## **SIEMENS**

## **Data sheet**



SIMATIC HMI TP1500 Comfort, Comfort Panel, touch operation, 15" widescreen TFT display, 16 million colors, PROFINET interface, MPI/PROFIBUS DP interface, 24 MB configuration memory, WEC 2013, configurable as of WinCC Comfort V14 SP1 with HSP, ambient temperature up to 45  $^{\circ}\text{C}$ 

General information	
Product type designation	TP1500 Comfort
Display	
Design of display	TFT
Screen diagonal	15.4 in
Display width	331.2 mm
Display height	207 mm
Number of colors	16 777 216
Resolution (pixels)	
<ul> <li>Horizontal image resolution</li> </ul>	1 280 pixel
Vertical image resolution	800 pixel
Backlighting	
<ul> <li>MTBF backlighting (at 25 °C)</li> </ul>	80 000 h
Backlight dimmable	Yes; LED, dimmable
Control elements	
Keyboard fonts	
<ul> <li>Function keys</li> </ul>	
<ul> <li>Number of function keys</li> </ul>	0
<ul> <li>Keys with LED</li> </ul>	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	
<ul> <li>Direct keys (touch buttons as S7 input I/O)</li> </ul>	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
Rated value (DC)	24 V
permissible range, lower limit (DC)	19.2 V
permissible range, upper limit (DC)	28.8 V
Input current	
Current consumption (rated value)	1.7 A
Starting current inrush I²t	0.5 A²·s

Power	
Active power input, typ.	41 W
Processor	
Processor type	X86
Memory	
Flash	Yes
RAM	Yes
Memory available for user data	24 Mbyte
Type of output	
Info LED	No
Power LED	No
Error LED	No
Acoustics	
Buzzer	No
Speaker	Yes
Time of day	
Clock	
Hardware clock (real-time)	Yes
Software clock	Yes
• retentive	Yes; Back-up duration typically 6 weeks
<ul><li>synchronizable</li></ul>	Yes
Interfaces	
Number of industrial Ethernet interfaces	2; 2 ports (switch) + independent port
Number of RS 485 interfaces	1; RS 422 / 485 combined
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 20 mA interfaces (TTY)	0
Number of parallel interfaces	0
Number of other interfaces	0
Number of SD card slots	2
With software interfaces	No
Industrial Ethernet	
Industrial Ethernet status LED	3
Number of ports of the integrated switch	2
Protocols	
PROFINET	Yes
Supports protocol for PROFINET IO	Yes
IRT	Yes; WinCC V14 SP1 HSP or higher
PROFIBUS	Yes
EtherNet/IP	Yes
MPI  Protocols (Ethernet)	Yes
Protocols (Ethernet)  • TCP/IP	Yes
TCP/IP      DHCP	Yes
SNMP	Yes
• SNMP • DCP	Yes
• LLDP	Yes
WEB characteristics	100
HTTP	Yes
• HTTPS	Yes
• HTML	Yes
• XML	Yes
• CSS	Yes
Active X	Yes
JavaScript	Yes
Java VM	No
Redundancy mode	
Media redundancy	
— MRP	Yes

Further protocols	
CAN	No
MODBUS	Yes
Interrupts/diagnostics/status information	165
Diagnoses	Voc. C7 controller
Diagnostic information readable  EMC	Yes; S7 controller
Emission of radio interference acc. to EN 55 011	
	Yes
<ul> <li>Limit class A, for use in industrial areas</li> <li>Limit class B, for use in residential areas</li> </ul>	No
Degree and class of protection	NO
IP (at the front)	IP65
IP (rear)	IP20
NEMA (front)	11 20
Enclosure Type 4 at the front	Yes
Enclosure Type 4x at the front     Enclosure Type 4x at the front	Yes
Standards, approvals, certificates	165
CE mark	Yes
CULus	Yes; In application process
FM approval	Yes
RCM (formerly C-TICK)	Yes
KC approval	Yes
EAC (formerly Gost-R)	Yes
Use in hazardous areas	
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; For inscription on device rating plate
• cULus Class II Division 2	No
• FM Class I Division 2	Yes
FM Class II Division 2	No
Marine approval	
Germanischer Lloyd (GL)	Yes; Available soon
American Bureau of Shipping (ABS)	Yes; Available soon
Bureau Veritas (BV)	Yes
<ul> <li>Det Norske Veritas (DNV)</li> </ul>	Yes; Available soon
<ul> <li>Korean Register of Shipping (KRS)</li> </ul>	Yes; Available soon
<ul> <li>Lloyds Register of Shipping (LRS)</li> </ul>	Yes; Available soon
<ul> <li>Nippon Kaiji Kyokai (Class NK)</li> </ul>	Yes; Available soon
<ul> <li>Polski Rejestr Statkow (PRS)</li> </ul>	No
