6AV2145-8GB01-0AA0

Data sheet

SIMATIC HMI KTP700F Mobile HW/OR, 7.0" TFT display, 800 x 480 pixel,16m colors key and touch operation, 6 function keys, 2 illuminated push-buttons, 1x PROFINET/Industrial Ethernet interface, 1x multimedia card, 1x USB, Key-operated switch, acknowledgement switch, emergency stop/stop button configurable from WinCC Comfort V15, handwheel and override



General information	
Product type designation	KTP700F
Display	
Design of display	TFT widescreen display, LED backlighting
Screen diagonal	7 in
Color display	Yes
Number of colors	16 000 000
Resolution (pixels)	
 Horizontal image resolution 	800 pixel
Vertical image resolution	480 pixel
Backlighting	
 MTBF backlighting (at 25 °C) 	50 000 h
 Backlight dimmable 	Yes; 0-100 %
Control elements	
Keyboard fonts	
 Function keys 	
 Number of function keys 	6
 Number of function keys with LEDs 	6
 Keys with LED 	Yes
 Numeric keyboard 	Yes; Onscreen keyboard
alphanumeric keyboard	Yes; Onscreen keyboard
Touch operation	
 Design as touch screen 	Yes
Design as multi-touch screen	No
Special operator controls	
 Stop button (forced blocking) 	Yes
 Emergency stop button (illuminated and forced blocking) 	Yes
 Acknowledgement button (3-stage) 	Yes
 Key-operated switch 	Yes
 Illuminated pushbutton 	Yes
Handwheel	Yes
Camera	
integrated camera	No
Expansions for operator control of the process	
 DP direct LEDs (LEDs as S7 output I/O) 	
— F1Fx	6
 Direct keys (keys as S7 input I/O) 	

— F1Fx	6
Direct keys (touch buttons as S7 input I/O)	32
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
Memory	
Flash	Yes
RAM	Yes
Memory available for user data	12 Mbyte
Type of output	
Power LED	No
LED for safe	No
LED for communication	No
LED for battery	No
Vibrations	No
Time of day	
Clock	
Hardware clock (real-time)	Yes
• retentive	Yes
synchronizable	Yes
Interfaces	
Number of industrial Ethernet interfaces	1
Number of PROFINET interfaces	1
Number of RS 485 interfaces	0
Number of RS 422 interfaces	0
Number of RS 232 interfaces	0
Number of USB interfaces	1; USB 2.0
Number of order interfaces Number of wireless interfaces	0
Number of SD card slots	1
Protocols	
	V
PROFINET	Yes
Supports protocol for PROFINET IO	Yes
PROFISATE	Yes
PROFIBUS	No
EtherNet/IP	Yes
MPI	No
Protocols (Ethernet)	V
• TCP/IP	Yes
• DHCP	Yes
• SNMP	Yes
• DCP	Yes
• LLDP	Yes
WEB characteristics	Von
HTTP HTTPS	Yes
	Yes
• HTML	Yes
• XML	No Voc
• CSS	Yes
Active X Issue Soriet	No Voc
JavaScript JavaSVM	Yes
Java VM Further pretocals	No
Further protocols	Voc
MODBUS other hus systems	Yes
other bus systems	No
Communication functions	

Mindon communication	
Wireless communication	
supported standards Padia standard MI AN 900 444	Al-
— Radio standard WLAN 802.11	No
Bluetooth radio standard	No
Degree and class of protection	
IP65 (all-round)	Yes
Standards, approvals, certificates	
CE mark	Yes
UL approval	Yes
cULus	Yes
FM approval	No
RCM (formerly C-TICK)	Yes
KC approval	No
EAC (formerly Gost-R)	Yes
Suitable for safety functions	Yes
Marine approval	No
Highest safety class achievable in safety mode	
Performance level according to ISO 13849-1	PLe
SIL acc. to IEC 61508	SIL 3
Use in hazardous areas	
ATEX Zone 2	No
ATEX Zone 22	No
• IECEx Zone 2	No
• IECEx Zone 22	No
• cULus Class I Zone 1	No
 cULus Class I Zone 2, Division 2 	No
• cULus Class II Division 2	No
FM Class I Division 2	No
FM Class II Division 2	No
Marine approval	
	Yes
Marine approval	
Marine approval • Germanischer Lloyd (GL)	Yes
Marine approval Germanischer Lloyd (GL) Polski Rejestr Statkow (PRS)	Yes
Marine approval Germanischer Lloyd (GL) Polski Rejestr Statkow (PRS) Ambient conditions	Yes
Marine approval Germanischer Lloyd (GL) Polski Rejestr Statkow (PRS) Ambient conditions Free fall Fall height, max.	Yes No
Marine approval	Yes No
Marine approval Germanischer Lloyd (GL) Polski Rejestr Statkow (PRS) Ambient conditions Free fall Fall height, max. Ambient temperature during operation	Yes No 1.2 m
Marine approval Germanischer Lloyd (GL) Polski Rejestr Statkow (PRS) Ambient conditions Free fall Fall height, max. Ambient temperature during operation min.	Yes No 1.2 m
