## **SIEMENS**

## **Data sheet**

6AG1124-0JC01-4AX0

SIPLUS HMI TP900 Comfort for medial exposure with conformal coating based on 6AV2124-0JC01-0AX0  $\,$ 



Figure similar

General information	
Product type designation	TP900 Comfort
Display	
Design of display	TFT
Screen diagonal	9 in
Display width	195 mm
Display height	117 mm
Number of colors	16 777 216
Resolution (pixels)	
<ul> <li>Horizontal image resolution</li> </ul>	800 pixel
Vertical image resolution	480 pixel
Backlighting	
<ul> <li>MTBF backlighting (at 25 °C)</li> </ul>	80 000 h
Backlight dimmable	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
Expansions for operator control of the process	
<ul> <li>DP direct LEDs (LEDs as S7 output I/O)</li> </ul>	
— F1Fx	0
<ul> <li>Direct keys (keys as S7 input I/O)</li> </ul>	
— F1Fx	0
<ul> <li>Direct keys (touch buttons as S7 input I/O)</li> </ul>	40
Installation type/mounting	
Mounting position	vertical
Wall mounting/direct mounting	No
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
	20.0 V
Input current	0.75 A
Current consumption (rated value)	0.75 A
Starting current inrush I²t	0.5 A²·s
Power	
Active power input, typ.	18 W
Memory	<u>,                                      </u>
Flash	Yes
RAM	Yes
Memory available for user data	12 Mbyte
Type of output	
Info LED	No
Power LED	No
Error LED	No
Acoustics	
Buzzer	No
Speaker	Yes
Time of day	
Clock	
Hardware clock (real-time)	Yes
Software clock	No
• retentive	Yes; Back-up duration typically 6 weeks
synchronizable	Yes
synchronizable     Interfaces	Yes
Interfaces	
Interfaces Number of industrial Ethernet interfaces	2
Interfaces  Number of industrial Ethernet interfaces  Number of RS 485 interfaces	2 1; RS 422 / 485 combined
Interfaces  Number of industrial Ethernet interfaces  Number of RS 485 interfaces  Number of RS 422 interfaces	2 1; RS 422 / 485 combined 1
Interfaces  Number of industrial Ethernet interfaces  Number of RS 485 interfaces  Number of RS 422 interfaces  Number of RS 232 interfaces	2 1; RS 422 / 485 combined 1
Interfaces  Number of industrial Ethernet interfaces  Number of RS 485 interfaces  Number of RS 422 interfaces  Number of RS 232 interfaces  Number of USB interfaces	2 1; RS 422 / 485 combined 1 0 2; USB 2.0
Interfaces  Number of industrial Ethernet interfaces  Number of RS 485 interfaces  Number of RS 422 interfaces  Number of RS 232 interfaces  Number of USB interfaces  • USB Mini B	2 1; RS 422 / 485 combined 1 0 2; USB 2.0 1; 5-pole
Interfaces  Number of industrial Ethernet interfaces  Number of RS 485 interfaces  Number of RS 422 interfaces  Number of RS 232 interfaces  Number of USB interfaces  • USB Mini B  Number of 20 mA interfaces (TTY)	2 1; RS 422 / 485 combined 1 0 2; USB 2.0 1; 5-pole 0
Interfaces  Number of industrial Ethernet interfaces  Number of RS 485 interfaces  Number of RS 422 interfaces  Number of RS 232 interfaces  Number of USB interfaces  • USB Mini B  Number of 20 mA interfaces (TTY)  Number of parallel interfaces	2 1; RS 422 / 485 combined 1 0 2; USB 2.0 1; 5-pole 0
Interfaces  Number of industrial Ethernet interfaces  Number of RS 485 interfaces  Number of RS 422 interfaces  Number of RS 232 interfaces  Number of USB interfaces  • USB Mini B  Number of 20 mA interfaces (TTY)  Number of other interfaces	2 1; RS 422 / 485 combined 1 0 2; USB 2.0 1; 5-pole 0
Interfaces  Number of industrial Ethernet interfaces  Number of RS 485 interfaces  Number of RS 422 interfaces  Number of RS 232 interfaces  Number of USB interfaces  • USB Mini B  Number of 20 mA interfaces (TTY)  Number of parallel interfaces  Number of other interfaces  Number of SD card slots	2 1; RS 422 / 485 combined 1 0 2; USB 2.0 1; 5-pole 0 0 2
Interfaces  Number of industrial Ethernet interfaces  Number of RS 485 interfaces  Number of RS 422 interfaces  Number of RS 232 interfaces  Number of USB interfaces  • USB Mini B  Number of 20 mA interfaces (TTY)  Number of parallel interfaces  Number of other interfaces  Number of SD card slots  With software interfaces	2 1; RS 422 / 485 combined 1 0 2; USB 2.0 1; 5-pole 0
Number of industrial Ethernet interfaces  Number of RS 485 interfaces  Number of RS 422 interfaces  Number of RS 232 interfaces  Number of USB interfaces  ● USB Mini B  Number of 20 mA interfaces (TTY)  Number of parallel interfaces  Number of other interfaces  Number of SD card slots  With software interfaces  Industrial Ethernet	2 1; RS 422 / 485 combined 1 0 2; USB 2.0 1; 5-pole 0 0 0 2 No
Interfaces  Number of industrial Ethernet interfaces  Number of RS 485 interfaces  Number of RS 422 interfaces  Number of RS 232 interfaces  Number of USB interfaces  USB Mini B  Number of 20 mA interfaces (TTY)  Number of parallel interfaces  Number of other interfaces  Number of SD card slots  With software interfaces  Industrial Ethernet  Industrial Ethernet status LED	2 1; RS 422 / 485 combined 1 0 2; USB 2.0 1; 5-pole 0 0 2 No
Interfaces  Number of industrial Ethernet interfaces  Number of RS 485 interfaces  Number of RS 422 interfaces  Number of RS 232 interfaces  Number of USB interfaces  • USB Mini B  Number of 20 mA interfaces (TTY)  Number of parallel interfaces  Number of other interfaces  Number of SD card slots  With software interfaces  Industrial Ethernet  • Industrial Ethernet status LED  • Number of ports of the integrated switch	2 1; RS 422 / 485 combined 1 0 2; USB 2.0 1; 5-pole 0 0 0 2
Number of industrial Ethernet interfaces  Number of RS 485 interfaces  Number of RS 422 interfaces  Number of RS 232 interfaces  Number of USB interfaces  • USB Mini B  Number of 20 mA interfaces (TTY)  Number of parallel interfaces  Number of other interfaces  Number of SD card slots  With software interfaces  Industrial Ethernet  • Industrial Ethernet status LED  • Number of ports of the integrated switch	2 1; RS 422 / 485 combined 1 0 2; USB 2.0 1; 5-pole 0 0 2 No
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Interfaces  Number of industrial Ethernet interfaces  Number of RS 485 interfaces  Number of RS 422 interfaces  Number of RS 232 interfaces  Number of USB interfaces  • USB Mini B  Number of 20 mA interfaces (TTY)  Number of parallel interfaces  Number of other interfaces  Number of SD card slots  With software interfaces  Industrial Ethernet  • Industrial Ethernet status LED  • Number of ports of the integrated switch  Protocols  PROFINET  Supports protocol for PROFINET IO	2 1; RS 422 / 485 combined 1 0 2; USB 2.0 1; 5-pole 0 0 0 2 No  2 Yes Yes
Interfaces  Number of industrial Ethernet interfaces  Number of RS 485 interfaces  Number of RS 422 interfaces  Number of RS 232 interfaces  Number of USB interfaces  • USB Mini B  Number of 20 mA interfaces (TTY)  Number of parallel interfaces  Number of other interfaces  Number of SD card slots  With software interfaces  Industrial Ethernet  • Industrial Ethernet status LED  • Number of ports of the integrated switch  Protocols  PROFINET  Supports protocol for PROFINET IO  IRT	2 1; RS 422 / 485 combined 1 0 2; USB 2.0 1; 5-pole 0 0 2 No  2 Yes Yes Yes; As of WinCC V12