Chinese Classification Society (CCS)	Yes; 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 °C
— For vertical installation, max.	45 °C
Operation (max. tilt angle)	
— At maximum tilt angle, min.	0 °C
— At maximum tilt angle, max.	40 °C
Operation (vertical installation, portrait format)	
— For vertical installation, min.	0 °C
— For vertical installation, max.	40 °C
Operation (max. tilt angle, portrait format)	
— At maximum tilt angle, min.	0 °C
— At maximum tilt angle, max.	40 °C
Ambient temperature during storage/transportation	

### Commonstration   **Operation**, max**	e min	20 °C
Selective humility   Operation max.   90 %; no condensation   Operation yeakens   Op	• min.	-20 °C
Operation, max		
Operating systems   Proprietary   No		90 %: no condensation
Sectional peraints   Section   Sec	·	55 76, NO CONTROLISATION
windows CE		No
• Windows CE		INO
Configuration / Invader         Yes           Message indicator         Yes           Azim system (incl. buffer and acknowledgment)         Yes           Process value display (output)         Yes           Process value display (output)         Yes           Recipe management         Yes           Configuration software         ****           **** STEP 7 Basic (TIA Portal)         No           **** Winch Centible Compact         No           **** Winch Centible Advanced         No           **** Winch Centible Advanced         No           **** Winch Centible Advanced         No           **** Winch Centre (TIA Portal)         Yes; Y14 SP1 HSP and higher           **** Winche Centre (TIA Portal)         Yes; Y14 SP1 HSP and higher           **** Winches of anine-fundine languages         32           **** Number of anine-fundine languages         32           **** Number of anine-fundine languages         32           **** Recipitationship winder Winder (TIA Portal)         Yes           **** Languages per project         32           **** Languages         4           **** Protect Languages         32           **** Protect Languages         32           **** Protect Languages         Yes <t< td=""><td></td><td>Yes: Windows Embedded Compact 2013</td></t<>		Yes: Windows Embedded Compact 2013
Message indicator         Yes           Alam system (incl. buffer and acknowledgment)         Yes           Process value default (inclut) possible         Yes           Process value default (inclut) possible         Yes           Recipe management         Yes           Configuration software         ************************************		100, 11110010 <u>1</u> 11100000 00111puot <u>1</u> 2010
Alam system (Incl. buffer and acknowledgment) Process value deslay (output) Process value deslay (output) Process value deslay (includ) Process value (in		Yes
Process value display (output)   Yes		
Process value default (unput) possible		Yes
STEP 7 Basic (TIA Portal)	Process value default (input) possible	Yes
	Recipe management	Yes
■ STEP 7 Professional (TIA Portal)     ■ WinCC (Excible Compact     ■ WinCC (Excible Standard     ■ WinCC (Excible Advanced     ■ No     ■ WinCC Stasic (TIA Portal)     ■ WinCC Comfort (TIA Portal)     ■ WinCC Professional (TIA Portal)     ■ WinCC Professional (TIA Portal)     ■ Yes, V14 SP1 HSP and higher     ■ WinCC Professional (TIA Portal)     ■ Yes, V14 SP1 HSP and higher      ■ WinCC Professional (TIA Portal)     ■ Yes, V14 SP1 HSP and higher      ■ Vinco Advanced (TIA Portal)     ■ Vinco Professional (TIA Portal)     ■ Vin	Configuration software	
WinCC flexible Compact   No   WinCC flexible Advanced   No   WinCC flexible Advanced   No   WinCC Sasic (TIA Portal)   No   WinCC Comfort (TIA Portal)   Yes; V14 SP1 HSP and higher   WinCC Advanced (TIA Portal)   Yes; V14 SP1 HSP and higher   WinCC Advanced (TIA Portal)   Yes; V14 SP1 HSP and higher   WinCC Professional (TIA Portal)   Yes; V14 SP1 HSP and higher   WinCC Professional (TIA Portal)   Yes; V14 SP1 HSP and higher   WinCC Professional (TIA Portal)   Yes; V14 SP1 HSP and higher   WinCC Professional (TIA Portal)   Yes   V14 SP1 HSP and higher   WinCC Professional (TIA Portal)   Yes   V14 SP1 HSP and higher   Yes	<ul> <li>STEP 7 Basic (TIA Portal)</li> </ul>	No