Marine approval Germanischer Lloyd (GL) Polski Rejestr Statkow (PRS) Ambient conditions Free fall Fall height, max. Ambient temperature during operation min. max.	Yes No 1.2 m
Marine approval Germanischer Lloyd (GL) Polski Rejestr Statkow (PRS) Ambient conditions Free fall Fall height, max. Ambient temperature during operation min. max. Ambient temperature during storage/transportation	Yes No 1.2 m 0 °C 45 °C
Marine approval Germanischer Lloyd (GL) Polski Rejestr Statkow (PRS) Ambient conditions Free fall Fall height, max. Ambient temperature during operation min. max. Ambient temperature during storage/transportation min.	Yes No 1.2 m 0 °C 45 °C -20 °C
Marine approval Germanischer Lloyd (GL) Polski Rejestr Statkow (PRS) Ambient conditions Free fall Fall height, max. Ambient temperature during operation min. max. Ambient temperature during storage/transportation min. max.	Yes No 1.2 m 0 °C 45 °C -20 °C
Marine approval Germanischer Lloyd (GL) Polski Rejestr Statkow (PRS) Ambient conditions Free fall Fall height, max. Ambient temperature during operation min. max. Ambient temperature during storage/transportation min. max. Ambient temperature during storage/transportation min. max. Relative humidity	Yes No 1.2 m 0 °C 45 °C -20 °C 60 °C
Marine approval Germanischer Lloyd (GL) Polski Rejestr Statkow (PRS) Ambient conditions Free fall Fall height, max. Ambient temperature during operation min. max. Ambient temperature during storage/transportation min. max. Relative humidity Operation, max. Operating systems	Yes No 1.2 m 0 °C 45 °C -20 °C 60 °C
Marine approval Germanischer Lloyd (GL) Polski Rejestr Statkow (PRS) Ambient conditions Free fall Fall height, max. Ambient temperature during operation min. max. Ambient temperature during storage/transportation min. max. Ambient temperature during storage/transportation min. max. Relative humidity Operation, max. Operating systems pre-installed operating system	Yes No 1.2 m 0 °C 45 °C -20 °C 60 °C
Marine approval Germanischer Lloyd (GL) Polski Rejestr Statkow (PRS) Ambient conditions Free fall Fall height, max. Ambient temperature during operation min. max. Ambient temperature during storage/transportation min. max. Ambient temperature during storage/transportation min. max. Relative humidity Operation, max. Operating systems pre-installed operating system Windows CE	Yes No 1.2 m 0 °C 45 °C -20 °C 60 °C
Marine approval Germanischer Lloyd (GL) Polski Rejestr Statkow (PRS) Ambient conditions Free fall Fall height, max. Ambient temperature during operation min. max. Ambient temperature during storage/transportation min. max. Relative humidity Operation, max. Operating systems pre-installed operating system Windows CE Configuration	Yes No 1.2 m 0 °C 45 °C -20 °C 60 °C 90 % Yes
Marine approval Germanischer Lloyd (GL) Polski Rejestr Statkow (PRS) Ambient conditions Free fall Fall height, max. Ambient temperature during operation min. max. Ambient temperature during storage/transportation min. max. Relative humidity Operation, max. Operating systems pre-installed operating system Windows CE Configuration Message indicator	Yes No 1.2 m 0 °C 45 °C -20 °C 60 °C 90 % Yes
Marine approval Germanischer Lloyd (GL) Polski Rejestr Statkow (PRS) Ambient conditions Free fall Fall height, max. Ambient temperature during operation min. max. Ambient temperature during storage/transportation min. max. Relative humidity Operation, max. Operating systems pre-installed operating system Windows CE Configuration Message indicator Alarm system (incl. buffer and acknowledgment)	Yes No 1.2 m 0 °C 45 °C -20 °C 60 °C 90 % Yes Yes Yes
Marine approval Germanischer Lloyd (GL) Polski Rejestr Statkow (PRS) Ambient conditions Free fall Fall height, max. Ambient temperature during operation min. max. Ambient temperature during storage/transportation min. max. Relative humidity Operation, max. Operating systems pre-installed operating system Windows CE Configuration Message indicator Alarm system (incl. buffer and acknowledgment) Process value display (output)	Yes No 1.2 m 0 °C 45 °C -20 °C 60 °C 90 % Yes Yes Yes Yes Yes