Interfaces  Number of industrial Ethernet interfaces  Number of RS 485 interfaces  Number of RS 422 interfaces  Number of RS 232 interfaces  Number of USB interfaces  • USB Mini B  Number of 20 mA interfaces (TTY)  Number of parallel interfaces  Number of SD card slots  With software interfaces  Industrial Ethernet  • Industrial Ethernet status LED  • Number of ports of the integrated switch  Protocols  PROFINET  Supports protocol for PROFINET IO  IRT  PROFIBUS	2 1; RS 422 / 485 combined 1 0 2; USB 2.0 1; 5-pole 0 0 2 No  Yes Yes Yes Yes; As of WinCC V12 Yes
Interfaces  Number of industrial Ethernet interfaces  Number of RS 485 interfaces  Number of RS 422 interfaces  Number of RS 232 interfaces  Number of USB interfaces  • USB Mini B  Number of 20 mA interfaces (TTY)  Number of parallel interfaces  Number of other interfaces  Number of SD card slots  With software interfaces  Industrial Ethernet  • Industrial Ethernet status LED  • Number of ports of the integrated switch  Protocols  PROFINET  Supports protocol for PROFINET IO  IRT  PROFIBUS  MPI	2 1; RS 422 / 485 combined 1 0 2; USB 2.0 1; 5-pole 0 0 2 No  2 Yes Yes Yes; As of WinCC V12
Interfaces  Number of industrial Ethernet interfaces  Number of RS 485 interfaces  Number of RS 422 interfaces  Number of RS 232 interfaces  Number of USB interfaces  • USB Mini B  Number of 20 mA interfaces (TTY)  Number of parallel interfaces  Number of other interfaces  Number of SD card slots  With software interfaces  Industrial Ethernet  • Industrial Ethernet status LED  • Number of ports of the integrated switch  Protocols  PROFINET  Supports protocol for PROFINET IO  IRT  PROFIBUS  MPI  Protocols (Ethernet)	2 1; RS 422 / 485 combined 1 0 2; USB 2.0 1; 5-pole 0 0 0 2 No  2 Yes Yes Yes Yes Yes Yes Yes Yes
Interfaces  Number of industrial Ethernet interfaces  Number of RS 485 interfaces  Number of RS 422 interfaces  Number of RS 232 interfaces  Number of USB interfaces  • USB Mini B  Number of 20 mA interfaces (TTY)  Number of parallel interfaces  Number of other interfaces  Number of SD card slots  With software interfaces  Industrial Ethernet  • Industrial Ethernet status LED  • Number of ports of the integrated switch  Protocols  PROFINET  Supports protocol for PROFINET IO  IRT  PROFIBUS  MPI  Protocols (Ethernet)  • TCP/IP	2 1; RS 422 / 485 combined 1 0 2; USB 2.0 1; 5-pole 0 0 0 2 No 2 Yes Yes Yes Yes Yes Yes Yes Yes
Interfaces  Number of industrial Ethernet interfaces  Number of RS 485 interfaces  Number of RS 422 interfaces  Number of RS 232 interfaces  Number of USB interfaces  • USB Mini B  Number of 20 mA interfaces (TTY)  Number of parallel interfaces  Number of other interfaces  Number of SD card slots  With software interfaces  Industrial Ethernet  • Industrial Ethernet status LED  • Number of ports of the integrated switch  Protocols  PROFINET  Supports protocol for PROFINET IO  IRT  PROFIBUS  MPI  Protocols (Ethernet)  • TCP/IP  • DHCP	2 1; RS 422 / 485 combined 1 0 2; USB 2.0 1; 5-pole 0 0 0 2 No 2 Yes Yes Yes Yes; As of WinCC V12 Yes Yes Yes Yes
Interfaces  Number of industrial Ethernet interfaces  Number of RS 485 interfaces  Number of RS 422 interfaces  Number of RS 232 interfaces  Number of USB interfaces  • USB Mini B  Number of parallel interfaces (TTY)  Number of parallel interfaces  Number of SD card slots  With software interfaces  Industrial Ethernet  • Industrial Ethernet status LED  • Number of ports of the integrated switch  Protocols  PROFINET  Supports protocol for PROFINET IO  IRT  PROFIBUS  MIPI  Protocols (Ethernet)  • TCP/IP  • DHCP  • SNMP	2 1; RS 422 / 485 combined 1 0 2; USB 2.0 1; 5-pole 0 0 0 2 No 2 No  2 Yes
Interfaces  Number of industrial Ethernet interfaces  Number of RS 485 interfaces  Number of RS 422 interfaces  Number of RS 232 interfaces  Number of USB interfaces  • USB Mini B  Number of 20 mA interfaces (TTY)  Number of parallel interfaces  Number of other interfaces  Number of SD card slots  With software interfaces  Industrial Ethernet  • Industrial Ethernet status LED  • Number of ports of the integrated switch  Protocols  PROFINET  Supports protocol for PROFINET IO  IRT  PROFIBUS  MPI  Protocols (Ethernet)  • TCP/IP  • DHCP  • SNMP  • DCP	2 1; RS 422 / 485 combined 1 0 2; USB 2.0 1; 5-pole 0 0 0 2 No   Yes Yes Yes; As of WinCC V12 Yes
Interfaces  Number of industrial Ethernet interfaces  Number of RS 485 interfaces  Number of RS 422 interfaces  Number of RS 232 interfaces  Number of USB interfaces  • USB Mini B  Number of parallel interfaces (TTY)  Number of parallel interfaces  Number of SD card slots  With software interfaces  Industrial Ethernet  • Industrial Ethernet status LED  • Number of ports of the integrated switch  Protocols  PROFINET  Supports protocol for PROFINET IO  IRT  PROFIBUS  MIPI  Protocols (Ethernet)  • TCP/IP  • DHCP  • SNMP	2 1; RS 422 / 485 combined 1 0 2; USB 2.0 1; 5-pole 0 0 0 2 No 2 No  2 Yes

• HTTP	Yes
HTTPS	No
• HTML	Yes
• XML	No
• CSS	Yes
<ul><li>Active X</li></ul>	No
<ul> <li>JavaScript</li> </ul>	Yes
• Java VM	No
Redundancy mode	
Media redundancy	
— MRP	Yes; As of WinCC V12
Further protocols	
• CAN	No
EtherNet/IP	Yes
• MODBUS	Yes
EMC	
Emission of radio interference acc. to EN 55 011	
Limit class A, for use in industrial areas	Yes
Limit class B, for use in residential areas	No
Degree and class of protection	INO
NEMA (front)	Voc
Enclosure Type 4 at the front  Final course Type 4 at the front	Yes
Enclosure Type 4x at the front	Yes
Ambient conditions	
Suited for indoor use	Yes
Suited for outdoor use	No
Ambient temperature during operation	
<ul> <li>Operation (vertical installation)</li> </ul>	
<ul><li>For vertical installation, min.</li></ul>	0 °C; = Tmin
<ul> <li>For vertical installation, max.</li> </ul>	50 °C; = Tmax
<ul><li>Operation (max. tilt angle)</li></ul>	
<ul><li>At maximum tilt angle, min.</li></ul>	0 °C; = Tmin
<ul> <li>At maximum tilt angle, min.</li> </ul>	40 °C; = Tmax
<ul> <li>Operation (vertical installation, portrait format)</li> </ul>	
<ul> <li>For vertical installation, min.</li> </ul>	0 °C; = Tmin
<ul> <li>For vertical installation, max.</li> </ul>	40 °C; = Tmax
<ul> <li>Operation (max. tilt angle, portrait format)</li> </ul>	
— At maximum tilt angle, min.	0 °C; = Tmin
— At maximum tilt angle, min.	35 °C; = Tmax
Ambient temperature during storage/transportation	
• min.	-20 °C
• max.	60 °C
Altitude during operation relating to sea level	
Installation altitude above sea level, max.	5 000 m
Ambient air temperature-barometric pressure-	Tmin Tmax at 1 140 hPa 795 hPa (-1 000 m +2 000 m) // Tmin
altitude	(Tmax - 10 K) at 795 hPa 658 hPa (+2 000 m +3 500 m) // Tmin
Deletive hypeidity	(Tmax -20 K) at 658 hPa 540 hPa (+3 500 m +5 000 m)
Relative humidity	400 0/ Dilling and another force to a second
<ul> <li>With condensation, tested in accordance with IEC 60068-2-38, max.</li> </ul>	100 %; RH incl. condensation/frost (no commissioning under condensation conditions)
Resistance	
Coolants and lubricants	
Resistant to commercially available coolants	Yes; Incl. diesel and oil droplets in the air
and lubricants	
Use in stationary industrial systems	Voc. Class 2P2 mold, fungue and dry ret sparse (with the averation of