■ WinCC flexible Standard     ■ WinCC Basic (TIA Portal)     ■ WinCC Comfort (TIA Portal)     ■ WinCC Comfort (TIA Portal)     ■ WinCC Comfort (TIA Portal)     ■ WinCC Portessional (TIA Portal)     ■ WinCommon (TIA Portal)     ■ Win	<ul> <li>STEP 7 Professional (TIA Portal)</li> </ul>	No
	WinCC flexible Compact	No
WinCC Comfort (TIA Portal) WinCC Comfort (TIA Portal) WinCC Confort (TIA Portal) WinCC Avanced (TIA Portal) WinCC Professional (TIA Portal)  Ves: V14 SP1 HSP and higher  Languages  Number of online/runtime languages  Number of online/runtime languages  Number of valuages per project  Substances Ves Project languages Project languages Ves Project Word Ves Number of Ves SiMATIC WinCC Sm@rtServer Ves SiMATIC WinCC Sam@rtServer Ves SiMATIC WinCC Audit Ves Number of Vesual Basic Scripts Ves  Task planner  Number of alarm classes Ves Bit messages Wessage system Number of bit messages Analog messages Wessages Number of bit messages  Number of silam number procedure Ves System messages HMI Ves System messages HMI Ves System messages HMI Ves System messages HMI Ves System revent, more (SIMATIC S7, SINUMERIK, SIMOTION,) Number of characters per message Number of process values per message Acknowledgment groups Ves Message indicator Ves Post Ves	WinCC flexible Standard	No
WinCC Comfort (TIA Portal)     WinCC Advanced (TIA Portal)     WinCC Professional (TIA Portal)     WinCC Professional (TIA Portal)     WinCC Professional (TIA Portal)     WinCC Professional (TIA Portal)  Languages      Number of online/runtime languages     Number of online/runtime languages     Number of online/runtime languages     Number of online/runtime languages     Number of visital Basic Scripts  Web browser     Pocket Word     Pocket Word     Pocket Excel     Pop Viewer     Number of Visual Basic Scripts  Ves  Number of Visual Basic Scripts  Task planner     It im-controlled     Yes     Number of alam classes     Number of thit messages     Number of characters per message     System event, more (SIMATIC ST, SINUMERIK, SIMOTION,)     Number of characters per message     Number of recipes     Data records per recipe     Number of Long     Number of recipes     Number of recipes     Number of recipes     Number of recipes     Data records per recipe     Number of Long     Number of recipes     Numb	WinCC flexible Advanced	No
WinCC Professional (TIA Portal) Yes; V14 SP1 HSP and higher WinCC Professional (TIA Portal) Yes; V14 SP1 HSP and higher  WinCC Professional (TIA Portal)  Number of online/runtime languages  Number of online/runtime languages  Languages  Languages  Languages  Languages y  Libraries y  Libra	<ul> <li>WinCC Basic (TIA Portal)</li> </ul>	No
WinCC Professional (TIA Portal)  Languages  Number of online languages  Number of online invitime languages  Number of characters per message  Number of claracters per message  Number of claracters per message  Number of posses values per message  Number of characters per message  Number of claracters per message  Number of characters per message  Number of characters per message  Number of claracters per message  Number of claracters per message  Number of characters per message  Number of process values per message  Numb	WinCC Comfort (TIA Portal)	Yes; V14 SP1 HSP and higher