Marine approval Germanischer Lloyd (GL) Polski Rejestr Statkow (PRS) Ambient conditions Free fall Fall height, max. Ambient temperature during operation min. max. Ambient temperature during storage/transportation min. max. Relative humidity Operation, max. Relative humidity Operating systems pre-installed operating system Windows CE Configuration Message indicator Alarm system (incl. buffer and acknowledgment) Process value display (output) Process value default (input) possible	Yes No 1.2 m 0 °C 45 °C -20 °C 60 °C 90 % Yes Yes Yes Yes Yes Yes Yes
Marine approval Germanischer Lloyd (GL) Polski Rejestr Statkow (PRS) Ambient conditions Free fall Fall height, max. Ambient temperature during operation min. max. Ambient temperature during storage/transportation min. max. Relative humidity Operation, max. Operating systems pre-installed operating system Windows CE Configuration Message indicator Alarm system (incl. buffer and acknowledgment) Process value display (output) Process value default (input) possible Recipe management	Yes No 1.2 m 0 °C 45 °C -20 °C 60 °C 90 % Yes Yes Yes Yes Yes
Marine approval Germanischer Lloyd (GL) Polski Rejestr Statkow (PRS) Ambient conditions Free fall Fall height, max. Ambient temperature during operation min. max. Ambient temperature during storage/transportation min. max. Relative humidity Operation, max. Operating systems pre-installed operating system Windows CE Configuration Message indicator Alarm system (incl. buffer and acknowledgment) Process value display (output) Process value default (input) possible Recipe management Configuration software	Yes No 1.2 m 0 °C 45 °C -20 °C 60 °C 90 % Yes Yes Yes Yes Yes Yes Yes Yes Yes
Marine approval Germanischer Lloyd (GL) Polski Rejestr Statkow (PRS) Ambient conditions Free fall Fall height, max. Ambient temperature during operation min. max. Ambient temperature during storage/transportation min. max. Relative humidity Operation, max. Operating systems pre-installed operating system Windows CE Configuration Message indicator Alarm system (incl. buffer and acknowledgment) Process value display (output) Process value default (input) possible Recipe management Configuration software STEP 7 Basic (TIA Portal)	Yes No 1.2 m 0 °C 45 °C -20 °C 60 °C 90 % Yes Yes Yes Yes Yes Yes Yes Yes Yes Ye
Marine approval Germanischer Lloyd (GL) Polski Rejestr Statkow (PRS) Ambient conditions Free fall Fall height, max. Ambient temperature during operation min. max. Ambient temperature during storage/transportation min. max. Relative humidity Operation, max. Operating systems pre-installed operating system Windows CE Configuration Message indicator Alarm system (incl. buffer and acknowledgment) Process value display (output) Process value default (input) possible Recipe management Configuration software STEP 7 Basic (TIA Portal) STEP 7 Professional (TIA Portal)	Yes No 1.2 m 0 °C 45 °C -20 °C 60 °C 90 % Yes Yes Yes Yes Yes Yes Yes Ye
Marine approval Germanischer Lloyd (GL) Polski Rejestr Statkow (PRS) Ambient conditions Free fall Fall height, max. Ambient temperature during operation min. max. Ambient temperature during storage/transportation min. max. Relative humidity Operation, max. Operating systems pre-installed operating system Windows CE Configuration Message indicator Alarm system (incl. buffer and acknowledgment) Process value display (output) Process value default (input) possible Recipe management Configuration software STEP 7 Basic (TIA Portal) STEP 7 Professional (TIA Portal) STEP 7 Professional (TIA Portal) WinCC flexible Compact	Yes No 1.2 m 0 °C 45 °C -20 °C 60 °C 90 % Yes Yes Yes Yes Yes Yes Yes Ye
Marine approval Germanischer Lloyd (GL) Polski Rejestr Statkow (PRS) Ambient conditions Free fall Fall height, max. Ambient temperature during operation min. max. Ambient temperature during storage/transportation min. max. Relative humidity Operation, max. Operating systems pre-installed operating system Windows CE Configuration Message indicator Alarm system (incl. buffer and acknowledgment) Process value display (output) Process value default (input) possible Recipe management Configuration software STEP 7 Basic (TIA Portal) STEP 7 Professional (TIA Portal)	Yes No 1.2 m 0 °C 45 °C -20 °C 60 °C 90 % Yes Yes Yes Yes Yes Yes Yes Ye

