## **SIEMENS**

## **Data sheet**

SIMATIC HMI TP1500 Comfort Pro, for support arm (expandable, round pipe) and Extension Unit, Comfort Panel, touch operation, 15" widescreen TFT display, 16 million colors, PROFINET interface, MPI/PROFIBUS DP interface, 24 MB configuration memory, WEC 2013, configurable from WinCC Comfort V14 SP1 with HSP



General information	
Product type designation	TP1500 Comfort PRO
Display	
Design of display	TFT
Screen diagonal	15.6 in
Display width	344.2 mm
Display height	193.5 mm
Number of colors	16 777 216
Resolution (pixels)	
<ul> <li>Horizontal image resolution</li> </ul>	1 366 pixel
<ul> <li>Vertical image resolution</li> </ul>	768 pixel
Backlighting	
<ul> <li>MTBF backlighting (at 25 °C)</li> </ul>	50 000 h
<ul> <li>Backlight dimmable</li> </ul>	Yes; 0-100 %
Control elements	
Keyboard fonts	
<ul> <li>Function keys</li> </ul>	
<ul> <li>Number of function keys</li> </ul>	0
<ul> <li>Number of function keys with LEDs</li> </ul>	0
<ul> <li>Keys with LED</li> </ul>	No
System keys	No
<ul> <li>Numeric keyboard</li> </ul>	Yes; Onscreen keyboard
alphanumeric keyboard	Yes; Onscreen keyboard
Touch operation	
Design as touch screen	Yes; Projective-capacitive
Expansions for operator control of the process	
<ul> <li>Direct keys (touch buttons as S7 input I/O)</li> </ul>	40
Installation type/mounting	
Mounting	Support arm
Mounting position	vertical
Mounting in portrait format possible	No
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 concumption (rated value)	15 /
Current consumption (rated value)	1.5 A
Starting current inrush I²t	0.5 A <sup>2</sup> ·s
Power	20.14
Active power input, typ.	36 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
synchronizable	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 other interfaces	0
Number of SD card slots	2
With software interfaces	No 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
PROFIBUS	Yes
	Yes
EtherNet/IP MPI	Yes
Protocols (Ethernet)	1 53
TCP/IP	Yes
• DHCP	Yes
	Yes
SNMP     DCP	Yes
LLDP     WEB characteristics	Yes
HTTP	Yes
• HTTPS	Yes
	Yes
• HTML	
• XML	Yes
• CSS	Yes
Active X     Active Seriet	Yes
JavaScript	Yes
• Java VM	No
Redundancy mode	
Media redundancy	

Futther protocols  CAN No  MODRUS Yes  Interrupt did grostics status information  Diagnoses  Diagno	— MRP	Yes
CAN NODEUS NODEUS NETURE VERSION NO NODEUS NETURE VERSION NO N		163
Hornupts/diagnostics/status information    Diagnoses   Diagnostic information readable   Yes; S7 controller	·	No
Interrupts (disposets information   Diagnoses		
Diagnosis — Diagnosis information readable Yes: \$7 controller  Emission of radio interference acc. to EN 55 011  - Limit class A, for use in industrial areas  - Limit class A, for use in industrial areas  - Limit class A, for use in industrial areas  - Limit class A, for use in industrial areas  - Limit class B, for use in residential areas  No  Degree and class of protection  IP (at the front) IP65  IP (rear) IP65  NEMA (front)  - Enclosure Type 4x at the front  - Yes  Standards, approvals, certificates  - CE mark  - Yes  - CLIUS  - CE mark  - Yes  - CLIUS  - KC approval  - No; Available soon  - Por vertical installation, min.  - For vertical installation, min.  -	Interrupts/diagnostics/status information	
Diagnostic information readable EMC Emission of radio interference acc. to EN 55 011  Limit class A, for use in inclustrial areas Limit class A, for use in inclustrial areas Limit class A, for use in inclustrial areas No Degree and class of protection IP (et the front) IP (et the front) IP (et the front) Emission of radio interference acc. to Emission of Personal Class of protection IP (rear) IP (et a)		
Emission of radio interference acc. to EN 55 011  • Limit class A, for use in inclustrial areas • Limit class B, for use in inclustrial areas • Limit class B, for use in residential areas No Deprea and class of protection  IP (at the front)		Yes; S7 controller
Emission of radio interference acc. to EN 5011  • Limit class B, for use in industrial areas • Limit class B, for use in industrial areas • Limit class B, for use in residential areas • No Degrees and class of protection IP (rear)  IP (at the front)  • Enclosure Type 4 at the front • Yes • Cultus  CE mark • Cultus  CCE mark • Cultus • Yes • Cultus • Yes • Cultus • Yes • Cultus • Yes • Cultus • Continue Type 4 at the front • Yes • Cultus • Yes • Cultus • Continue Type 4 at the front • Yes • Cultus • Yes • Cultus • No, Available soon • No, Available soon • No, Available soon • No, Available soon • No • Anabient conditions • No • No • Anabient temperature during operation • Operation (vertical installation) • For vertical installation, min. • For vertical installation, min		
Degree and class B, for use in residential areas    Pig (at the front)		
Degree and class B, for use in residential areas    Pig (at the front)	Limit class A, for use in industrial areas	Yes
IP (at the front) IP65 IP (rear) IP66 IP (rear) IP66 NEMA (front)  • Enclosure Type 4 at the front Yes  CE mark Yes • CULus Yes • RCM (formerly C-TICK) Yes • RCM (formerly C-TICK) Yes • RCM (formerly Gost-R) No; Available soon  EAC (formerly Gost-R) No; Available soon  Anbient conditions  Suited for indoor use Yes Suited for outdoor use No Ambient temperature during operation Operation (vertical installation) No — 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  Ambient temperature during storage/transportation • min. 20°C • At maximum tilt angle, max. 40°C  Ambient temperature during storage/transportation • min. 90°C • Relative humidity • Operation, max. 90%; no condensation Operation, wax. 90%; no condensation Operation, bester  • Windows CE  • Yes; Windows Embedded Compact 2013  configuration by header  Message indicator Yes  Alam system (inc), buffer and acknowledgment) Yes  Process value default (input) possible Yes  Recipe management Yes  • STEP 7 Professional (TIA Portal) No • STEP 7 Professional (TIA Portal) No • WinCC flexible Standard No • WinCC flexible Standard No • WinCC Gessional (TIA Portal) Yes; V14 SP1 HSP and higher • WinCC Porfessional (TIA Portal) Yes; V14 SP1 HSP and higher • WinCC Centrof (TIA Portal) Yes; V14 SP1 HSP and higher • WinCC Porfessional (TIA Portal) Yes; V14 SP1 HSP and higher • WinCC Porfessional (TIA Portal) Yes; V14 SP1 HSP and higher • WinCC Porfessional (TIA Portal) Yes; V14 SP1 HSP and higher • WinCC Porfessional (TIA Portal) Yes; V14 SP1 HSP and higher • WinCC Porfessional (TIA Portal) Yes; V14 SP1 HSP and higher		No