Online languages  Number of online/runtime languages  Number of online/runtime languages  Languages per project  Libraries  Applications/options  Web browser  Pocket Word  Pocket Excel  Pocket Excel  Pot Newer  SiMATIC WinCC Sm@rtServer  SiMATIC WinCC Audit  Yes  SiMATIC WinCC Audit  Yes  Task planner  time-controlled  Stask-controlled  Pass ystem  Number of latim classes  Analog messages  Number of analog messages  Analog messages  Number of analog messages  System event, more (SIMATIC ST, SINUMERIK, SINOTION))  Number of poresses value per message  Number of poresses value per message  Number of process value per message  Number of corrects  Number of process value per message  Number of process value per message  Number of erceipes  Nessage indicator  Number of process value per message  Acknowledgement groups  Nessage indicator  Number of frecipes  Data records per recipe  1000	<ul> <li>WinCC Advanced (TIA Portal)</li> </ul>	Yes; V14 SP1 HSP and higher
Online languages         32           Project languages         32           * Languages per project         32           Functionality under WinCC (TIA Portal)           Libraries         Yes           Applications/options         **           * Web browser         Yes           * Pocket Word         Yes           * Pocket Excel         Yes           * POF Viewer         Yes           * Media Player         Yes           * SIMATIC WinCC Sm@rtServer         Yes           * SIMATIC WinCC Sudit         Yes           Number of Visual Basic Scripts         Yes           Task planner         **           * time-controlled         Yes           * time-controlled         Yes           * Number of alarm classes         32           * Bit messages         **           * Number of bit messages         6 000           * Analog messages         200           * 37 alarm number procedure         Yes           * System messages HMI         Yes           * System ween, more (SIMATIC S7, SINUMERIK, SIMOTION,)         Yes           * Number of characters per message         80           * Number of characters per message         8<	WinCC Professional (TIA Portal)	Yes; V14 SP1 HSP and higher
Number of online/runtime languages  Languages per project  Libraries  Applications/options  Ves  Applications/options  Veb browser  Pocket Word  Pocket Excel  Pocket Excel  Pocket Excel  SIMATIC WinCC Sm@rtServer  SIMATIC WinCC Audit  Number of Visual Basic Scripts  Task planner  I time-controlled  Stak-controlled  Stak-contro	Languages	
Languages   Languages per project   32	Online languages	
• Languages per project 32 Functionality under WinCC (TIA Portal)  Libraries Yes Applications/cyptions  • Web browser Yes • Pocket Word Yes • Pocket Word Yes • PDF Viewer Yes • Media Player Yes • SIMATIC WinCC Sm@rtServer Yes • SIMATIC WinCC SamertServer Yes • SiMATIC WinCC Audit Yes  Number of Visual Basic Scripts Yes  Task planner • ime-controlled Yes • task-controlled Yes • Number of alarm classes • Fit messages — Number of bit messages — Number of bit messages • Number of analog messages — Number of analog messages — Number of malog messages  • System messages HMI • System event, more (SIMATIC S7, SINUMERIK, SIMOTION,) • Number of process values per message • Message indicator  Recipe management • Number of recipes • Data records per recipe • Data records per recipe		32
Eutrationality under WinGC (TIA Portal)  Libraries  Applications/options  • Web browser  • Pocket Word  • Pocket Excel  • PDF Viewer  • Media Player  • SIMATIC WinCC Amult  Ves  • SIMATIC WinCC Audit  Yes  Number of Visual Basic Scripts  Task planner  • time-controlled  Yes  • lask-controlled  Yes  • Bit message system  • Number of bit messages  — Number of bit messages  — Number of of alarm classes  • Analog messages  — Number of analog messages  — Number of analog messages  • S7 alarm number procedure  • System messages HIII  • System event, more (SIMATIC S7, SINUMERIK, SINIOTION,)  • Number of process values per message  • Acknowledgment groups  • Acknowledgment groups  • Message indicator  Recipe management  • Number of recipes  • Data records per recipe  • Data records per recipe	Project languages	
