostics viewYesSystem diagnostics viewYesIten diagnostics viewYesSididasYesIten diagnostics viewYesIten diagnostics viewYesSididasYesIten displayYesIten displayYesIten displayYesIten of ten instrumentsYesAnalog/idgital clockYesIten of entries per project500Number of entries per project500Number of entries per graphics list500Number of entries per graphics list500<		
Graphic displayYesI consYesGeometric objectsYesComplex inage objects20• Alarn viewYes• Trend viewYes• Trend viewYes• User viewYes• Status/controlYes• Status/controlYes• Recipe viewYes• Recipe viewYes• Status/controlYes• Sm@rtClient viewYes• Recipe viewYes• Recipe viewYes• System diagnostics viewYes• BrowserYes• HTML browserYes• PDF displayYes• Bar graphsYes• SlidersYes• Analog/digital clockYes• Number of ext lists per project500• Number of entries per text list500• Number of entries per graphics list500• Number of entr		
• IconsYesGeometric objectsYesComplex inage objects20• Number of complex objects per screen20• Alarm viewYes• Trend viewYes• Trend viewYes• User viewYes• Status/controlYes• Status/controlYes• Recipe viewYes• Recipe viewYes• System diagnostics viewYes• Media PlayerYes• PDF displayYes• PDF displayYes• Bar graphsYes• SlidersYes• Pointer instrumentsYes• Analog/digital clockYes• Number of text lists per project500• Number of entries per text list500• Number of entries per graphics lists500• Number of entries per graphics list500• Number of entries per graphics list500		
Geometric objectsYesComplex image objectsNumber of complex objects per screen20Alarm viewYesTrend viewYesUser viewYesStatus/controlYesStatus/controlYesSm@rtClient viewYesRecipe viewYesSystem diagnostics viewYesMedia PlayerYesHTML browserYesPDF displayYesSlidersYesSlidersYesPolinter instrumentsYesAnalog/digital clockYesNumber of entries per project500Number of entries per project500		
Complex image objects • Number of complex objects per screen 20 • Alarm view Yes • Trend view Yes • User view Yes • Status/control Yes • Sm@rtClient view Yes • Recipe view Yes • Recipe view Yes • Ky trend view Yes • Status/control Yes • Status/control Yes • Sm@rtClient view Yes • Recipe view Yes • Recipe view Yes • Recipe view Yes • Media Player Yes • Media Player Yes • Media Player Yes • PDF display Yes • IP camera display Yes • Bar graphs Yes • Sliders Yes • Analog/digital clock Yes Lists 500 • Number of entries per text list 500 • Number of graphics lists per project 500 • Number of entries per graphics list 500 • Number of entries per graphics		
• Number of complex objects per screen20• Alarm viewYes• Trend viewYes• Trend viewYes• User viewYes• Status/controlYes• Sm@rtClient viewYes• Recipe viewYes• f(x) trend viewYes• System diagnostics viewYes• Media PlayerYes• HTML browserYes• IP camera displayYes• Bar graphsYes• SlidersYes• Pointer instrumentsYes• Analog/digital clockYesLists500• Number of entries per text list500• Number of entries per text list500• Number of entries per graphics list500• Number of entries per graphics list500• Number of entries per graphics list500		105
Alarm viewYesTrend viewYesUser viewYesUser viewYesStatus/controlYesSm@rtClient viewYesRecipe viewYesRecipe viewYesf(x) trend viewYesSystem diagnostics viewYesMedia PlayerYesHTML browserYesPDF displayYesIP camera displayYesBar graphsYesSlidersYesPointer instrumentsYesAnalog/digital clockYesLists500Number of entries per text list500Number of entries per project500Number of entries per graphics list500Number of entries per graphics list500Number of entries per graphics list500Number of entries per graphics list500		20
• User viewYes• Status/controlYes• Sm@rtClient viewYes• Recipe viewYes• Recipe viewYes• f(x) trend viewYes• System diagnostics viewYes• Media PlayerYes• Media PlayerYes• HTML browserYes• PDF displayYes• IP camera displayYes• Bar graphsYes• SlidersYes• Analog/digital clockYes• Number of text lists per project500• Number of graphics lists per project500• Number of entries per text list500• Number of entries per graphics list500		Yes
Status/controlYesSm@rtClient viewYesRecipe viewYesf(x) trend viewYesSystem diagnostics viewYesMedia PlayerYesHTML browserYesPDF displayYesIP camera displayYesBar graphsYesSlidersYesAnalog/digital clockYesIstSolNumber of text lists per project500Number of entries per text list500Number of entries per graphics list500Archiving500	Trend view	Yes
Sm@rtClient viewYesRecipe viewYesf(x) trend viewYesSystem diagnostics viewYesMedia PlayerYesHTML browserYesPDF displayYesIP camera displayYesBar graphsYesSlidersYesPointer instrumentsYesAnalog/digital clockYesItstsSlopNumber of text lists per project500Number of entries per text list500Number of entries per graphics lists per project500Number of entries per graphics list500ArchivingImage: Slop Slop Slop Slop Slop Slop Slop Slop	User view	Yes
Recipe viewYes• f(x) trend viewYes• System diagnostics viewYes• Media PlayerYes• MTML browserYes• PDF displayYes• IP camera displayYes• Bar graphsYes• SlidersYes• Pointer instrumentsYes• Analog/digital clockYes Lists 500• Number of text lists per project500• Number of entries per text list500• Number of entries per graphics lists per project500• Number of entries per graphics list500• Number of entries per graphics list500	Status/control	Yes
• f(x) trend viewYesSystem diagnostics viewYesMedia PlayerYes• HTML browserYes• PDF displayYes• IP camera displayYes• Bar graphsYes• SlidersYes• Pointer instrumentsYes• Analog/digital clockYes• Number of text lists per project500• Number of entries per text list500• Number of entries per graphics lists per project500• Number of entries per graphics list500	 Sm@rtClient view 	Yes
System diagnostics viewYesMedia PlayerYesHTML browserYesPDF displayYesIP camera displayYesBar graphsYesSlidersYesPointer instrumentsYesAnalog/digital clockYesListsNumber of text lists per projectNumber of entries per text list500Number of graphics lists per project500Number of entries per graphics list500Number of entries per graphics list500Archiving500	Recipe view	Yes
Media PlayerYesHTML browserYesPDF displayYesIP camera displayYesBar graphsYesSlidersYesPointer instrumentsYesAnalog/digital clockYesListsNumber of text lists per project500Number of graphics lists per project500Number of graphics lists per project500Number of entries per text list500Number of entries per graphics lists500Archiving500		Yes
HTML browserYesPDF displayYesIP camera displayYesBar graphsYesSlidersYesPointer instrumentsYesAnalog/digital clockYesItistsYesItistsSolNumber of text lists per project500Number of graphics lists per project500Number of entries per text list500Number of entries per graphics list500ArchivingYes		Yes
PDF displayYesIP camera displayYesBar graphsYesSlidersYesPointer instrumentsYesAnalog/digital clockYesListsImage: Number of text lists per project500Number of entries per text list500Number of graphics lists per project500Number of entries per graphics list500ArchivingYes		
• IP camera displayYes• Bar graphsYes• SlidersYes• Pointer instrumentsYes• Analog/digital clockYes Lists Yes• Number of text lists per project500• Number of entries per text list500• Number of graphics lists per project500• Number of graphics lists per project500• Number of entries per graphics list500• Number of entries per graphics list500• Number of entries per graphics list500		
• Bar graphsYes• SlidersYes• Pointer instrumentsYes• Analog/digital clockYesLists• Number of text lists per project500• Number of entries per text list500• Number of graphics lists per project500• Number of entries per graphics lists per project500• Number of entries per graphics list500• Number of entries per graphics list500• Number of entries per graphics list500		
SlidersYesPointer instrumentsYesAnalog/digital clockYesListsNumber of text lists per project500Number of entries per text list500Number of graphics lists per project500Number of entries per graphics list500Archiving500		
• Pointer instrumentsYes• Analog/digital clockYesLists• Number of text lists per project500• Number of entries per text list500• Number of graphics lists per project500• Number of entries per graphics lists per project500• Number of entries per graphics list500• Number of entries per graphics list500• Archiving		
• Analog/digital clock Yes Lists 500 • 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 500		
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 500		
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 entries per text list 500 Number of graphics lists per project 500 Number of entries per graphics list 500 Archiving		500
Number of graphics lists per project 500 Number of entries per graphics list 500 Archiving		
Number of entries per graphics list 500 Archiving		
Archiving		
• Number of archives per device 50	Number of archives per device	50
Number of entries per archive 20 000		
Message archive Yes		
Process value archive Yes		Yes
Archiving methods	Archiving methods	