IP (at the front) IP65 IP (rear) IP66 IP (rear) IP66 NEMA (front)  • Enclosure Type 4 at the front Yes  CE mark Yes • CULus Yes • RCM (formerly C-TICK) Yes • RCM (formerly C-TICK) Yes • RCM (formerly Gost-R) No; Available soon  EAC (formerly Gost-R) No; Available soon  Anbient conditions  Suited for indoor use Yes Suited for outdoor use No Ambient temperature during operation Operation (vertical installation) No — 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  Ambient temperature during storage/transportation • min. 20°C • At maximum tilt angle, max. 40°C  Ambient temperature during storage/transportation • min. 90°C • Relative humidity • Operation, max. 90%; no condensation Operation, wax. 90%; no condensation Operation, bester  • Windows CE  • Yes; Windows Embedded Compact 2013  configuration by header  Message indicator Yes  Alam system (inc), buffer and acknowledgment) Yes  Process value default (input) possible Yes  Recipe management Yes  • STEP 7 Professional (TIA Portal) No • STEP 7 Professional (TIA Portal) No • WinCC flexible Standard No • WinCC flexible Standard No • WinCC Gessional (TIA Portal) Yes; V14 SP1 HSP and higher • WinCC Porfessional (TIA Portal) Yes; V14 SP1 HSP and higher • WinCC Centrof (TIA Portal) Yes; V14 SP1 HSP and higher • WinCC Porfessional (TIA Portal) Yes; V14 SP1 HSP and higher • WinCC Porfessional (TIA Portal) Yes; V14 SP1 HSP and higher • WinCC Porfessional (TIA Portal) Yes; V14 SP1 HSP and higher • WinCC Porfessional (TIA Portal) Yes; V14 SP1 HSP and higher • WinCC Porfessional (TIA Portal) Yes; V14 SP1 HSP and higher	Degree and class of protection	
NEMA (front)		IP65
Enclosure Type 4x at the front Yes  Standards, approvals, certificates  CE mark CULus Pes  RCM (formerly C-TICK) Yes  RCM (formerly C-TICK) Yes  RCA approval No: Available soon  EAC (formerly Cost-R) No: Available soon  Ambient conditions  Suited for indoor use No Ambient temperature during operation Operation (vertical installation) — For vertical installation, min. — For vertical installation, max. — For vertical installation, max. — At maximum tilt angle, min. — Relative humidity  • Operation, max.  Operation, ope	IP (rear)	IP65
Enclosure Type 4x at the front Standards, approvales, certificates CE mark  (ULus CE mark (KC approval RCM (formerly C-TICK) Yes RCM (formerly C-TICK) Yes RCM (formerly Cost-R) No; Available soon EAC (formerly Gost-R) Ambient conditions Suited for indoor use Suited for indoor use No Ambient temperature during operation Operation (vertical installation)  For vertical installation, min. For vertical installation	NEMA (front)	
Standards, approvals, certificates  CE mark CE mark CULIUS Yes  RCM (formerly C-TICK) Yes  RCM (formerly C-TICK) Yes  RCAD (formerly C-TICK) No; Available soon  Ambient conditions  Suited for indoor use Suited for indoor use No  Ambient temperature during operation Operation (vertical installation) — For vertical installation, min. — For vertical installation, max. 45 °C Operation (max. tilt angle) — At maximum tilt angle, min. — At maximum tilt angle, min. — At maximum tilt angle, max. 40 °C  Ambient temperature during storage/transportation  • min. • max. • 60 °C Relative humidity • Operation, max.  Operation, max.  Operation, max.  Operation yestems  proprietary proprietary proprietary proprietary process value default (input) possible  • STEP 7 Porfessional (TIA Portal) • VinCC flexible Compact • VinCC Bexible Compact • VinCC Sexible Compact • VinCC Sexible Compact • VinCC Certification • VinCC Certification • VinCC Professional (TIA Portal) • VinCC Certification • VinCC Professional (TIA Portal)	<ul> <li>Enclosure Type 4 at the front</li> </ul>	Yes
CE mark	<ul> <li>Enclosure Type 4x at the front</li> </ul>	Yes
CULUS  RCM (formerly C-TICK)  Yes  RCM (formerly C-TICK)  Yes  No; Available soon  EAC (formerly Gost-R)  Ambient conditions  Suited for indoor use  Ambient temperature during operation  Operation (vertical installation, min.  — For vertical installation, min.  — For vertical installation, max.  45 °C  Operation (max. itil angle)  — At maximum tilt angle, min.  — A mine meperature during storage/transportation  • min:  • max.  60 °C  Relative humidity  • Operation, max.  Operation, max.  Operation wax.  Operation wax.  Propersion, max.  Operation wax.  Operation wax.  Propersion, max.  Operation wax.  • Windows CE  Alarm system (incl. buffer and acknowledgment)  Process value default (input) possible  Recipe management  • STEP 7 Professional (TIA Portal)  • WinCC flexible Standard  • WinCC Stable Advanced  • WinCC Edwible Standard  • WinCC Edwible Standard  • WinCC Ceribesional (TIA Portal)  • WinCC Ceribesional (TIA Portal)  • WinCC Bexible Compact  • WinCC Professional (TIA Portal)  • WinCC Gexible Compact  • WinCC Grevible Standard  • WinCC Comfourt (TIA Portal)  • WinCC Defossional (TIA Portal)  • WinCC Professional (TIA Portal)  • WinCC Professional (TIA Portal)  • WinCC Comfourt (TIA Portal)  • WinCC Comfourt (TIA Portal)  • WinCC Comfourt (TIA Portal)  • WinCC Defossional (TIA Portal)  • WinCC Professional (TIA Portal)  • WinCC Professional (TIA Portal)  • WinCC Comfourt (TIA Portal)  • WinCC Professional (TIA Portal)	Standards, approvals, certificates	
RCM (formerly C-TICK) KC approval No; Available soon EAC (formerly Gost-R) No; Available soon  Ambient conditions  Suited for indoor use Suited for indoor use No Ambient temperature during operation Operation (vertical installation) — For vertical installation, min. — For vertical installation, max. Operation (max. titl angle) — At maximum titl angle, min. — At maximum tit angle, min. — At maximum tit angle, max. Ambient temperature during storage/transportation  • min. • oo "C Ambient temperature during storage/transportation • min. • of "C Relative humidity • Operation, max.  Operating systems  proprietary proprietary  proprietary proprietary  propristalled operating system • Windows CE Yes; Windows Embedded Compact 2013  configuration / header  Message indicator Message indicator Message indicator Frecess value display (output) Yes Process value display (output) Yes Process value display (input) Process value display (input) Process value display (output) No • STEP 7 Basic (TIA Portal) • Visc C flexible Standard • WinCC flexible Standard • WinCC flexible Standard • WinCC Grexible Standard • WinCC Grexible Advanced • WinCC C Grexible Advanced • WinCC C Grexible Advanced • WinCC C Advanced (TIA Portal) • WinCC C Torfossional (TIA Portal) • WinCC C Advanced (TIA Portal) • WinCC C Torfossional (TIA Portal) • WinCC Professional (TIA Portal)	CE mark	Yes