WinCC Advanced (TA Portal) Yes	 WinCC Basic (TIA Portal) 	No
Number of branchers per info text Number of brighest per		Yes
Conine languages Surprise S		Yes
Number of online/number languages	WinCC Professional (TIA Portal)	Yes
Number of contineruntine languages	Languages	
Languages Languages Per project 32	Online languages	
Languages pet project 32	 Number of online/runtime languages 	32
Libraries	Project languages	
Libraries	 Languages per project 	32
Applications/options Web browser Pocket Excel Pocket Excel No POF Viewer Media Player Media Player Media Player Mind Visual Basic Scripts Task planner Itime-controlled Yes Number of projects (internal) O Multiproject Number of projects (internal) O System wessages — Number of otheracesages O System wessages O System wessages O Number of characters per message O Number of characters per message O Number of characters per message O Number of projects values per message O Number of recipes O O O O O O O O O O O O O	Functionality under WinCC (TIA Portal)	
	Libraries	Yes
Pocket Excel PoPo Viewer No PoPo Viewer Media Player No SIMATIC WinCC Sm@rtServer SIMATIC WinCC Audit Yes Number of Visual Basic Scripts Task planner • time-controlled • task-controlled Heip system • Number of characters per info text Number of projects (internal) • Number of projects (external) Number of projects (external) • Number of alarm classes • Bit messages — Number of silarm classes • System mumber procedure • Yes • System went, more (SIMATIC S7, SINUMERIK, Yes System event, more (SIMATIC S7, SINUMERIK, Yes System of characters per message • Auchowdegment groups • Auchowdegment groups • Auchowdegment groups • Auchowdegment groups • Message indicator • Number of projects on the sinual purpose • Message indicator • Number of projects on the sinual purpose • Message buffer — Number of characters per message • Number of process values per message • Number of process values per message • Number of projects on the sinual purpose • Message indicator • Message indicator • Message indicator • Message indicator • Number of entries • Circulating buffer — was per data record • Number of recipes • Olata records per recipe • Solo • Data records per recipe • Solo • Entries per data record • Number of variables per device • Number of variables per screen • Number of variables per	Applications/options	
Pocket Excel PDF Viewer PDF Viewer Media Player No SIMATIC WinCC Sm@rtServer SIMATIC WinCC Audit Yes Number of Visual Basic Scripts Task planner Number of characters per info text Number of projects (internal) Number of projects (internal) Number of projects (external) Number of projects (external) Number of alarm classes Bit messages Number of bit messages Number of analog messages Number of projects (internal) Number of alarm classes System Number of alarm classes System ressages Number of analog messages Number of analog messages Number of analog messages Number of projects (internal) Number of projects (internal) Number of projects (internal) Number of alarm classes System (internal) Number of projects (internal) Number of entries Number of projects (internal) Number of projects (internal) Number of internal recipe memory Number of recipes Number of recipes Number of variables per recipe Number of variables per device Number of variables per device Number of variables per screen	Web browser	Yes
	Pocket Word	No
	Pocket Excel	No
	PDF Viewer	Yes
	Media Player	No
SIMATIC WINCC Audit Yes		Yes
Number of Visual Basic Scripts		Yes
Task planner • time-controlled • task-controlled Pyes Help system • Number of characters per info text • Number of projects (internal) • Number of projects (internal) • Number of projects (external) • Number of alarm classes • Number of alarm classes • Number of bit messages — Number of bit messages — Number of analog messages — Number of analog messages — Number of analog messages • System ressages HMI • System event, more (SIMATIC S7, SINUMERIK, SIMOTION)) • Number of characters per message • Number of characters per message • Number of process values per message • Acknowledgment groups • Message indicator • Message indicator • Message indicator • Wes • Message indicator • Ves • Message buffer — Number of entries — circulating buffer — ves — maintenance-free • Yes Recipe management • Number of recipes • Data records per recipe • Soo • Entries per data record • I 1000 • Size of internal recipe memory • Recipe memory expandable • Number of variables per device • Number of variables per screen • Limit values		