Libraries Yes Applications/options  • Web browser Yes • Pocket Word Yes • Pocket Excel Yes • PoF 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 alam classes • Number of bit messages  — Number of bit messages  — Number of analog messages  — Number of analog messages  • System messages HMI • System event, more (SIMATIC S7, SINUMERIK, SIMOTION,) • Number of brocess values per message • Acknowledgment groups • Message indicator • Nessage indicator • Number of process values per message • Acknowledgment groups • Message indicator • Nessage indicator • Number of process values per message • Acknowledgment groups • Message indicator • Number of frecipes • Data records per recipe • Data records per recipe		32
Applications/options  Web browser Pocket Word Yes Pocket Word Pocket Excel PDF Viewer Media Player Media Player SIMATIC WinCC Sm@rtServer SIMATIC WinCC Audit Yes Number of Visual Basic Scripts Yes Lask-controlled Isak-controlled Sessage system  Number of alarm classes Isit messages Number of alarm classes Sidam mumber procedure Number of analog messages Number of analog messages Number of analog messages Number of analog messages Analog messages System west messages System event, more (SIMATIC ST, SINUMERIK, SIMOTION,) Number of process values per message Acknowledgment groups Acknowledgment groups Message indicator Recipe management Number of recipes Data records per recipe Data records per recipe  Number of process values per message Sumbar of process values per message Number of process values per message N		
Web browser Pocket Word Pocket Excel Pocket Excel Pob Viewer Media Player SiMATIC WinCC Sm@rtServer SiMATIC WinCc Audit Yes SiMATIC WinCc Audit Yes SiMATIC WinCc Audit Yes Simatic Wincc Audit Yes  *** ves  *** simatic Wincc Audit ** ves  *** ves  *** simatic Wincc Audit ** ves  *** ves  **		Yes
Pocket Word     Pocket Excel     Pocket Excel     Pob Viewer     Media Player     Media Player     SIMATIC WinCC Sm@rtServer     SIMATIC WinCC Audit     Yes     SIMATIC WinCC Audit     Yes  Number of Visual Basic Scripts  Task planner     • time-controlled     Yes  Message system      Number of alarm classes     SI Bit messages     — Number of bit messages     — Number of bit messages     — Number of analog messages     — Number of analog messages     S7 alarm 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     Acknowledgment groups     Message indicator     Yes  Recipe management     Number of recipes     Data records per recipe     1 000		
Pocket Excel     PDF Viewer     Media Player     Media Player     SIMATIC WinCC Sm@rtServer     SIMATIC WinCC Audit     Yes  Number of Visual Basic Scripts  Task planner     • time-controlled     Yes  Message system  Number of alarm classes     SIB t messages     — Number of bit messages     — Number of analog messages     — Number of analog messages     System event, more (SIMATIC S7, SINUMERIK, SIMOTION,)     Number of process values per message     Number of process values per message     Number of process values per message     Number of ceipes     Message indicator     Yes  Message indicator  Number of recipes     Mosmore of process     Number of process     Number of process values per message     Number of process values per message     Number of recipes		
PDF Viewer  Media Player  Media Player  SIMATIC WinCC Sm@rtServer  SIMATIC WinCC Audit  Yes  Number of Visual Basic Scripts  Task planner  time-controlled  Yes  Message system  Number of alam classes  Number of bit messages  Number of bit messages  Number of analog messages  Number of process values per message  Number of process values per message  Acknowledgment groups  Message indicator  Recipe management  Number of recipes  Data records per recipe  1000		