<ul> <li>to biologically active substances according to EN 60721-3-3</li> </ul>	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request
<ul> <li>to chemically active substances according to EN 60721-3-3</li> </ul>	Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *
LI 00/21 0 0	(sorting dogree o),

<ul> <li>to mechanically active substances according to EN 60721-3-3</li> </ul>	Yes; Class 3S4 incl. sand, dust, *
Use on ships/at sea	
to biologically active substances according to EN 60721-3-6	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request
to chemically active substances according to EN 60721-3-6	Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *
to mechanically active substances according to EN 60721-3-6	Yes; Class 6S3 incl. sand, dust; *
Usage in industrial process technology	
— Against chemically active substances acc. to EN 60654-4	Yes; Class 3 (excluding trichlorethylene)
<ul> <li>Environmental conditions for process, measuring and control systems acc. to ANSI/ISA- 71.04</li> </ul>	Yes; Level GX group A/B (excluding trichlorethylene; harmful gas concentrations up to the limits of EN 60721-3-3 class 3C4 permissible); level LC3 (salt spray) and level LB3 (oil)
Remark	
<ul> <li>Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04</li> </ul>	* The supplied plug covers must remain in place over the unused interfaces during operation!
Conformal coating	
Coatings for printed circuit board assemblies acc. to	Yes; Class 2 for high reliability
EN 61086	
<ul> <li>Protection against fouling acc. to EN 60664-3</li> </ul>	Yes; Type 1 protection
<ul> <li>Military testing according to MIL-I-46058C, Amendment 7</li> </ul>	Yes; Discoloration of coating possible during service life
<ul> <li>Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A</li> </ul>	Yes; Conformal coating, Class A
Operating systems	
	No
proprietary pre-installed operating system	INO
Windows CE	Yes
• Wildows CL	163
Configuration	
Configuration  Meaning indicator	Voc
Message indicator	Yes
Message indicator Alarm system (incl. buffer and acknowledgment)	Yes
Message indicator Alarm system (incl. buffer and acknowledgment) Process value display (output)	Yes Yes
Message indicator  Alarm system (incl. buffer and acknowledgment)  Process value display (output)  Process value default (input) possible	Yes Yes Yes
Message indicator Alarm system (incl. buffer and acknowledgment) Process value display (output) Process value default (input) possible Recipe management	Yes Yes
Message indicator Alarm system (incl. buffer and acknowledgment) Process value display (output) Process value default (input) possible Recipe management Configuration software	Yes Yes Yes Yes
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 Yes Yes Yes No
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 Yes Yes Yes You No No
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	Yes Yes Yes Yes You No No No
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 Standard	Yes Yes Yes Yes No No No No No
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 Standard • WinCC flexible Advanced	Yes Yes Yes Yes You No No No No No No No
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 Standard • WinCC flexible Advanced • WinCC Basic (TIA Portal)	Yes Yes Yes Yes You No
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 Standard • WinCC flexible Advanced • WinCC Basic (TIA Portal) • WinCC Comfort (TIA Portal)	Yes Yes Yes Yes You No No No No No No No No Yes; from V11
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 Standard • WinCC flexible Advanced • WinCC Basic (TIA Portal) • WinCC Comfort (TIA Portal)	Yes Yes Yes Yes Yes  No No No No No No No No Yes; from V11 Yes; from V11
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 Standard • WinCC flexible Advanced • WinCC Basic (TIA Portal) • WinCC Comfort (TIA Portal) • WinCC Advanced (TIA Portal)	Yes Yes Yes Yes You No No No No No No No No Yes; from V11
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 Standard • WinCC flexible Advanced • WinCC Basic (TIA Portal) • WinCC Comfort (TIA Portal) • WinCC Advanced (TIA Portal) • WinCC Professional (TIA Portal)	Yes Yes Yes Yes Yes  No No No No No No No No Yes; from V11 Yes; from V11
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 Standard • WinCC flexible Advanced • WinCC Basic (TIA Portal) • WinCC Comfort (TIA Portal) • WinCC Advanced (TIA Portal) • WinCC Professional (TIA Portal)	Yes Yes Yes Yes  No No No No No No No Yes; from V11 Yes; from V11 Yes; from V11
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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 Standard • WinCC flexible Advanced • WinCC Basic (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)  • WinCC Professional (TIA Portal)	Yes Yes Yes Yes  No No No No No No No Yes; from V11 Yes; from V11 Yes; from V11
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 Standard • WinCC flexible Advanced • WinCC Basic (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 Professional (TIA Portal)  * Languages  • Number of online/runtime languages  * Project languages • Languages per project	Yes Yes Yes Yes  No No No No No No No Yes; from V11 Yes; from V11 Yes; from V11
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 Standard • WinCC flexible Advanced • WinCC Basic (TIA Portal) • WinCC Comfort (TIA Portal) • WinCC Advanced (TIA Portal) • WinCC Professional (TIA Portal) • WinCC Professional (TIA Portal) • WinCC Independent (TIA Portal) • WinCC Professional (TIA Portal)  Languages Online languages • Number of online/runtime languages  Project languages • Languages per project  Functionality under WinCC (TIA Portal)	Yes Yes Yes Yes  No No No No No No No Yes; from V11 Yes; from V11 Yes; from V11
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 Standard • WinCC flexible Advanced • WinCC Basic (TIA Portal) • WinCC Comfort (TIA Portal) • WinCC Advanced (TIA Portal) • WinCC Professional (TIA Portal) • WinCC Professional (TIA Portal) • WinCC Professional (TIA Portal)  Languages Online languages • Number of online/runtime languages Project languages • Languages per project  Functionality under WinCC (TIA Portal) Libraries	Yes Yes Yes Yes  No No No No No No No Yes; from V11 Yes; from V11 Yes; from V11
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 Standard • WinCC flexible Advanced • WinCC Basic (TIA Portal) • WinCC Comfort (TIA Portal) • WinCC Advanced (TIA Portal) • WinCC Advanced (TIA Portal) • WinCC Professional (TIA Portal)  • WinCC Professional (TIA Portal)  Languages Online languages • Number of online/runtime languages  Project languages • Languages per project  Functionality under WinCC (TIA Portal)  Libraries Applications/options	Yes Yes Yes Yes  No No No No No No No Yes; from V11 Yes; from V11 Yes; from V11 Yes; from V11