KC approval  EAC (formerly Gost-R)  No; Available soon  Ambient conditions  Suited for indoor use  Suited for outdoor use  Ambient conditions  Suited for outdoor use  No  Ambient emperature during operation  Operation (vertical installation)  — For vertical installation, min. — For vertical installation, min. — For vertical installation, max.  45 °C  Operation (max. tilt angle) — At maximum tilt angle, min. — 60 °C  Ambient temperature during storage/transportation  • min. • Operating systems  proprietany  • Operating systems  proprietary  pre-installed operating system  • Windows CE  Alarm system (incl. buffer and acknowledgment)  Process value display (output)  No  * STEP 7 Basic (TIA Portal)  • WinCC flexible Compact  • WinC C flexible Standard  • WinC C flexible Standard  • WinC C flexible Standard  • WinC C Comfort (TIA Portal)  • WinC C Confort (TIA Portal)  • WinC C Advanced (TIA Portal)  • WinC C Professional (TIA Portal)	cULus	Yes
EAC (formerly Gost-R)  Ambient conditions  Suited for indoor use  Suited for outdoor use  Ambient temperature during operation  Operation (vertical installation, min.  — For vertical installation, max.  Operation (max. tilt angle)  — At maximum tilt angle, min. — At maximum tilt angle, max.  Ambient temperature during storage/transportation  • min. • max.  60 °C  Relative humidity • Operation, max.  Operation,	RCM (formerly C-TICK)	Yes
Suited for indoor use Yes Suited for indoor use No Ambient temperature during operation Operation (vertical installation) — For vertical installation, min. 0°C — For vertical installation, min. 45°C Operation (max. tilt angle) — At maximum tilt angle, min. 0°C — At maximum tilt angle, max. 40°C  Ambient temperature during storage/transportation • min. 20°C • max. 60°C Relative humidity • Operation, max. 90%; no condensation Operating systems proprietary proprietary • Windows CE  Windows CE  Alarm system (incl. buffer and acknowledgment) Process value display (output) Process value default (input) possible Recipe management • STEP 7 Basic (TIA Portal) • WinCC flexible Standard • WinCC Basic (TIA Portal) • WinCC Cod Advanced (TIA Portal) • WinCC Professional (TIA Portal) • WinCC		No; Available soon
Suited for indoor use Suited for outdoor use No Ambient temperature during operation Operation (vertical installation) — For vertical installation, min. — For vertical installation, max. — 45 °C Operation (max. tilt angle) — At maximum tilt angle, min. — O°C		No; Available soon
Suited for outdoor use  Ambient temperature during operation  Operation (vertical installation, min. — For vertical installation, max. — So "C  Operation (max. tilt angle) — At maximum tilt angle, min. — At maximum tilt angle, max. — O"C — At maximum tilt angle, max. — O"C — At maximum tilt angle, max. — O"C — The max. — O"C — The max. — O"C — O"	Ambient conditions	
Ambient temperature during operation  Operation (vertical installation)	Suited for indoor use	Yes
Operation (vertical installation)  — For vertical installation, min. — For vertical installation, max.  Operation (max. tilt angle)  — At maximum tilt angle, min. — At maximum tilt angle, max.  Ablient temperature during storage/transportation  • min. • max. • 60 °C  Relative humidity • Operation, max.  Operating systems  proprietary  No  pre-installed operating system  • Windows CE  Alarm system (incl. buffer and acknowledgment)  Process value display (output)  Process value default (input) possible  Recipe management  Ostep 7 Posessional (TIA Portal)  • WinCC flexible Standard  • WinCC Gavisic (TIA Portal)  • WinCC Confort (TIA Portal)  • WinCC Professional (TIA Portal)  • WinCC Confort (TIA Portal)  • WinCC Professional (TIA Portal)  • Wi	Suited for outdoor use	No
— For vertical installation, min. — For vertical installation, max.  — For vertical installation, max.  — At maximum tilt angle, min. — At maximum tilt angle, min. — At maximum tilt angle, max.  — Oo "C  — max. — 60 "C  Relative humidity — Operation, max.  — Operation, max.  — Operation, max.  — Operating systems — overating systems — overating system — ov	Ambient temperature during operation	
— For vertical installation, max. 45 °C  Operation (max. tilt angle)  — At maximum tilt angle, min. — At maximum tilt angle, max. 40 °C  Ambient temperature during storage/transportation  • min. • min. • 20 °C • max. 60 °C  Relative humidity • Operation, max. 90 %; no condensation  Operating systems  proprietary No pre-installed operating system  • Windows CE Yes; Windows Embedded Compact 2013  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 Standard No • WinCC flexible Standard No • WinCC Gexible Advanced No • WinCC Comfort (TIA Portal) Yes; V14 SP1 HSP and higher • WinCC Professional (TIA Portal) Yes; V14 SP1 HSP and higher		
Operation (max. tilt angle, min. 0 °C		
— At maximum tilt angle, min. — At maximum tilt angle, max.  Ambient temperature during storage/transportation  • min. • max. • 60 °C  Relative humidity • Operation, max.  Operating systems  proprietary  pre-installed operating system • Windows CE  Message indicator  Alarm system (incl. buffer and acknowledgment)  Process value display (output)  Process value default (input) possible  Recipe management  • STEP 7 Brais (TIA Portal) • STEP 7 Professional (TIA Portal) • WinCC flexible Advanced • WinCC Basic (TIA Portal) • WinCC Basic (TIA Portal) • WinCC Comfort (TIA Portal) • WinCC Gexible Advanced • WinCC Comfort (TIA Portal) • WinCC Professional (TIA Portal)		45 °C