Sequential archive	Yes
— Sequential archive	
— Short-term archive	Yes
Memory location	Vee
— Memory card	Yes
— USB memory	Yes
— Ethernet	Yes
Data storage format	Vee
- CSV	Yes
— TXT	Yes
— RDB Security	Yes
	50
Number of user groups	32
 Number of user rights Number of users 	50
	Yes
Password export/import	Yes
SIMATIC Logon	Yes
Logging through printer	Vee
Alarms Penert (chift log)	Yes
Report (shift log)	Yes
Hardcopy Electronic print to file	
Electronic print to file	Yes; PDF, HTML
Character sets	
Keyboard fonts	Yes
— US English	Tes
Transfer (upload/download)	Vee
MPI/PROFIBUS DP	Yes
• USB	Yes
• Ethernet	Yes
using external storage medium	Yes
Process coupling	Vee
 S7-1200 S7-1500 	Yes
	Yes
 S7-200 S7-300/400 	Yes
	Yes
LOGO!WinAC	Yes
SINUMERIKSIMOTION	Yes; with SINUMERIK option package Yes
	Yes
 Allen Bradley (EtherNet/IP) Allen Bradley (DF1) 	Yes
	Yes
Mitsubishi (MC TCP/IP)	
Mitsubishi (FX)OMRON (FINS TCP)	Yes No
	Yes
OMRON (LINK/Multilink) Modicon (Modbus TCP/IP)	Yes
Modicon (Modbus TCP/IP) Modicon (Modbus)	Yes
Modicon (Modbus)	Yes
OPC UA Client OPC UA Server	Yes
Service tools/configuration aids	Tes
	Voo
Backup/Restore manuallyBackup/Restore automatically	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
cos monory	

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	No
Stainless steel	Yes
Dimensions	
Width of the housing front	330 mm
Height of housing front	241 mm
Mounting cutout, width	310 mm
Mounting cutout, height	221 mm
Overall depth	67 mm
Weights	
Weight (without packaging)	3.6 kg
Weight (with packaging)	4.2 kg

last modified:

3/2/2021 🖸