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 Standard • WinCC flexible Advanced • WinCC Basic (TIA Portal) • WinCC Comfort (TIA Portal) • WinCC Advanced (TIA Portal) • WinCC Professional (TIA Portal) • WinCC Professional (TIA Portal) • WinCC Professional (TIA Portal)  Languages Online languages • Number of online/runtime languages Project languages • Languages per project  Functionality under WinCC (TIA Portal)  Libraries  Applications/options • Web browser	Yes Yes Yes Yes  No No No No No No No Yes; from V11 Yes; from V11 Yes; from V11 Yes; from V11
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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 Standard • WinCC flexible Advanced • WinCC Basic (TIA Portal) • WinCC Comfort (TIA Portal) • WinCC Advanced (TIA Portal) • WinCC Professional (TIA Portal)  • WinCC Professional (TIA Portal)  Languages Online languages • Number of online/runtime languages Project languages • Languages per project  Functionality under WinCC (TIA Portal)  Libraries  Applications/options • Web browser • Pocket Word • Pocket Excel	Yes Yes Yes Yes  No No No No No No No Yes; from V11
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 Standard • WinCC flexible Advanced • WinCC Basic (TIA Portal) • WinCC Comfort (TIA Portal) • WinCC Advanced (TIA Portal) • WinCC Professional (TIA Portal) • WinCC Professional (TIA Portal)  Languages Online languages • Number of online/runtime languages Project languages • Languages per project  Functionality under WinCC (TIA Portal)  Libraries  Applications/options • Web browser • Pocket Word	Yes Yes Yes Yes  No No No No No No No Yes; from V11 Yes; from V11 Yes; from V11 Yes; from V11

SIMATIC WincC Audit   Yes	SIMATIC WinCC Sm@rtServer	Yes
Number of Visual Basic Scripts	_	
Task planner		
• time-controlled	· · · · · · · · · · · · · · · · · · ·	100
Lask-controlled		Yes
Helps system		
Number of characters per info text		100
Number of alarm classes   32		70
Number of alarm classes     ○ Bit messages     — Number of bit messages     — Number of bit messages     — Number of analog messages     — Number of analog messages     — Number of analog messages     — Number of procedure     ○ System messages, bit MI     ○ System messages, bit GIMATIC 57, Sinumerik,     Simotion, etc.)     Number of characters per message     ○ Number of characters per message     ○ Number of characters per message     ○ Number of process values per message     ○ Acknowdegment groups     ○ Wes     ○ Message indicator     ○ Wes     ○ Message buffer     ─ Number of entries     ○ Circulating buffer     ─ Number of entries     ○ Circulating buffer     ○ Wes     ─ retentive     ○ Wes     ─ retentive     ○ Wes     ○ Data records per recipe     ○ Size of internal recipe memory     ○ Alto vecords per recipe     ○ Entries per data record     ○ Size of internal recipe memory     ○ Recipe memory expandable     ○ Ves     ○ Number of variables per device     ○ Number of variables per device     ○ Number of variables per screen     ○ Auto Ves     ○ Number of variables per screen     ○ Auto Ves     ○ Multiplexing     ○ Yes     ○ Situatures     ○ Number of configurable images     ○ Number of configurable images     ○ Number of configurable images     ○ Number of by PLC     ○ Yes     ○ Image selection by PLC     ○ Yes     ○ Image selection by PLC     ○ Yes     ○ Image selection by PLC     ○ Yes     ○ Image number in the PLC     ○ Yes     ○ Image number in the PLC     ○ Yes     ○ Image number in the PLC     ○ Yes     ○ Soutches     ○ Craphic I/O fields (graphics list)     ○ Soutches     ○ Soutches     ○ Soutches     ○ Craphic I/O fields     ○ Cra	·	
		32
		<u>-</u>
	_	4 000
Number of analog messages   200	_	
S 7 alarm number procedure     System messages HMI     System messages, other (SIMATIC S7, Sinumerik, Simotion, etc.)     Number of characters per message     Number of process values per message     Acknowledgment groups     Yes     Message indicator     Yes     Message indicator     Yes     Message indicator     — Number of entries     — Circulating buffer     — Number of entries     — retentive     — retentive     — maintenance-free     — maintenance-free     Pescipe management      Number of recipes     Oba records per recipe     Size of internal recipe memory     Size of internal recipe memory     Size of internal recipe memory     Size of variables per device     Number of variables per device     Number of variables per screen     Number of variables per screen     Number of variables per screen     Number of variables per device     Number of variables per device     Number of variables per screen     Autory     Structures     Yes     Arrays     Number of configurable images     Number of configura		200
System messages, other (SIMATIC S7, Sinumerik, Simotion, etc.)  Number of characters per message Number of process values per message Acknowledgment groups Yes Message indicator Nessage indicator Nessage buffer  - Number of entries - Circulating buffer Yes - retentive Yes - maintenance-free Yes  Recipe management  Number of recipes Data records per recipe Entries per data record Size of internal recipe memory Recipe memory expandable Recipe memory expandable Recipe memory expandable Number of variables per device Number of variables per screen Number		
Simoton, etc.)   Number of characters per message   80     Number of process values per message   8     Acknowledgment groups   Yes     Message indicator   Yes     Message buffer   Thumber of entries   1024     — Circulating buffer   Yes     — retentive   Yes     — retentive   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     Limit values   Yes     Multiplexing   Yes     Structures   Yes     Arrays   Yes     Images     Number of configurable images   500     Permanent window/default   Yes     Image objects     Number of policits per image   400     Permanent window/default   Yes     Image number in the PLC   Yes     Image number in the PLC   Yes     Image number in the PLC   Yes     Symbolic //O fields (graphics list)   Yes     Signation   Signation   Yes     Suntches   Yes     Symbolic //O fields (graphics list)   Yes     Suntches   Yes     Buttons   Yes     Graphic idsplay   Yes		
Number of process values per message Acknowledgment groups Acknow		
Number of process values per message Acknowledgment groups Acknow	Number of characters per message	80
Acknowledgment groups     Message indicator     Message buffer     — Number of entries     — Circulating buffer     — retentive     — retentive     — retentive     — maintenance-free  Recipe management     • Number of recipes     • Data records per recipe     • Entries per data record     • Size of internal recipe emory     • Recipe memory expandable     • Number of variables per device     • Number of variables per screen     • Mumble of variables per screen     • Mumber of variables per screen     • Number of variables per screen     • Mumble of variables per screen     • Mumble of variables per screen     • Mumble of variables per screen     • Mumber of variables per screen     • Number of configurable images     •		8