— At maximum tilt angle, max. 40 °C  Ambient temperature during storage/transportation  • min20 °C  • max. 60 °C  Relative humidity  • Operation, max. 90 %; no condensation  Operating systems  proprietary No  pre-installed operating system  • Windows CE Yes; Windows Embedded Compact 2013  configuration / header  Message indicator Yes  Alarm system (incl. buffer and acknowledgment) Yes  Process value display (output) Yes  Recipe management Yes  Configuration software  • STEP 7 Basic (TIA Portal) No  • STEP 7 Professional (TIA Portal) No  • WinCC flexible Compact No  • WinCC Basic (TIA Portal) No  • WinCC Comfort (TIA Portal) Yes; V14 SP1 HSP and higher  • WinCC Professional (TIA Portal) Yes; V14 SP1 HSP and higher		
Ambient temperature during storage/transportation  • min. • mix. • max. 60 °C  Relative humidity • Operation, max. 90 %; no condensation  Operating systems  proprietary pro-installed operating system • Windows CE  **Configuration / header  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) • WinCC flexible Compact • WinCC flexible Advanced • WinCC Basic (TIA Portal) • WinCC Comfort (TIA Portal) • WinCC Professional (TIA Portal) • WinCC Professional (TIA Portal) • WinCC Professional (TIA Portal) • WinCC Comfort (TIA Portal) • WinCC Professional (TIA Portal)		
<ul> <li>min.</li> <li>-20 °C</li> <li>max.</li> <li>60 °C</li> <li>Relative humidity</li> <li>Operation, max.</li> <li>Operating systems</li> <li>proprietary</li> <li>No</li> <li>pre-installed operating system</li> <li>♦ Windows CE</li> <li>Yes; Windows Embedded Compact 2013</li> <li>configuration / header</li> <li>Message indicator</li> <li>Alarm system (incl. buffer and acknowledgment)</li> <li>Process value display (output)</li> <li>Yes</li> <li>Process value default (input) possible</li> <li>Recipe management</li> <li>Onfiguration software</li> <li>♦ STEP 7 Basic (TIA Portal)</li> <li>♦ STEP 7 Professional (TIA Portal)</li> <li>No</li> <li>♦ WinCC flexible Compact</li> <li>♦ WinCC flexible Standard</li> <li>♦ WinCC Basic (TIA Portal)</li> <li>♦ WinCC Basic (TIA Portal)</li> <li>♦ WinCC Gixble Advanced</li> <li>♦ WinCC Comfort (TIA Portal)</li> <li>♦ WinCC Comfort (TIA Portal)</li> <li>♦ WinCC Advanced (TIA Portal)</li> <li>♦ WinCC Advanced (TIA Portal)</li> <li>♦ WinCC Professional (TIA Portal)</li> </ul>		40 °C
Relative humidity  Operation, max.  Operating systems  proprietary pre-installed operating system  Windows CE Yes; Windows Embedded Compact 2013  configuration / header  Message indicator Alarm system (incl. buffer and acknowledgment) Process value display (output) Yes Process value default (input) possible Recipe management Configuration software  STEP 7 Basic (TIA Portal) WinCC flexible Compact WinCC flexible Standard WinCC Basic (TIA Portal) WinCC Basic (TIA Portal) WinCC Comfort (TIA Portal) WinCC Gexible Standard WinCC Basic (TIA Portal) WinCC Comfort (TIA Portal) WinCC Comfort (TIA Portal) WinCC Comfort (TIA Portal) Yes; V14 SP1 HSP and higher WinCC Professional (TIA Portal) WinCC Professional (TIA Portal) Yes; V14 SP1 HSP and higher		20.90
Relative humidity  Operation, max.  Operating systems  proprietary  No  pre-installed operating system  Windows CE  Yes; Windows Embedded Compact 2013  Configuration / header  Message indicator  Alarm system (incl. buffer and acknowledgment)  Process value display (output)  Yes  Process value default (input) possible  Recipe management  STEP 7 Basic (TIA Portal)  WinCC flexible Compact  WinCC flexible Advanced  WinCC Basic (TIA Portal)  WinCC Comfort (TIA Portal)  WinCC Comfort (TIA Portal)  WinCC Comfort (TIA Portal)  WinCC Advanced (TIA Portal)  WinCC Advanced (TIA Portal)  WinCC Professional (TIA Portal)  WinCC Professional (TIA Portal)  WinCC Advanced (TIA Portal)  WinCC Advanced (TIA Portal)  WinCC Professional (TIA Portal)  Yes; V14 SP1 HSP and higher		
Operating systems  proprietary  No  pre-installed operating system  Windows CE  Yes; Windows Embedded Compact 2013  configuration / header  Message indicator  Alarm system (incl. buffer and acknowledgment)  Process value display (output)  Yes  Process value default (input) possible  Recipe management  STEP 7 Basic (TIA Portal)  WinCC flexible Compact  WinCC flexible Advanced  WinCC flexible Advanced  WinCC Basic (TIA Portal)  WinCC Comfort (TIA Portal)  WinCC Comfort (TIA Portal)  WinCC Comfort (TIA Portal)  WinCC Advanced (TIA Portal)  WinCC Advanced (TIA Portal)  WinCC Advanced (TIA Portal)  WinCC Professional (TIA Portal)  Yes; V14 SP1 HSP and higher  WinCC Professional (TIA Portal)  Yes; V14 SP1 HSP and higher		60 C
proprietary No  pre-installed operating system  • Windows CE Yes; Windows Embedded Compact 2013  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 Advanced No • WinCC Basic (TIA Portal) No • WinCC Comfort (TIA Portal) Yes; V14 SP1 HSP and higher • WinCC Professional (TIA Portal) Yes; V14 SP1 HSP and higher	•	90 %: no condensation
proprietary  Pre-installed operating system  Windows CE  Yes; Windows Embedded Compact 2013  Configuration / header  Message indicator  Alarm system (incl. buffer and acknowledgment)  Process value display (output)  Process value default (input) possible  Recipe management  Yes  Configuration software  STEP 7 Basic (TIA Portal)  WinCC flexible Compact  WinCC flexible Standard  WinCC flexible Advanced  WinCC Basic (TIA Portal)  WinCC Comfort (TIA Portal)  WinCC Comfort (TIA Portal)  WinCC Comfort (TIA Portal)  WinCC Advanced (TIA Portal)  WinCC Advanced (TIA Portal)  WinCC Professional (TIA Portal)  WinCC Professional (TIA Portal)  WinCC Professional (TIA Portal)  Yes; V14 SP1 HSP and higher  Yes; V14 SP1 HSP and higher		30 %, no condensation
pre-installed operating system  Windows CE  Yes; Windows Embedded Compact 2013  configuration / header  Message indicator  Alarm system (incl. buffer and acknowledgment)  Process value display (output)  Process value default (input) possible  Recipe management  Yes  Configuration software  STEP 7 Basic (TIA Portal)  WinCC flexible Compact  WinCC flexible Standard  WinCC flexible Advanced  WinCC Basic (TIA Portal)  WinCC Comfort (TIA Portal)  WinCC Advanced (TIA Portal)  WinCC Professional (TIA Portal)  Wes; V14 SP1 HSP and higher		No