Media Player SIMATIC WinCC Sm@rtServer SIMATIC WinCC Audit Yes  Number of Visual Basic Scripts Yes  Task planner Inter-controlled Yes  Number of alarm classes Sages system  Number of alarm classes Sit messages — Number of bit messages — Number of analog messages — Number of analog messages System number procedure System number procedure System event, more (SIMATIC S7, SINUMERIK, SIMOTION,) Number of characters per message  Acknowledgment groups Message indicator  Nesses Sou  Number of recipes		
● SIMATIC WinCC Sm@rtServer         Yes           Number of Visual Basic Scripts         Yes           Task planner         • time-controlled           • time-controlled         Yes           • task-controlled         Yes           Message system         • Number of alarm classes           • Number of bit messages         6 000           • Analog messages         — Number of analog messages           — Number of analog messages         200           • S7 alarm number procedure         Yes           • System messages HMI         Yes           • System event, more (SIMATIC S7, SINUMERIK, SIMOTION,)         Yes           • Number of characters per message         80           • Number of process values per message         8           • Acknowledgment groups         Yes           • Message indicator         Yes           Recipe management         • Number of recipes           • Data records per recipe         1 000		
SIMATIC WinCC Audit  Number of Visual Basic Scripts  Task planner  • time-controlled • task-controlled  Number of alarm classes • Number of alarm classes • Bit messages  — Number of bit messages  — Number of analog messages  — Number of analog messages  • Aranlog messages  — Number of analog messages  200 • S7 alarm number procedure • System messages HMI • System event, more (SIMATIC S7, SINUMERIK, SIMOTION,)  • Number of characters per message  • Acknowledgment groups • Acknowledgment groups • Message indicator  Recipe management  • Number of recipes • Data records per recipe  1 000	•	
Number of Visual Basic Scripts  Task planner  • time-controlled  • task-controlled  • task-controlled  • Number of alarm classes  • Number of bit messages  — Number of bit messages  6 000  • Analog messages  — Number of analog messages  200  • S7 alarm number procedure  • System messages HMI  • System event, more (SIMATIC S7, SINUMERIK, SIMOTION,)  • Number of characters per message  • Acknowledgment groups  • Acknowledgment groups  • Message indicator  Recipe management  • Number of recipes  • Data records per recipe  1 000		
Task planner  • time-controlled  • task-controlled  • task-controlled  • Number of alarm classes  • Number of bit messages  — Number of analog messages  — Number of analog messages  — Number of analog messages  200  • S7 alarm number procedure  • System messages HMI  • System event, more (SIMATIC S7, SINUMERIK, SIMOTION,)  • Number of characters per message  • Acknowledgment groups  • Acknowledgment groups  • Message indicator  Recipe management  • Number of recipes  • Data records per recipe  1 000		
<ul> <li>time-controlled</li> <li>task-controlled</li> <li>Yes</li> </ul> Message system <ul> <li>Number of alarm classes</li> <li>Bit messages</li> <li>Number of bit messages</li> <li>Analog messages</li> <li>Number of analog messages</li> <li>Number of analog messages</li> <li>S7 alarm number procedure</li> <li>System messages HMI</li> <li>System event, more (SIMATIC S7, SINUMERIK, SIMOTION,)</li> <li>Number of characters per message</li> <li>Number of process values per message</li> <li>Acknowledgment groups</li> <li>Message indicator</li> <li>Number of recipes</li> <li>Number of recipes</li> <li>Data records per recipe</li> <li>1 000</li> </ul>	·	165
**esk-controlled**  Message system*  Number of alarm classes 32 Bit messages 6000 Analog messages 6000  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 80 Acknowledgment groups Yes Message indicator Yes Secipe management  Number of recipes 500 Data records per recipe 1000	•	Vec
Message system  Number of alarm classes Bit messages Number of bit messages Analog messages Number of analog messages Number of analog messages System 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  Recipe management Number of recipes Data records per recipe  1000		