Message indicator     Message buffer     — Number of entries     — circulating buffer     — retentive     — retentive     — maintenance-free     Recipe management      Number of recipes     ① Data records per recipe     ② Entries per data record     ③ I 0 000     ③ Size of internal recipe memory     ② Recipe memory expandable     Yes  Variables      Number of variables per device     ③ Number of variables per screen     ④ Multiplexing     ④ Structures     ④ Multiplexing     ④ Structures     ④ Arrays     ④ Arrays     ☐ Permanent window/default     ⑤ Global image     ④ Image selection by PLC     ☑ Image objects      ⑥ Number of objects per image     ○ Symbolic I/O fields (graphics list)     ○ Graphic I/O fields (text list)     ○ Data record     ○ Yes     ⑤ Switches     ○ Switches     ○ Switches     ○ Graphic display     ○ Graphic display     ○ Graphic display     ○ Cyre     ○ Graphic display     ○ Yes     ○ Graphic display     ○ Cyre     ○ Graphic display     ○ Yes     ○ Graphic display     ○ Cyre     ○ Graphic display     ○ Yes     ○ Cyre		Yes
		Yes
Number of entries Circulating buffer retentive retentive maintenance-free Yes maintenance-free Yes maintenance-free Yes maintenance-free Yes maintenance-free Yes maintenance-free Yes Mumber of recipes Size of internal recipe Entries per data record 1 000 Size of internal recipe memory Recipe memory expandable Yes Number of variables per device Number of variables per device Number of variables per screen 400 Limit values Yes Multiplexing Structures Arrays Arrays Yes Arrays Number of configurable images Permanent window/default Yes Image selection by PLC Yes Image selection by PLC Yes Image selection by PLC Yes Image objects Number of objects per image Text fields Yes Graphic I/O fields (graphics list) Datet/time fields Yes Switches Switches Switches Switches Switches Switches Graphic display Yes Corns Yes Corns Yes Caraphic display Yes Corns Yes Corns Yes Corns Yes Caraphic display Yes Corns Yes Corns Yes Caraphic display Yes		
retentive — maintenance-free Yes  Recipe management  ● Number of recipes ● Data records per recipe ● S00 ● Entries per data record ● 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 ● Unit values ● Ves ● Multiplexing ● Structures ● Arrays ● Structures ● Arrays  ■ Number of configurable images ● Number of configurable images ● Number of beigets per screen ● Image selection by PLC ● Image number in the PLC  Image objects ● Number of bjects per image ● Text fields ● Ves ● Graphic I/O fields (graphics list) ● Symbolic I/O fields (text list) ● Switches ● Switches ● Switches ● Graphic I/O fields (text list) ● Switches ● Graphic I/O fields (text list) ● Yes ● Buttons ● Graphic display ● Yes ● Loons	_	1 024
retentive maintenance-free Yes maintenance-free Yes  Recipe management    Number of recipes   300	<ul> <li>Circulating buffer</li> </ul>	Yes
Recipe management	-	Yes
<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>Yes</li> <li>Variables</li> <li>Number of variables per device</li> <li>Number of variables per screen</li> <li>Limit values</li> <li>Muttiplexing</li> <li>Structures</li> <li>Arrays</li> <li>Yes</li> <li>Arrays</li> <li>Yes</li> <li>Images</li> <li>Number of configurable images</li> <li>Permanent window/default</li> <li>Global image</li> <li>Image selection by PLC</li> <li>Image number in the PLC</li> <li>Yes</li> <li>Image objects</li> <li>Number of objects per image</li> <li>Text fields</li> <li>(Graphic I/O fields (graphics list)</li> <li>Yes</li> <li>Symbolic I/O fields (graphics list)</li> <li>Yes</li> <li>Symbolic I/O fields (text list)</li> <li>Yes</li> <li>Buttons</li> <li>Graphic display</li> <li>Icons</li> <li>Yes</li> </ul>	— maintenance-free	Yes
<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>Yes</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>Yes</li> <li>Arrays</li> <li>Permanent window/default</li> <li>Global image</li> <li>Image selection by PLC</li> <li>Image sobjects</li> <li>Number of objects per image</li> <li>Number of objects per image</li> <li>Text fields</li> <li>Yes</li> <li>JO fields (graphics list)</li> <li>Symbolic I/O fields (text list)</li> <li>Pyes</li> <li>Buttons</li> <li>Graphic display</li> <li>Farshic display</li> <li>Yes</li> <li>Graphic display</li> <li>Yes</li> </ul>	Recipe management	
Entries per data record Size of internal recipe memory Recipe memory expandable Yes  Variables  Number of variables per device Number of variables per screen Limit values Multiplexing Structures Arrays Yes Arrays  Number of configurable images Arrays  Number of configurable images Permanent window/default Yes Global image Image selection by PLC Image sumber in the PLC Yes Image objects  Number of objects per image Ves Ilvo fields Graphic I/O fields (graphics list) Symbolic I/O fields (text list) Date/time fields Yes Buttons Graphic display Ves	Number of recipes	300
Entries per data record Size of internal recipe memory Recipe memory expandable Yes  Variables  Number of variables per device Number of variables per screen Limit values Structures Arrays Yes Arrays  Number of configurable images Arrays  Number of configurable images Sloudal image Images  Number of configurable images Sloudal image Image selection by PLC Image selection by PLC Image objects  Number of objects per image Ves Symbolic I/O fields (graphics list) Symbolic I/O fields (text list) Symbolic I/O fields (text list) Symbolic I/O fields (text list) Switches Switches Switches Graphic display Fes Graphic display Fes Graphic display Fes	Data records per recipe	500
Size of internal recipe memory Recipe memory expandable  Number of variables per device Number of variables per screen Limit values Multiplexing Structures Arrays  Number of configurable images Permanent window/default Global image Image selection by PLC Image number in the PLC Image objects  Number of objects per image Number of objects per image  Number of objects (graphics list) Symbolic I/O fields (graphics list) Symbolic I/O fields (text list) Switches Buttons Graphic display Fes		1 000
Variables  • Number of variables per device • Number of variables per screen • Limit values • Multiplexing • Structures • Arrays  • Arrays    Number of configurable images • Arrays   Yes   Multiplexing • Structures • Arrays   Yes   Mumber of configurable images • Number of configurable images • Permanent window/default • Global image • Image selection by PLC • Image number in the PLC   Yes   Image objects • Number of objects per image • Text fields • I/O fields • Craphic I/O fields (graphics list) • Symbolic I/O fields (text list) • Symbolic I/O fields (text list) • Switches • Switches • Buttons • Graphic display • Icons		2 Mbyte
Variables  • Number of variables per device • Number of variables per screen • Number of variables per screen • Auto • Limit values • Multiplexing • Structures • Arrays • Arrays    Number of configurable images • Number of configurable images • Permanent window/default • Global image • Image selection by PLC • Image number in the PLC    Ves   Image objects • Number of objects per image • Number of objects per image • Yes • Irat fields • Yes • I/O fields • Caraphic I/O fields (graphics list) • Symbolic I/O fields (text list) • Date/time fields • Switches • Buttons • Graphic display • Icons		