● Windows CE  Ves; Windows Embedded Compact 2013  configuration / header  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)  ● WinCC flexible Compact  ● WinCC flexible Standard  ● WinCC flexible Advanced  ● WinCC Basic (TIA Portal)  ● WinCC Comfort (TIA Portal)  ● WinCC Comfort (TIA Portal)  ● WinCC Advanced (TIA Portal)  ● WinCC Advanced (TIA Portal)  ● WinCC Professional (TIA Portal)  Pres; V14 SP1 HSP and higher  Yes; V14 SP1 HSP and higher		INO
Message indicator Alarm system (incl. buffer and acknowledgment) Process value display (output) Process value default (input) possible Recipe management Yes  Configuration software  • STEP 7 Basic (TIA Portal) • WinCC flexible Compact • WinCC flexible Standard • WinCC flexible Advanced • WinCC Basic (TIA Portal) • WinCC Comfort (TIA Portal)  • WinCC Comfort (TIA Portal)  • WinCC Comfort (TIA Portal)  • WinCC Advanced (TIA Portal)  • WinCC Advanced (TIA Portal)  • WinCC Professional (TIA Portal)		Yes: Windows Embedded Compact 2013
Message indicator Alarm system (incl. buffer and acknowledgment) Process value display (output) Process value default (input) possible Yes Recipe management Yes  Configuration software  • STEP 7 Basic (TIA Portal) • STEP 7 Professional (TIA Portal) • WinCC flexible Compact • WinCC flexible Standard • WinCC flexible Advanced • WinCC Basic (TIA Portal) • WinCC Comfort (TIA Portal)  • WinCC Comfort (TIA Portal) • WinCC Comfort (TIA Portal) • WinCC Advanced (TIA Portal) • WinCC Advanced (TIA Portal) • WinCC Professional (TIA Portal)  • WinCC Professional (TIA Portal)  • WinCC Professional (TIA Portal)  • Yes; V14 SP1 HSP and higher		150, Wildows Embouded Compact 2010
Alarm system (incl. buffer and acknowledgment) Process value display (output) Yes Process value default (input) possible Yes Recipe management Yes  Configuration software  • STEP 7 Basic (TIA Portal) • STEP 7 Professional (TIA Portal) No  • WinCC flexible Compact • WinCC flexible Standard • WinCC flexible Advanced • WinCC Basic (TIA Portal) • WinCC Comfort (TIA Portal) • WinCC Comfort (TIA Portal) • WinCC Advanced (TIA Portal) • WinCC Advanced (TIA Portal) • WinCC Advanced (TIA Portal) • WinCC Professional (TIA Portal) • WinCC Professional (TIA Portal) • WinCC Professional (TIA Portal)  • WinCC Professional (TIA Portal)  • WinCC Professional (TIA Portal)  • Yes; V14 SP1 HSP and higher	·	Yes
Process value display (output) Process value default (input) possible Yes  Recipe management Yes  Configuration software  STEP 7 Basic (TIA Portal) No STEP 7 Professional (TIA Portal) WinCC flexible Compact No WinCC flexible Compact No WinCC flexible Standard No WinCC flexible Advanced No WinCC Basic (TIA Portal) WinCC Comfort (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		
Process value default (input) possible  Recipe management  Yes  Configuration software  STEP 7 Basic (TIA Portal)  STEP 7 Professional (TIA Portal)  WinCC flexible Compact  WinCC flexible Standard  WinCC flexible Advanced  WinCC Basic (TIA Portal)  WinCC Basic (TIA Portal)  WinCC Comfort (TIA Portal)  WinCC Comfort (TIA Portal)  WinCC Advanced (TIA Portal)  WinCC Advanced (TIA Portal)  Yes; V14 SP1 HSP and higher  WinCC Professional (TIA Portal)  Yes; V14 SP1 HSP and higher		
Recipe management  Configuration software  STEP 7 Basic (TIA Portal) STEP 7 Professional (TIA Portal) WinCC flexible Compact WinCC flexible Standard WinCC flexible Advanced WinCC Basic (TIA Portal) WinCC Comfort (TIA Portal) WinCC Advanced (TIA Portal) WinCC Advanced (TIA Portal) WinCC Professional (TIA Portal) Yes; V14 SP1 HSP and higher Yes; V14 SP1 HSP and higher		
Configuration software  STEP 7 Basic (TIA Portal) STEP 7 Professional (TIA Portal) WinCC flexible Compact WinCC flexible Standard WinCC flexible Advanced WinCC Basic (TIA Portal) WinCC Comfort (TIA Portal) WinCC Advanced (TIA Portal) WinCC Advanced (TIA Portal) WinCC Professional (TIA Portal) Yes; V14 SP1 HSP and higher Yes; V14 SP1 HSP and higher		
<ul> <li>STEP 7 Basic (TIA Portal)</li> <li>STEP 7 Professional (TIA Portal)</li> <li>WinCC flexible Compact</li> <li>WinCC flexible Standard</li> <li>WinCC flexible Advanced</li> <li>WinCC Basic (TIA Portal)</li> <li>WinCC Comfort (TIA Portal)</li> <li>WinCC Advanced (TIA Portal)</li> <li>WinCC Advanced (TIA Portal)</li> <li>Yes; V14 SP1 HSP and higher</li> <li>WinCC Professional (TIA Portal)</li> <li>Yes; V14 SP1 HSP and higher</li> </ul>		
<ul> <li>STEP 7 Professional (TIA Portal)</li> <li>WinCC flexible Compact</li> <li>WinCC flexible Standard</li> <li>WinCC flexible Advanced</li> <li>WinCC Basic (TIA Portal)</li> <li>WinCC Comfort (TIA Portal)</li> <li>WinCC Advanced (TIA Portal)</li> <li>Yes; V14 SP1 HSP and higher</li> <li>WinCC Professional (TIA Portal)</li> <li>Yes; V14 SP1 HSP and higher</li> </ul>	-	No
<ul> <li>WinCC flexible Compact</li> <li>WinCC flexible Standard</li> <li>WinCC flexible Advanced</li> <li>WinCC Basic (TIA Portal)</li> <li>WinCC Comfort (TIA Portal)</li> <li>WinCC Advanced (TIA Portal)</li> <li>Yes; V14 SP1 HSP and higher</li> <li>WinCC Professional (TIA Portal)</li> <li>Yes; V14 SP1 HSP and higher</li> </ul>		No
<ul> <li>WinCC flexible Advanced</li> <li>WinCC Basic (TIA Portal)</li> <li>WinCC Comfort (TIA Portal)</li> <li>WinCC Advanced (TIA Portal)</li> <li>WinCC Advanced (TIA Portal)</li> <li>Yes; V14 SP1 HSP and higher</li> <li>WinCC Professional (TIA Portal)</li> <li>Yes; V14 SP1 HSP and higher</li> </ul>		No
<ul> <li>WinCC Basic (TIA Portal)</li> <li>WinCC Comfort (TIA Portal)</li> <li>WinCC Advanced (TIA Portal)</li> <li>WinCC Professional (TIA Portal)</li> <li>Yes; V14 SP1 HSP and higher</li> <li>Yes; V14 SP1 HSP and higher</li> </ul>	WinCC flexible Standard	No
<ul> <li>WinCC Comfort (TIA Portal)</li> <li>WinCC Advanced (TIA Portal)</li> <li>WinCC Professional (TIA Portal)</li> <li>Yes; V14 SP1 HSP and higher</li> <li>Yes; V14 SP1 HSP and higher</li> </ul>	<ul> <li>WinCC flexible Advanced</li> </ul>	No
<ul> <li>WinCC Advanced (TIA Portal)</li> <li>WinCC Professional (TIA Portal)</li> <li>Yes; V14 SP1 HSP and higher</li> <li>Yes; V14 SP1 HSP and higher</li> </ul>	<ul> <li>WinCC Basic (TIA Portal)</li> </ul>	No
WinCC Professional (TIA Portal)     Yes; V14 SP1 HSP and higher	<ul> <li>WinCC Comfort (TIA Portal)</li> </ul>	Yes; V14 SP1 HSP and higher
	<ul> <li>WinCC Advanced (TIA Portal)</li> </ul>	Yes; V14 SP1 HSP and higher