• time-controlled Yes • task-controlled Yes Help system • Number of characters per info text 500 Multiproject • Number of projects (internal) 0 • Number of projects (external) 0 • Number of alarm classes 32 • Bit messages system • Number of alarm classes • Number of bit messages 4 000 • Analog messages 200 • Number of bit messages 200 • Number of nalog messages 200 • System messages HMI Yes • System messages HMI Yes • System yeart, more (SIMATIC S7, SINUMERIK, SIMOTION,) Yes • Number of cracacters per message 80 • Number of process values 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 • Recipe management Yes • Data records per recipe 500		
Elejs ystem		Yes
Help system Number of characters per info text Number of projects (internal) Number of projects (external) Number of projects (external) Number of projects (external) Number of alarm classes Number of bit messages Number of bit messages Number of analog messages Number of procedure System messages HMI System event, more (SIMATIC S7, SINUMERIK, SIMOTION,) Number of characters per message Acknowledgment groups Acknowledgment groups Message indicator Message indicator Message indicator Message buffer Number of entries Number of entries Recipe management Number of recipes Data records per recipe Entries per data record I 1000 Size of internal recipe memory Recipe memory expandable Yes Variables Number of variables per device Number of variables per screen A00 Limit values		
Number of characters per info text Number of projects (internal) Number of projects (external) Number of projects (external) Number of projects (external) Number of alarm classes Number of alarm classes Number of bit messages Number of bit messages Number of analog messages Number of characters per message Number of characters per message Number of process values per message Number of process values per message Number of process values per message Nessage indicator Nessage indicator Nessage indicator Nessage of entries Number of recipes Number of variables per device Number of variables per screen		
Multiproject		500
Number of projects (internal) Number of projects (external) Number of projects (external) Number of alarm classes Number of alarm classes Number of bit messages Number of bit messages Number of analog messages Number of analog messages Number of analog messages Number of salarm number procedure System event, more (SIMATIC S7, SINUMERIK, SIMOTION,) Number of characters per message Number of process values per message Number of process values per message Nessage indicator Nessage indicator Number of entries Number of the classes of the classe		
● Number of projects (external) 0 Message system 32 ● Bit messages 4 000 ● Analog messages 4 000 ● 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 7 — Number of entries 1 024 — Circulating buffer Yes — maintenance-free Yes Recipe management Yes • Number of recipes 300 • Data records per recipe 500 • Entries per data record 1 000 • Size of internal recipe memory 2 Mbyte • Recipe memory expandable Yes Variables • Number of variables per screen 400 • Limit values Yes		0
● Number of alarm classes 32 ● Bit messages 4 000 ● Analog messages 4 000 ● 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 1024 — Circulating buffer Yes — retentive Yes — maintenance-free Yes Recipe management 1000 ● Data records per recipe 500 ● Entries per data record 1 000 ● Size of internal recipe memory 2 Mbyte ● Recipe memory expandable Yes Variables Number of variables per screen 400 • Limit values Yes		