<ul> <li>Number of variables per screen</li> <li>Limit values</li> <li>Yes</li> <li>Multiplexing</li> <li>Yes</li> <li>Structures</li> <li>Arrays</li> <li>Yes</li> <li>Arrays</li> <li>Number of configurable images</li> <li>Number of configurable images</li> <li>Permanent window/default</li> <li>Yes</li> <li>Global image</li> <li>Image election by PLC</li> <li>Image number in the PLC</li> <li>Yes</li> <li>Image objects</li> <li>Number of objects per image</li> <li>Yes</li> <li>I/O fields</li> <li>Yes</li> <li>Symbolic I/O fields (graphics list)</li> <li>Symbolic I/O fields (text list)</li> <li>Date/time fields</li> <li>Switches</li> <li>Switches</li> <li>Buttons</li> <li>Graphic display</li> <li>Yes</li> <li>Graphic display</li> <li>Yes</li> <li>Icons</li> </ul>		
<ul> <li>Limit values</li> <li>Multiplexing</li> <li>Structures</li> <li>Structures</li> <li>Arrays</li> <li>Arrays</li> <li>Number of configurable images</li> <li>Number of configurable images</li> <li>Permanent window/default</li> <li>Global image</li> <li>Image selection by PLC</li> <li>Image number in the PLC</li> <li>Image objects</li> <li>Number of objects per image</li> <li>I/O fields</li> <li>Fext fields</li> <li>I/O fields (graphics list)</li> <li>Symbolic I/O fields (graphics list)</li> <li>Symbolic I/O fields (text list)</li> <li>Date/time fields</li> <li>Switches</li> <li>Switches</li> <li>Buttons</li> <li>Graphic display</li> <li>Icons</li> </ul>	Number of variables per device	2 048
<ul> <li>Multiplexing</li> <li>Structures</li> <li>Arrays</li> <li>Yes</li> <li>Arrays</li> <li>Yes</li> <li>Images</li> <li>Number of configurable images</li> <li>Permanent window/default</li> <li>Global image</li> <li>Image selection by PLC</li> <li>Image number in the PLC</li> <li>Image objects</li> <li>Number of objects per image</li> <li>I/O fields</li> <li>I/O fields (graphics list)</li> <li>Symbolic I/O fields (text list)</li> <li>Date/time fields</li> <li>Switches</li> <li>Buttons</li> <li>Graphic display</li> <li>Icons</li> </ul>	<ul> <li>Number of variables per screen</li> </ul>	400
<ul> <li>Structures</li> <li>Arrays</li> <li>Yes</li> <li>Images</li> <li>Number of configurable images</li> <li>Permanent window/default</li> <li>Global image</li> <li>Image selection by PLC</li> <li>Image number in the PLC</li> <li>Image objects</li> <li>Number of objects per image</li> <li>I/O fields</li> <li>Graphic I/O fields (graphics list)</li> <li>Symbolic I/O fields (text list)</li> <li>Date/time fields</li> <li>Switches</li> <li>Buttons</li> <li>Graphic display</li> <li>Icons</li> <li>Yes</li> </ul>		Yes
Images  Number of configurable images Permanent window/default Global image Image selection by PLC Image number in the PLC Yes Image objects  Number of objects per image Yes I/O fields Graphic I/O fields (graphics list) Symbolic I/O fields (text list) Date/time fields Switches Buttons Graphic display Image oconfigurable images Source So	Multiplexing	Yes
Images  Number of configurable images Permanent window/default Global image Image selection by PLC Image number in the PLC Yes Image objects Number of objects per image Yes If consumer in the PLC Yes  Image objects  Number of objects per image Yes Yes Image objects  Number of objects per image Yes If consumer image Yes Yes Yes Yes Yes Yes Yes Symbolic I/O fields (graphics list) Yes Symbolic I/O fields (text list) Yes Switches Yes Buttons Yes Graphic display Yes Icons Yes	Structures	Yes
Images  Number of configurable images Permanent window/default Yes Global image Image Selection by PLC Image selection by PLC Image number in the PLC Yes Image objects Number of objects per image Yes I/O fields Yes I/O fields Yes Graphic I/O fields (graphics list) Symbolic I/O fields (text list) Date/time fields Switches Buttons Graphic display Image Soloco Yes Soloco Yes Yes Soloco Yes		
<ul> <li>Number of configurable images</li> <li>Permanent window/default</li> <li>Global image</li> <li>Image selection by PLC</li> <li>Image number in the PLC</li> <li>Yes</li> <li>Image objects</li> <li>Number of objects per image</li> <li>Text fields</li> <li>I/O fields</li> <li>Graphic I/O fields (graphics list)</li> <li>Symbolic I/O fields (text list)</li> <li>Date/time fields</li> <li>Switches</li> <li>Buttons</li> <li>Graphic display</li> <li>Icons</li> <li>Yes</li> </ul>	Images	
<ul> <li>Permanent window/default</li> <li>Global image</li> <li>Image selection by PLC</li> <li>Image number in the PLC</li> <li>Yes</li> </ul> Image objects <ul> <li>Number of objects per image</li> <li>Text fields</li> <li>I/O fields</li> <li>Graphic I/O fields (graphics list)</li> <li>Symbolic I/O fields (text list)</li> <li>Date/time fields</li> <li>Switches</li> <li>Buttons</li> <li>Graphic display</li> <li>Icons</li> </ul>		500
<ul> <li>Image selection by PLC</li> <li>Image number in the PLC</li> <li>Yes</li> <li>Image objects</li> <li>Number of objects per image</li> <li>Text fields</li> <li>I/O fields</li> <li>Graphic I/O fields (graphics list)</li> <li>Symbolic I/O fields (text list)</li> <li>Date/time fields</li> <li>Switches</li> <li>Buttons</li> <li>Graphic display</li> <li>Icons</li> </ul>		
<ul> <li>Image selection by PLC</li> <li>Image number in the PLC</li> <li>Yes</li> <li>Image objects</li> <li>Number of objects per image</li> <li>Text fields</li> <li>I/O fields</li> <li>Graphic I/O fields (graphics list)</li> <li>Symbolic I/O fields (text list)</li> <li>Date/time fields</li> <li>Switches</li> <li>Buttons</li> <li>Graphic display</li> <li>Icons</li> </ul>	Global image	Yes
<ul> <li>Image number in the PLC</li> <li>Image objects</li> <li>Number of objects per image</li> <li>Text fields</li> <li>I/O fields</li> <li>Graphic I/O fields (graphics list)</li> <li>Symbolic I/O fields (text list)</li> <li>Date/time fields</li> <li>Switches</li> <li>Buttons</li> <li>Graphic display</li> <li>Icons</li> </ul>	_	Yes
Image objects  Number of objects per image Text fields I/O fields		Yes
<ul> <li>Number of objects per image</li> <li>Text fields</li> <li>I/O fields</li> <li>Graphic I/O fields (graphics list)</li> <li>Symbolic I/O fields (text list)</li> <li>Date/time fields</li> <li>Switches</li> <li>Buttons</li> <li>Graphic display</li> <li>Icons</li> </ul>		
<ul> <li>Text fields</li> <li>I/O fields</li> <li>Graphic I/O fields (graphics list)</li> <li>Symbolic I/O fields (text list)</li> <li>Date/time fields</li> <li>Switches</li> <li>Buttons</li> <li>Graphic display</li> <li>Icons</li> </ul>	Number of objects per image	400
<ul> <li>Graphic I/O fields (graphics list)</li> <li>Symbolic I/O fields (text list)</li> <li>Date/time fields</li> <li>Switches</li> <li>Buttons</li> <li>Graphic display</li> <li>Icons</li> </ul> Yes <ul> <li>Yes</li> </ul>		Yes
<ul> <li>Symbolic I/O fields (text list)</li> <li>Date/time fields</li> <li>Switches</li> <li>Buttons</li> <li>Graphic display</li> <li>Icons</li> </ul> Yes  Yes  Yes  Yes  Yes  Yes  Yes  Yes	• I/O fields	Yes
<ul> <li>Symbolic I/O fields (text list)</li> <li>Date/time fields</li> <li>Switches</li> <li>Buttons</li> <li>Graphic display</li> <li>Icons</li> </ul> Yes Yes Yes Yes Yes Yes	<ul> <li>Graphic I/O fields (graphics list)</li> </ul>	Yes