Number of alarm classes Bit messages — Number of bit messages 6 000  Analog messages — Number of analog messages  ST alarm number procedure System messages HMI System vent, more (SIMATIC ST, SINUMERIK, SIMOTION,) Number of characters per message Number of process values per message Acknowledgment groups Acknowledgment groups Message indicator  Recipe management Number of recipes Data records per recipe  1 000		100
<ul> <li>Bit messages     — Number of bit messages     6 000</li> <li>Analog messages     — Number of analog messages     200     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     Recipe management     Number of recipes     Data records per recipe     1 000</li> </ul>		32
<ul> <li>Number of bit messages</li> <li>Analog messages</li> <li>Number of analog messages</li> <li>S7 alarm number procedure</li> <li>System messages HMI</li> <li>System event, more (SIMATIC S7, SINUMERIK, SIMOTION,)</li> <li>Number of characters per message</li> <li>Number of process values per message</li> <li>Acknowledgment groups</li> <li>Message indicator</li> <li>Recipe management</li> <li>Number of recipes</li> <li>Data records per recipe</li> <li>6 000</li> <li>200</li> <li>Yes</li> <li>S00</li> <li>Data records per recipe</li> <li>200</li> <li>Yes</li> <li>Soo</li> <li>Data records per recipe</li> <li>200</li> <li>Yes</li> </ul>		
<ul> <li>Analog messages <ul> <li>Number of analog messages</li> <li>\$7 alarm number procedure</li> <li>\$yes</li> </ul> </li> <li>\$ystem messages HMI</li> <li>\$yes</li> <li>\$yes mevent, more (SIMATIC \$7, \$INUMERIK, \$yes sIMOTION,)</li> <li>Number of characters per message</li> <li>Number of process values per message</li> <li>Acknowledgment groups</li> <li>Acknowledgment groups</li> <li>Message indicator</li> <li>Recipe management</li> <li>Number of recipes</li> <li>Data records per recipe</li> <li>1 000</li> </ul>	<u> </u>	6 000
<ul> <li>Number of analog messages</li> <li>\$7 alarm number procedure</li> <li>\$yes</li> <li>\$ystem messages HMI</li> <li>\$yes</li> <li>\$yes</li> <li>\$Number of (SIMATIC S7, SINUMERIK, SIMOTION,)</li> <li>Number of characters per message</li> <li>Number of process values per message</li> <li>Acknowledgment groups</li> <li>Message indicator</li> <li>Recipe management</li> <li>Number of recipes</li> <li>Number of recipes</li> <li>Data records per recipe</li> </ul>	-	
<ul> <li>S7 alarm number procedure</li> <li>System messages HMI</li> <li>System event, more (SIMATIC S7, SINUMERIK, SIMOTION,)</li> <li>Number of characters per message</li> <li>Number of process values per message</li> <li>Acknowledgment groups</li> <li>Message indicator</li> <li>Recipe management</li> <li>Number of recipes</li> <li>Data records per recipe</li> </ul>		200
<ul> <li>System messages HMI</li> <li>System event, more (SIMATIC S7, SINUMERIK, SIMOTION,)</li> <li>Number of characters per message</li> <li>Number of process values per message</li> <li>Acknowledgment groups</li> <li>Message indicator</li> <li>Recipe management</li> <li>Number of recipes</li> <li>Data records per recipe</li> </ul>		
System event, more (SIMATIC S7, SINUMERIK, SIMOTION,)  Number of characters per message Number of process values per message Acknowledgment groups Message indicator Yes  Recipe management  Number of recipes Data records per recipe  1 000	· · · · · · · · · · · · · · · · · · ·	
<ul> <li>Number of process values per message</li> <li>Acknowledgment groups</li> <li>Message indicator</li> <li>Recipe management</li> <li>Number of recipes</li> <li>Data records per recipe</li> <li>1 000</li> </ul>	System event, more (SIMATIC S7, SINUMERIK,	