 Number of alarm classes Bit messages — Number of bit messages 4 000 Analog messages — Number of analog messages S7 alarm number procedure System messages HMI System event, more (SIMATIC S7, SINUMERIK, SIMOTION,) Number of characters per message Number of process values per message Acknowledgment groups Message indicator Message buffer Number of entries Circulating buffer retentive maintenance-free Recipe management Number of recipes Data records per recipe Entries per data record 1 000 Size of internal recipe memory Recipe memory expandable Ves Variables Number of variables per device Number of variables per screen 400 Limit values 		
- Number of bit messages Analog messages - Number of analog messages 200 S 7 alarm number procedure System messages HMI System went, more (SIMATIC S7, SINUMERIK, SIMOTION,) Number of characters per message Number of process values per message Acknowledgment groups Yes Message indicator Message buffer - Number of entries - Number of entries - Circulating buffer - retentive - maintenance-free Recipe management Number of recipes Data records per recipe Entries per data record Size of internal recipe memory Recipe memory expandable Yes Variables Number of variables per screen Number of variables per screen Number of variables per screen Analog messages 200 Ves 80 40 40 400 Ves 200 Ves 400 Ves		32
- Number of bit messages Analog messages - Number of analog messages 200 S 7 alarm number procedure System messages HMI System went, more (SIMATIC S7, SINUMERIK, SIMOTION,) Number of characters per message Number of process values per message Acknowledgment groups Yes Message indicator Message buffer - Number of entries - Number of entries - Circulating buffer - retentive - maintenance-free Recipe management Number of recipes Data records per recipe Entries per data record Size of internal recipe memory Recipe memory expandable Yes Variables Number of variables per screen Number of variables per screen Number of variables per screen Analog messages 200 Ves 80 40 40 400 Ves 200 Ves 400 Ves	Bit messages	
Analog messages — Number of analog messages S7 alarm number procedure System messages HMI System event, more (SIMATIC S7, SINUMERIK, SIMOTION,) Number of characters per message Number of process values per message Acknowledgment groups Acknowledgment groups Message indicator Message buffer — Number of entries Message buffer — Number of entries Total time buffer — retentive — retentive — maintenance-free Recipe management Number of recipes Data records per recipe Entries per data record Entries per data record Size of internal recipe memory Recipe memory expandable Yes Variables Number of variables per device Number of variables per screen A00 Limit values	_	4 000
- Number of analog messages 200 • S7 alarm number procedure Yes • System messages HMI Yes • System event, more (SIMATIC S7, SINUMERIK, SIMOTION,) • Number of characters per message 80 • Number of process values per message 8 • Acknowledgment groups Yes • Message indicator Yes • Message buffer - Number of entries 1024 - Circulating buffer Yes - retentive Yes - maintenance-free Yes Recipe management • Number of recipes 300 • Data records per recipe 500 • Entries per data record 1000 • Size of internal recipe memory 2 Mbyte • Recipe memory expandable Yes Variables • Number of variables per device 400 • Number of variables per screen 400 • Limit values		
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System messages HMI System event, more (SIMATIC S7, SINUMERIK, SIMOTION,) Number of characters per message Number of process values per message Acknowledgment groups Message indicator Message buffer Number of entries Circulating buffer Message buffer Wes Wes Wes Wes Wes Wes Recipe management Number of recipes Sudo Data records per recipe Sudo Entries per data record 1 000 Size of internal recipe memory Recipe memory expandable Yes Variables Number of variables per device Number of variables per screen Number of variables per screen Au00 Limit values Yes		