<ul> <li>Date/time fields</li> <li>Switches</li> <li>Buttons</li> <li>Graphic display</li> <li>Icons</li> <li>Yes</li> <li>Yes</li> <li>Yes</li> </ul>		Yes
<ul> <li>Buttons</li> <li>Graphic display</li> <li>Icons</li> <li>Yes</li> <li>Yes</li> <li>Yes</li> </ul>		Yes
<ul><li> Graphic display</li><li> Icons</li><li> Yes</li><li> Yes</li></ul>	<ul> <li>Switches</li> </ul>	Yes
<ul><li> Graphic display</li><li> Icons</li><li> Yes</li><li> Yes</li></ul>	Buttons	Yes
• Icons Yes	Graphic display	
Complex image objects		

Number of complex objects per screen   20		
	<ul> <li>Number of complex objects per screen</li> </ul>	20
	<ul> <li>Alarm view</li> </ul>	
Statuscontrol   Yes	<ul><li>Trend view</li></ul>	Yes
	<ul><li>User view</li></ul>	Yes
Recipe view   Yes   (ix) Irend view   Yes   (ix) Ire	<ul> <li>Status/control</li> </ul>	Yes
	<ul><li>Sm@rtClient view</li></ul>	Yes
System diagnostics view     Media Player     Yes     Bar graphs     Silders     Silders     Pointer instruments     Pointer instruments     Pointer instruments     Analog/digital clock  Lists      Number of text lists per project     Number of articles per text list     Sono     Number of articles per text list     Sono     Number of articles per text list     Sono     Number of articles per device     Number of articles per archive     Number of articles per archive     Number of entries per archive     Number of user archive     Number of user of entries per archive     Number of user of the entries o	Recipe view	Yes
Media Player	<ul><li>f(x) trend view</li></ul>	Yes
• Media Player         Yes           • Bar graphs         Yes           • Cholter instruments         Yes           • Pointer instruments         Yes           • Chalogydigial clock         Yes           • Number of text lists per project         500           • Number of graphics lists per project         500           • Number of entries per graphics list         500           • Number of entries per graphics list         500           • Number of entries per archive         20 000           • Number of entries per archive         20 000           • Message archive         Yes           • Process value archive         Yes           • Process value archive         Yes           • Archiving methods         - Sequential archive         Yes           • Archiving methods         - Sequential archive         Yes           • Memory location         - Wes         - Sequential archive         Yes           • Data storage format         Yes         - Sequential archive         Yes           • Data storage format         Yes         - Sequential archive         Yes           • Number of user groups         50         Number of user groups         50           • Number of user groups         50         Nu	System diagnostics view	Yes
Bar graphs   Yes		Yes
Silders     Pointer instruments     Number of ext lists per project     Number of entries per text list     Number of entries per text list     Number of entries per graphics lists     Number of entries per graphics list     Number of entries per archive     Poses value archive     Per overs value archive     Per overs value archive     Per overs value archive     Number of entries per archive     Number of entries per archive     Number of user group     Number of user groups     Number of user	•	Yes
		Yes
Number of text lists per project		
Number of entries per text list     Number of graphics lists per project     Number of entries per graphics list     Sono     Number of entries per graphics list     Sono     Number of entries per archive     Number of user of twee inches like inch		500
Number of graphics lists per project 500     Number of entries per graphics list 500     Number of archives per device 50     Number of archives per archive 20 0000     Message archive Yes     Process value archive Yes     Process value archive Yes     Archiving methods     — Sequential archive Yes     — Short-term archive Yes     — Memory location    — Memory card Yes     — USB memory Yes     — Data storage format Yes     — TXT Yes     — RDB Yes  Security     Number of user groups 50     Number of user groups 50     • Number of user sprints 32     • Number of user sprints 32     • Number of user nights 32     • Number of user sprints 32     • Number of users sprints 33     • Number of users sprints 32     • Number of us		
Number of entries per graphics list		
Number of archives per device   50		
Number of archives per device     Number of entries per archive     Number of executing archive     Number of executing archive     Number of user groups		500
Number of entries per archive		F0
● Message archive         Yes           ● Process value archive         Yes           ● Archiving methods         Yes           — Sequential archive         Yes           — Short-term archive         Yes           ● Memory location         Yes           — USB memory         Yes           — Ethernet         Yes           ● Data storage format         Yes           — CSV         Yes           — TXT         Yes           — RDB         Yes           Security         Yes           • Number of user groups         50           • Number of user rights         32           • Password export/import         Yes<		
<ul> <li>Process value archive</li> <li>Archiving methods</li> <li>— Sequential archive</li> <li>— Short-term archive</li> <li>Yes</li> <li>Memory location</li> <li>— Memory card</li> <li>— USB memory</li> <li>— Ethernet</li> <li>Data storage format</li> <li>— CSV</li> <li>— TXT</li> <li>— RDB</li> <li>Yes</li> <li>Security</li> <li>Number of user groups</li> <li>Number of user rights</li> <li>32</li> <li>Number of users</li> <li>Sasword export/import</li> <li>Yes</li> <li>SIMATIC Logon</li> <li>Logging through printer</li> <li>Alarms</li> <li>Report (shift log)</li> <li>Hardcopy</li> <li>Electronic print to file</li> <li>Character sets</li> <li>Keyboard fonts</li> <li>— US English</li> <li>Transfer (upload/download)</li> <li>MPI/PROFIBUS DP</li> <li>Yes</li> <li>Elthernet</li> <li>Yes</li> <li>S7-1200</li> <li>Yes</li> </ul>		
Sequential archive		Yes
- Short-term archive  Memory location  — Memory card — USB memory — Ethernet Pes  Data storage format — CSV — TXT — RDB — Yes  Security  Number of user groups Number of user groups Number of user rights Silvatific Logon Password export/import Silvatific Logon  Logging through printer  Alarms Report (shift log) Hardcopy Electronic print to file  Character sets Keyboard fonts — US English Yes  Transfer (upload/download)  MPI/PROFIBUS DP USINB Silvatific Logo Process coupling  No  Process coupling  Process coupling  Silvatific Logo Pes  Wes  Silvatific Logon Pes  Mes  Pes  Pes  Pes  Pes  Pes  Pes		
Memory card USB memory Ethernet USB memory Ethernet CSV TXT CSV TXT RDB Number of user groups Number of user groups Number of user groups Number of user groups Number of user system Number of users Password export/import SIMATIC Logon Yes SIMATIC Logon Yes Report (shift log) Hardcopy Yes Report (shift log) Hardcopy Yes Electronic print to file US English US		Yes