<ul> <li>Acknowledgment groups</li> <li>Message indicator</li> <li>Recipe management</li> <li>Number of recipes</li> <li>Data records per recipe</li> <li>1 000</li> </ul>	Number of characters per message	80
<ul> <li>Message indicator</li> <li>Recipe management</li> <li>Number of recipes</li> <li>Data records per recipe</li> <li>1 000</li> </ul>	·	8
<ul> <li>Message indicator</li> <li>Recipe management</li> <li>Number of recipes</li> <li>Data records per recipe</li> <li>1 000</li> </ul>		Yes
Recipe management  • Number of recipes  • Data records per recipe  1 000		Yes
Data records per recipe     1 000		
	Number of recipes	500
Entries per data record     2 000	Data records per recipe	1 000
	Entries per data record	2 000

Size of internal regine memory	4 Mhyta
<ul> <li>Size of internal recipe memory</li> <li>Recipe memory expandable</li> </ul>	4 Mbyte Yes
Variables	TES
Number of variables per device	4 096
Number of variables per device     Number of variables per screen	400
Limit values	Yes
	Yes
Multiplexing     Structures	Yes
• Structures	Yes
Arrays  Images	TES
Number of configurable images	750
Permanent window/default	Yes
Global image	Yes
Pop-up images	Yes
Slide-in images	Yes
Image selection by PLC	Yes
Image selection by FLC     Image number in the PLC	Yes
	165
Image objects  • Number of objects per image	600
Text fields	Yes
I/O fields	Yes
Graphic I/O fields (graphics list)     Symbolic I/O fields (toxt list)	Yes
Symbolic I/O fields (text list)      Date/time fields	Yes
Date/time fields	Yes
• Switches	Yes
Buttons	Yes
Graphic display	Yes
• Icons	Yes
Geometric objects	Yes
Complex image objects	40
Number of complex objects per screen	40
Alarm view	Yes
• Trend view	Yes
• User view	Yes
Status/control	Yes
Sm@rtClient view	Yes
Recipe view	Yes
• f(x) trend view	Yes
<ul> <li>System diagnostics view</li> </ul>	Yes
Media Player	Yes
HTML browser	Yes
PDF display	Yes
IP camera display	Yes
Bar graphs	Yes
• Sliders	Yes
Pointer instruments	Yes
Analog/digital clock	Yes
Lists	
<ul> <li>Number of text lists per project</li> </ul>	500
<ul> <li>Number of entries per text list</li> </ul>	500
<ul> <li>Number of graphics lists per project</li> </ul>	500
Number of entries per graphics list	500
Archiving	
<ul> <li>Number of archives per device</li> </ul>	50
<ul> <li>Number of entries per archive</li> </ul>	50 000
Message archive	Yes
Process value archive	Yes
Archiving methods	
•	
— Sequential archive	Yes
	Yes Yes

— 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
<ul> <li>Number of users</li> </ul>	50
<ul> <li>Password export/import</li> </ul>	Yes
SIMATIC Logon	Yes
Logging through printer	
<ul> <li>Alarms</li> </ul>	Yes
<ul><li>Report (shift log)</li></ul>	Yes
<ul><li>Hardcopy</li></ul>	Yes
Electronic print to file	Yes; PDF, HTML
Character sets	
<ul> <li>Keyboard fonts</li> </ul>	
— US English	Yes
Transfer (upload/download)	
MPI/PROFIBUS DP	Yes
• USB	Yes
• Ethernet	Yes
using external storage medium	Yes
Process coupling	
• S7-1200	Yes
• S7-1500	Yes
• S7-200	Yes
• S7-300/400	Yes
• LOGO!	Yes
WinAC	Yes
• SINUMERIK	Yes; with SINUMERIK option package
• SIMOTION	Yes
Allen Bradley (EtherNet/IP)	Yes
Allen Bradley (DF1)	Yes
Mitsubishi (MC TCP/IP)	Yes
Mitsubishi (FX)	Yes
OMRON (FINS TCP)	No
OMRON (LINK/Multilink)	Yes
Modicon (Modbus TCP/IP)	Yes
Modicon (Modbus)	Yes
OPC UA Client	Yes
OPC UA Server	Yes
Service tools/configuration aids	
Backup/Restore manually	Yes
Backup/Restore automatically	Yes
Simulation	Yes
Device switchover	Yes
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 You
USB memory  SIMATIC IDC LISP Flashdrive (LISP stick)	Yes Voc. Up to 16 CP
SIMATIC HM LISP 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	415 mm
Height of housing front	310 mm
Mounting cutout, width	396 mm
Mounting cutout, height	291 mm
Overall depth	73.2 mm
Weights	
Weight (without packaging)	4.4 kg

last modified: 3/12/2024 🖸