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Message indicator Message buffer Number of entries Circulating buffer Yes retentive maintenance-free Yes Recipe management Number of recipes Data records per recipe Entries per data record Size of internal recipe memory Recipe memory expandable Variables Number of variables per device Number of variables per screen Number of variables per screen Number of variables per screen Limit values Message indicator Yes 1 024 1 024 1 024 1 024 1 024 1 024 1 024 1 024 1 000 2 Mbyte 2 048 4 00 4 00 Limit values Yes		
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- retentive Yes - maintenance-free Yes Recipe management Number of recipes 300 Data records per recipe 500 Entries per data record 1 000 Size of internal recipe memory 2 Mbyte Recipe memory expandable Yes Variables Number of variables per device 2 048 Number of variables per screen 400 Limit values Yes		
- maintenance-free Yes Recipe management Number of recipes 300 Data records per recipe 500 Entries per data record 1000 Size of internal recipe memory 2 Mbyte Recipe memory expandable Yes Variables Number of variables per device 2 048 Number of variables per screen 400 Limit values Yes	_	
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 Data records per recipe Entries per data record Size of internal recipe memory Recipe memory expandable Variables Number of variables per device Number of variables per screen Limit values 500 1000 2 Mbyte Yes 		
 Entries per data record Size of internal recipe memory Recipe memory expandable Variables Number of variables per device Number of variables per screen Limit values 1 000 2 Mbyte Yes 		
 Size of internal recipe memory Recipe memory expandable Variables Number of variables per device Number of variables per screen Limit values 2 Mbyte Yes 		
 Recipe memory expandable Variables Number of variables per device Number of variables per screen Limit values Yes 		
Variables ● Number of variables per device 2 048 ● Number of variables per screen 400 ● Limit values Yes		
 Number of variables per device Number of variables per screen Limit values 2 048 400 Yes 		Yes
 Number of variables per screen Limit values Yes 		
• Limit values Yes		
Multiplexing		
	 Multiplexing 	Yes

21 1	V.
• Structures	Yes
Arrays	Yes
Images	
 Number of configurable images 	500
 Permanent window/default 	Yes
 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
I/O fields	Yes
 Graphic I/O fields (graphics list) 	Yes
Symbolic I/O fields (text list)	Yes
Date/time fields	Yes
Switches	Yes
Graphic display	Yes
• Icons	Yes
Geometric objects	Yes
Geometric objects Complex image objects	163
	20
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
f(x) trend view	Yes
 System diagnostics view 	Yes
Media Player	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 graphics lists per project Number of entries per graphics list	500
	300
Archiving	50
Number of archives per device Number of archives per archives	50
Number of entries per archive	20 000
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	No
— RDB	Yes
Security	
Number of user groups	50
Number of user rights	32
- Humber of door fights	VL

Number of users	50
Password export/import	Yes
SIMATIC Logon	Yes
Logging through printer	
• Alarms	Yes
Electronic print to file	Yes; PDF, HTML
Character sets	
Keyboard fonts	
— US English	Yes
Transfer (upload/download)	
MPI/PROFIBUS DP	No
• USB	No
• Ethernet	Yes
Wireless LAN	No
using external storage medium	No
Process coupling	
• S7-1200	Yes
• S7-1500	Yes
• S7-200	Yes
• S7-300/400	Yes
• LOGO!	Yes
• WinAC	No
SINUMERIK	Yes
• SIMOTION	Yes
 Allen Bradley (EtherNet/IP) 	Yes
 Allen Bradley (DF1) 	No
 Mitsubishi (MC TCP/IP) 	Yes
Mitsubishi (FX)	No
OMRON (FINS TCP)	Yes
 OMRON (LINK/Multilink) 	No
 Modicon (Modbus TCP/IP) 	Yes
Modicon (Modbus)	No
Service tools/configuration aids	
 Backup/Restore manually 	Yes
 Backup/Restore automatically 	Yes
 Simulation 	Yes
 Device switchover 	Yes
Peripherals/Options	
Printer	Yes
SIMATIC HMI MM memory card: Multi Media Card	Yes
SIMATIC HMI SD memory card: Secure Digital memory	Yes
card	
USB memory	Yes
Network camera	Yes
Additional software components loadable	Yes; SIMATIC options
Mechanics/material	
Enclosure material (front)	
Plastic	Yes
 Aluminum 	No
Stainless steel	No
Weights	
Weight (without packaging)	1.48 kg
Weight (with packaging)	1.8 kg
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