Languages	WinCC Professional (TIA Portal)	Yes; V14 SP1 HSP and higher
	Languages	

Number of online/runtime languages  Number of online/runtime languages  Languages per project  Libraries  Applications/options  Web browser  Pocket Word  Pocket Excel  POF Viewer  Media Player  SIMATIC WinCC Sm@rtServer  SIMATIC WinCC Audit  Ves  SIMATIC WinCC Audit  Ves  SIMATIC WinCC Audit  Ves  SIMATIC WinCC Audit  Ves  Itime-controlled  Ves  Lask-controlled  Ves  Bit message system  Number of orbaracters per message  Analog messages  Number of System wevent, more (SIMATIC ST, SINUMERIK, SIMOTION,)  Number of verses values per message  Acknowledgment groups  Posta excercible per recipe  Data records per recipe  Data records per dealar ecord  Number of variables per device  Number of variables per screen  Number of variables per device  Number of variables per screen  Number of variables per device  Number of variables per screen  Number of var	Online languages	
Project languages  • Languages per project  Functionality under WinCC (TIA Portal)  Libraries  Applications/options  • Web browser  • Pocket Word  • Pocket Excel  • PDF Viewer  • Media Player  • Media Player  • SIMATIC WinCC Sm@rtServer  • SIMATIC WinCC Sndits  Ves  • SIMATIC WinCC Audit  Ves  • SIMATIC WinCC Audit  Ves  • SIMATIC WinCC Audit  Number of Visual Basic Scripts  Task planner  • time-controlled  • task-controlled  • task-controlled  • task-controlled  • task-controlled  • task-controlled  • task-sages yestem  • Number of alarm classes  • Bit messages  — Number of bit messages  • Analog messages  — Number of bit messages  • Number of bit messages  • Number of side of the state of the sta		32
Languages per project  Functionality under WinCC (TIA Portal)  Libraries  Applications/options      Web browser     Pocket Word     Pocket Excel     PDF Viewer     Yes     Media Player     SIMATIC WinCC Sm@rtServer     SIMATIC WinCC SumortServer     SIMATIC WinCC SumortServer     SIMATIC WinCC Audit     Yes		
Eunctionality under WinCC (TIA Portal)  Libraries  Applications/options  • Web browser  • Pocket Word  • Pocket Excel  • PDF Viewer  • Media Player  • SIMATIC WinCC Sm@rtServer  • SIMATIC WinCC Audit  Ves  • SIMATIC WinCC Audit  Yes  • Simatic Audit Au		32
Libraries Yes Applications/options  Web browser Pocket Word Pocket Excel Pocket Exc		
Applications/options  Web browser Pocket Word Pocket Excel Pocket Excel Por Viewer Media Player SIMATIC WinCC Sm@rtServer SIMATIC WinCC Audit Ves SIMATIC WinCC Audit Ves SIMATIC WinCC Audit Ves SIMATIC WinCC Audit Ves		Yes
Web browser Pocket Word Pocket Excel PDF Viewer Wes PDF Viewer Media Player SIMATIC WinCC Sm@ntServer SIMATIC WinCC Audit Ves SIMATIC WinCC Audit Ves Ves SIMATIC WinCC Audit Ves Ves SIMATIC WinCC Smoled Ves Simatic Viewer Simatic		
Pocket Excel     Nedia Player     Nedia Player     SIMATIC WinCC Sm@rtServer     SIMATIC WinCC Audit     Yes     SIMATIC WinCC Audit     Yes     Number of Visual Basic Scripts     Task planner     time-controlled     Yes     Number of alarm classes     Number of alarm classes     Number of of the messages     Number of bit messages     Number of bit messages     Number of bit messages     Number of analog messages     Number of analog messages     Number of roalog messages     Number of signature     System messages HMI     System sevent, more (SIMATIC S7, SINUMERIK, SIMOTION,)     Number of process values per message     Number of process values per message     Number of process values per message     Nessage indicator     Yes     Message indicator     Yes     Message indicator     Recipe management     Number of recipes     Data records per recipe     Entries per data record     Size of internal recipe memory     Al Mbyte     Recipe memory expandable     Number of variables per device     Number of variables per screen     Number of variables per screen     Multiplexing     Number of variables per screen     Numble individues     Number of variables per screen		Yes
Pocket Excel     PDF Viewer     Media Player     Media Player     SIMATIC WinCC Sm@rtServer     SIMATIC WinCC Audit     Yes     SIMATIC WinCC Audit     Yes     Number of Visual Basic Scripts  Task planner     itine-controlled     Yes     task-controlled     Yes     Sumber of Jam classes     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 of analog messages     System event, more (SIMATIC S7, SINUMERIK, SIMOTION,)     Number of characters per message     Number of process values per message     Number of variables per secrepe     1000     2000     Size of internal recipe memory     Recipe memory expandable     Variables     Number of variables per device     Number of variables per screen     Number of variables		
SIMATIC WinCC Audit Number of Visual Basic Scripts  Task planner  time-controlled time-contro		Yes
	Media Player	Yes
• SIMATIC WinCC Audit Number of Visual Basic Scripts  Task planner • time-controlled • task-controlled • task-controlled • Number of alarm classes • Bit messages  — Number of analog 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 characters per message • Acknowledgment groups • Acknowledgment • Number of recipes • Data records per recipe • Data records per recipe • Data records per recipe • Entries per data record • Size of internal recipe memory • Recipe memory expandable • Number of variables per device • Number of variables per device • Number of variables per screen • Multiplexing • Structures • Arrays Images	-	Yes
Task planner  • time-controlled  • task-controlled  Yes  Message system  • Number of alarm classes  • Bit messages  — Number of bit messages  • 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  • Entries per data record  • Size of internal recipe memory  • Recipe memory expandable  Variables  • Number of variables per screen  • Number of variables per screen  • Multiplexing  • Structures  • Arrays  Images	_	Yes
time-controlled task-controlled Yes  Message system  Number of alarm classes Bit messages - Number of bit messages - Number of the messages - Number of analog messages 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 Entries per data record Size of internal recipe memory Recipe memory expandable  Number of variables per device Number of variables per screen Limit values Number of variables per screen Limit values Arrays Arrays Message indicates Yes Mundages	Number of Visual Basic Scripts	Yes
◆ task-controlled       Yes         Message system       32         • Number of alarm classes       32         • Bit messages       6 000         • Analog messages       200         • 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       1000         • Number of recipes       1000         • Data records per recipe       1000         • Entries per data record       2 000         • Size of internal recipe memory       4 Mbyte         • Recipe memory expandable       Yes         Variables       Number of variables per device       4 096         • Number of variables per screen       400         • Limit values       Yes         • Multiplexing       Yes         • Arrays       Yes         Images	Task planner	
Message system  Number of alarm classes Bit messages — Number of bit messages Analog messages — Number of analog messages  Number of analog messages  Number of analog messages  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 Entries per data record Size of internal recipe memory Recipe memory expandable  Number of variables per device Number of variables per screen Number of variables per screen Number of variables per screen Structures Yes Mutiplexing Structures Arrays Messages	• time-controlled	Yes
Number of alarm classes Bit messages — Number of bit 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 Number of process values per message Acknowledgment groups Message indicator Yes  Recipe management Number of recipes Data records per recipe Data record 2000 Size of internal recipe memory Recipe memory expandable Yes  Variables Number of variables per device Number of variables per screen Yes Number of variables yer Structures Yes	• task-controlled	Yes
Bit messages  - Number of bit messages  Analog messages  - Number of analog messages  System messages HMI 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  Acknowledgment groups  Message indicator  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	Message system	
- Number of bit messages	Number of alarm classes	32
<ul> <li>Analog messages     — 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>Mumber of recipes</li> <li>Data records per recipe</li> <li>Entries per data record</li> <li>Size of internal recipe memory</li> <li>Recipe memory expandable</li> <li>Recipe memory expandable</li> <li>Yes</li> </ul> Variables <ul> <li>Number of variables per device</li> <li>Number of variables per screen</li> <li>Multiplexing</li> <li>Structures</li> <li>Arrays</li> <li>Images</li> </ul>	Bit 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 Secure management Number of recipes Data records per recipe Entries per data record Size of internal recipe memory Recipe memory expandable Ves  Variables  Number of variables per device Number of variables per screen Multiplexing Structures Arrays Ves  Ves  Ves  Ves  Ves  Ves  Ves  Ve	<ul> <li>Number of bit messages</li> </ul>	6 000
<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>Number of recipes</li> <li>Mumber of recipes</li> <li>Number of recipes</li> <li>Data records per recipe</li> <li>Entries per data record</li> <li>Size of internal recipe memory</li> <li>Recipe memory expandable</li> <li>Recipe memory expandable</li> <li>Ves</li> </ul> Variables <ul> <li>Number of variables per device</li> <li>Number of variables per screen</li> <li>Limit values</li> <li>Multiplexing</li> <li>Structures</li> <li>Arrays</li> </ul> Images	<ul> <li>Analog messages</li> </ul>	
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 Entries per data record Size of internal recipe memory Recipe memory expandable  Variables  Number of variables per device Number of variables per screen Multiplexing Structures Arrays  Images	<ul> <li>Number of analog messages</li> </ul>	200
System event, more (SIMATIC S7, SINUMERIK, SIMOTION,)  Number of characters per message Number of process values per message Acknowledgment groups Yes  Message indicator  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  Multiplexing Structures Arrays  Mages	<ul> <li>S7 alarm number procedure</li> </ul>	Yes
SIMOTION, )  Number of characters per message 80 Number of process values per message 8 Acknowledgment groups Yes Message indicator Yes  Recipe management  Number of recipes 500 Data records per recipe 1000 Entries per data record 2000 Size of internal recipe memory 4 Mbyte Recipe memory expandable Yes  Variables  Number of variables per device 4096 Number of variables per screen 400 Limit values Yes Multiplexing Yes Structures Yes Marays  Images	<ul> <li>System messages HMI</li> </ul>	Yes
<ul> <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>Data records per recipe</li> <li>Entries per data record</li> <li>Size of internal recipe memory</li> <li>Recipe memory expandable</li> <li>Variables</li> <li>Number of variables per device</li> <li>Number of variables per screen</li> <li>Limit values</li> <li>Multiplexing</li> <li>Structures</li> <li>Arrays</li> <li>Images</li> </ul>		Yes
<ul> <li>Number of process values per message</li> <li>Acknowledgment groups</li> <li>Yes</li> <li>Message indicator</li> <li>Yes</li> </ul> Recipe management <ul> <li>Number of recipes</li> <li>Data records per recipe</li> <li>Entries per data record</li> <li>Size of internal recipe memory</li> <li>Recipe memory expandable</li> <li>Recipe memory expandable</li> </ul> Variables <ul> <li>Number of variables per device</li> <li>Number of variables per screen</li> <li>Limit values</li> <li>Multiplexing</li> <li>Structures</li> <li>Arrays</li> </ul> Images <ul> <li>Images</li> </ul>	•	
<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>Entries per data record</li> <li>Size of internal recipe memory</li> <li>Recipe memory expandable</li> <li>Recipe memory expandable</li> <li>Variables</li> <li>Number of variables per device</li> <li>Number of variables per screen</li> <li>Limit values</li> <li>Multiplexing</li> <li>Structures</li> <li>Arrays</li> <li>Images</li> </ul>		
Message indicator  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 Limit values Multiplexing Structures Arrays  Mages		
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 Limit values Multiplexing Structures Arrays  Marages		
<ul> <li>Number of recipes</li> <li>Data records per recipe</li> <li>Entries per data record</li> <li>Size of internal recipe memory</li> <li>Recipe memory expandable</li> <li>Variables</li> <li>Number of variables per device</li> <li>Number of variables per screen</li> <li>Limit values</li> <li>Multiplexing</li> <li>Structures</li> <li>Arrays</li> <li>Images</li> </ul>		res
<ul> <li>Data records per recipe</li> <li>Entries per data record</li> <li>Size of internal recipe memory</li> <li>Recipe memory expandable</li> <li>Variables</li> <li>Number of variables per device</li> <li>Number of variables per screen</li> <li>Limit values</li> <li>Multiplexing</li> <li>Structures</li> <li>Arrays</li> <li>Images</li> </ul>	·	500
<ul> <li>Entries per data record</li> <li>Size of internal recipe memory</li> <li>Recipe memory expandable</li> <li>Ves</li> </ul> Variables <ul> <li>Number of variables per device</li> <li>Number of variables per screen</li> <li>Limit values</li> <li>Multiplexing</li> <li>Structures</li> <li>Arrays</li> </ul> Images <ul> <li>Entries per data record</li> <li>4 Mbyte</li> <li>4 Mbyte</li> <li>4 Mbyte</li> <li>4 096</li> <li>4 096</li> <li>4 096</li> <li>5 Yes</li> <li>6 Yes</li> <li>7 Yes</li> <li>9 Yes</li> </ul>		
<ul> <li>Size of internal recipe memory</li> <li>Recipe memory expandable</li> <li>Variables</li> <li>Number of variables per device</li> <li>Number of variables per screen</li> <li>Limit values</li> <li>Multiplexing</li> <li>Structures</li> <li>Arrays</li> <li>Images</li> </ul>		
<ul> <li>Recipe memory expandable</li> <li>Variables</li> <li>Number of variables per device</li> <li>Number of variables per screen</li> <li>Limit values</li> <li>Multiplexing</li> <li>Structures</li> <li>Arrays</li> <li>Images</li> </ul>	•	
Variables  • Number of variables per device 4 096  • Number of variables per screen 400  • Limit values Yes  • Multiplexing Yes  • Structures Yes  • Arrays Yes  Images		
<ul> <li>Number of variables per device</li> <li>Number of variables per screen</li> <li>Limit values</li> <li>Multiplexing</li> <li>Structures</li> <li>Arrays</li> <li>Images</li> </ul>		
<ul> <li>Number of variables per screen</li> <li>Limit values</li> <li>Multiplexing</li> <li>Structures</li> <li>Arrays</li> <li>Images</li> </ul>		4 096
<ul> <li>Limit values</li> <li>Multiplexing</li> <li>Structures</li> <li>Arrays</li> <li>Images</li> </ul> Yes Yes Yes Yes		
<ul> <li>Multiplexing</li> <li>Structures</li> <li>Arrays</li> <li>Images</li> </ul> Yes <ul> <li>Yes</li> </ul>		
<ul> <li>Structures</li> <li>Arrays</li> <li>Images</li> </ul> Yes Yes		
• Arrays Yes Images	· -	
Images		
·		
	-	750
Permanent window/default     Yes		Yes
Global image     Yes	Global image	Yes
Pop-up images     Yes	_	Yes
• Slide-in images Yes	· · · ·	Yes
• Image selection by PLC Yes	_	Yes
• Image number in the PLC Yes	Image number in the PLC	Yes
Image objects	Image objects	
Number of objects per image     600		600
• Text fields Yes	<ul> <li>Text fields</li> </ul>	Yes
• I/O fields Yes	• I/O fields	Yes
• Graphic I/O fields (graphics list)  Yes	<ul> <li>Graphic I/O fields (graphics list)</li> </ul>	Yes
Symbolic I/O fields (text list)  Yes	<ul> <li>Symbolic I/O fields (text list)</li> </ul>	Yes
Date/time fields     Yes	Date/time fields	Yes

0.11.1	V
• Switches	Yes
• Buttons	Yes
Graphic display	Yes
• Icons	Yes
Geometric objects	Yes
Complex image objects	
<ul> <li>Number of complex objects per screen</li> </ul>	40
Alarm view	Yes
Trend view	Yes
User view	Yes
Status/control	Yes
<ul><li>Sm@rtClient view</li></ul>	Yes
Recipe view	Yes
• f(x) trend view	Yes
<ul> <li>System diagnostics view</li> </ul>	Yes
Media Player	Yes
HTML browser	Yes
PDF display	Yes
<ul> <li>IP camera display</li> </ul>	Yes
Bar graphs	Yes
• Sliders	Yes
<ul> <li>Pointer instruments</li> </ul>	Yes
Analog/digital clock	Yes
Lists	
Number of text lists per project	500
<ul> <li>Number of entries per text list</li> </ul>	500
<ul> <li>Number of graphics lists per project</li> </ul>	500
<ul> <li>Number of entries per graphics list</li> </ul>	500
Archiving	
<ul> <li>Number of archives per device</li> </ul>	50
<ul> <li>Number of entries per archive</li> </ul>	50 000
<ul> <li>Message archive</li> </ul>	Yes
<ul> <li>Process value archive</li> </ul>	Yes
<ul> <li>Archiving methods</li> </ul>	
<ul> <li>Sequential archive</li> </ul>	Yes
<ul> <li>Short-term archive</li> </ul>	Yes
Memory location	
— Memory card	Yes
— USB memory	Yes
— Ethernet	Yes
Data storage format	
— CSV	Yes
— TXT	Yes
— RDB	Yes
Security	
Number of user groups	50
Number of user rights	32
Number of users	50
Password export/import	Yes
SIMATIC Logon	Yes
Logging through printer	
Alarms	Yes
Report (shift log)	Yes
Hardcopy	
Electronic print to file	
	Yes
Character sets	
Character sets	Yes
Keyboard fonts	Yes; PDF, HTML
	Yes
Keyboard fonts	Yes; PDF, HTML

• 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
<ul><li>WinAC</li></ul>	Yes
SINUMERIK	Yes; With SINUMERIK option package as from WinCC V15 or higher
• SIMOTION	Yes
<ul> <li>Allen Bradley (EtherNet/IP)</li> </ul>	Yes
<ul> <li>Allen Bradley (DF1)</li> </ul>	Yes
Mitsubishi (MC TCP/IP)	Yes
Mitsubishi (FX)	Yes
OMRON (FINS TCP)	No
OMRON (LINK/Multilink)	Yes
<ul> <li>Modicon (Modbus TCP/IP)</li> </ul>	Yes
<ul><li>Modicon (Modbus)</li></ul>	Yes
OPC UA Client	Yes
OPC UA Server	Yes
Service tools/configuration aids	
<ul> <li>Backup/Restore manually</li> </ul>	Yes
<ul> <li>Backup/Restore automatically</li> </ul>	Yes
<ul> <li>Simulation</li> </ul>	Yes
<ul> <li>Device switchover</li> </ul>	Yes
Peripherals/Options	
Printer	Yes
SIMATIC HMI MM memory card: Multi Media Card	Yes; Up to 128 MB
SIMATIC HMI SD memory card: Secure Digital memory card	Yes; Up to 2 GB
SIMATIC HMI CF memory card Compact Flash Card	No
USB memory	Yes
SIMATIC IPC USB Flashdrive (USB stick)	Yes; Up to 16 GB
SIMATIC HMI USB stick	Yes; Up to 8 GB
Network camera	Yes
Mechanics/material	
Enclosure material (front)	
Plastic	No
Aluminum	Yes
Stainless steel	No
Dimensions	
Width of the housing front	396 mm
Height of housing front	256 mm; Without basic adapter
Overall depth	101 mm; Without basic adapter
Weights	
Weight (without packaging)	6.3 kg

last modified:

10/7/2021 🖸