- USB memory - Ethernet  Data storage format - CSV - TXT - RDB Yes  Security  ● Number of user groups ● Number of user rights 9 Number of user sights 9 Number of users ● Number of users ● SiMATIC Logon Password export/import ● SIMATIC Logon Yes  Logging through printer  ● Alarms Pactory ● Report (shift log) ● Hardcopy ● Electronic print to file  Character sets ● Keyboard fonts - US English Transfer (upload/download) ● MPI/PROFIBUS DP ● USB ● Ethernet ● Using external storage medium Process coupling ● \$7-1200 ● \$7-1200 ● Yes  Yes  Yes  Yes  Yes  Yes  Yes  Yes		
Ethernet  - Data storage format  CSV TXT RDB RDB Security  Number of user groups Number of user rights Number of user rights Number of user rights Number of user services Number of users Password export/import SIMATIC Logon SIMATIC Logon SIMATIC Logon Ves SIMATIC Logon Ves Ves Neport (shift log) Hardcopy Yes Report (shift log) Hardcopy Ves Electronic print to file Ves; PDF, HTML  Character sets Keyboard fonts US English US English US English Ves USB USB Ves Ethernet UsB UsB UsB Ves UsB Usg external storage medium No  Process coupling S7-1200 S7-1500 Yes Yes Ves Ves Ves Ves Ves Ves Ves Ves S7-1500 Yes Ves	— Memory card	Yes
	— USB memory	Yes
- CSV	— Ethernet	Yes
TXT	<ul> <li>Data storage format</li> </ul>	
— 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         Yes           • Alarms         Yes           • Report (shift log)         Yes           • Hardcopy         Yes           • Electronic print to file         Yes; PDF, HTML           Character sets         Keyboard fonts           • US English         Yes           Transfer (upload/download)         Yes           • USB         Yes           • Ethernet         Yes           • Lethernet         Yes           • using external storage medium         No           Process coupling         Yes           • S7-1200         Yes           • S7-1500         Yes	— CSV	Yes
Number of user groups   50	— TXT	Yes
<ul> <li>Number of user groups</li> <li>Number of user rights</li> <li>Number of users</li> <li>Number of users</li> <li>Password export/import</li> <li>Yes</li> <li>SIMATIC Logon</li> <li>Yes</li> <li>Logging through printer</li> <li>Alarms</li> <li>Report (shift log)</li> <li>Hardcopy</li> <li>Electronic print to file</li> <li>Yes; PDF, HTML</li> <li>Character sets</li> <li>Keyboard fonts         <ul> <li>US English</li> </ul> </li> <li>Transfer (upload/download)</li> <li>MPI/PROFIBUS DP</li> <li>USB</li> <li>Ethernet</li> <li>Using external storage medium</li> </ul> <li>Process coupling</li> <li>S7-1200</li> <li>S7-1500</li> <li>Yes</li>	— RDB	Yes
<ul> <li>Number of user rights</li> <li>Number of users</li> <li>Password export/import</li> <li>Yes</li> <li>SIMATIC Logon</li> <li>Yes</li> <li>Logging through printer</li> <li>Alarms</li> <li>Report (shift log)</li> <li>Hardcopy</li> <li>Electronic print to file</li> <li>Yes; PDF, HTML</li> <li>Character sets</li> <li>Keyboard fonts         <ul> <li>US English</li> <li>Yes</li> </ul> </li> <li>Transfer (upload/download)</li> <li>MPI/PROFIBUS DP</li> <li>USB</li> <li>Ethernet</li> <li>using external storage medium</li> <li>No</li> <li>Process coupling</li> <li>\$7-1200</li> <li>\$7-1500</li> <li>Yes</li> </ul>	Security	
<ul> <li>Number of users</li> <li>Password export/import</li> <li>Yes</li> <li>SIMATIC Logon</li> <li>Yes</li> <li>Logging through printer</li> <li>Alarms</li> <li>Report (shift log)</li> <li>Hardcopy</li> <li>Electronic print to file</li> <li>Yes; PDF, HTML</li> <li>Character sets</li> <li>Keyboard fonts         <ul> <li>US English</li> <li>MPI/PROFIBUS DP</li> <li>USB</li> <li>Ethernet</li> <li>Using external storage medium</li> </ul> </li> <li>Process coupling</li> <li>\$7-1200</li> <li>\$7-1500</li> <li>Yes</li> </ul>	Number of user groups	50
<ul> <li>Number of users</li> <li>Password export/import</li> <li>Yes</li> <li>SIMATIC Logon</li> <li>Yes</li> <li>Logging through printer</li> <li>Alarms</li> <li>Report (shift log)</li> <li>Hardcopy</li> <li>Electronic print to file</li> <li>Yes; PDF, HTML</li> <li>Character sets</li> <li>Keyboard fonts         <ul> <li>US English</li> <li>MPI/PROFIBUS DP</li> <li>USB</li> <li>Ethernet</li> <li>Using external storage medium</li> </ul> </li> <li>Process coupling</li> <li>\$7-1200</li> <li>\$7-1500</li> <li>Yes</li> </ul>	<ul> <li>Number of user rights</li> </ul>	32
<ul> <li>Password export/import</li> <li>SIMATIC Logon</li> <li>Yes</li> <li>Logging through printer</li> <li>Alarms</li> <li>Report (shift log)</li> <li>Hardcopy</li> <li>Electronic print to file</li> <li>Yes; PDF, HTML</li> </ul> Character sets <ul> <li>Keyboard fonts</li> <li>US English</li> <li>Wes</li> </ul> Transfer (upload/download) <ul> <li>MPI/PROFIBUS DP</li> <li>USB</li> <li>Ethernet</li> <li>Yes</li> </ul> Ethernet <ul> <li>Yes</li> </ul> Process coupling <ul> <li>\$7-1200</li> <li>\$7-1500</li> </ul> Yes <ul> <li>Yes <ul> <li>Yes</li> </ul> </li> </ul>		50
SIMATIC Logon  Yes  Logging through printer  Alarms Report (shift log) Hardcopy Electronic print to file  Character sets  Keyboard fonts US English Transfer (upload/download)  MPI/PROFIBUS DP SETHERM Elbert Yes  Ethernet Yes  ST-1200 ST-1500  Yes  Yes  Yes  Yes  Yes  Yes  Yes  Y		
Logging through printer  Alarms Report (shift log) Hardcopy Electronic print to file Yes; PDF, HTML  Character sets  Keyboard fonts — US English Transfer (upload/download)  MPI/PROFIBUS DP Substitute of the set of the se		
<ul> <li>Alarms</li> <li>Report (shift log)</li> <li>Hardcopy</li> <li>Electronic print to file</li> <li>Yes; PDF, HTML</li> <li>Character sets</li> <li>Keyboard fonts         <ul> <li>US English</li> <li>Yes</li> </ul> </li> <li>Transfer (upload/download)</li> <li>MPI/PROFIBUS DP</li> <li>USB</li> <li>Ethernet</li> <li>using external storage medium</li> <li>Process coupling</li> <li>S7-1200</li> <li>S7-1500</li> <li>Yes</li> </ul>		
<ul> <li>Report (shift log)</li> <li>Hardcopy</li> <li>Electronic print to file</li> <li>Yes; PDF, HTML</li> </ul> Character sets <ul> <li>Keyboard fonts</li> <li>US English</li> <li>Yes</li> </ul> Transfer (upload/download) <ul> <li>MPI/PROFIBUS DP</li> <li>USB</li> <li>Ethernet</li> <li>using external storage medium</li> </ul> Process coupling <ul> <li>S7-1200</li> <li>S7-1500</li> </ul> Yes <ul> <li>Yes</li> </ul> Yes <ul> <li>Yes <ul> <li>Yes</li> </ul>  Yes <ul> <li>Yes <ul> <li>Yes</li> </ul>  Yes <ul> <li>Yes <ul> <li>Yes</li> </ul>  Yes <ul> <li>Yes <ul> <li>Yes</li> </ul>  Yes <ul> <li>Yes <ul> <li>Yes</li> </ul>  Yes <ul> <li>Yes <ul> <li>Yes</li> </ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul>		Yes
<ul> <li>Hardcopy</li> <li>Electronic print to file</li> <li>Yes; PDF, HTML</li> </ul> Character sets <ul> <li>Keyboard fonts</li> <li>US English</li> <li>Yes</li> </ul> Transfer (upload/download) <ul> <li>MPI/PROFIBUS DP</li> <li>USB</li> <li>Ethernet</li> <li>using external storage medium</li> </ul> Process coupling <ul> <li>S7-1200</li> <li>S7-1500</li> </ul> Yes <ul> <li>Yes</li> </ul> Yes <ul> <li>Yes <ul> <li>Yes</li> </ul>  Yes <ul> <li>Yes <ul> <li>Yes</li> </ul>  Yes <ul> <li>Yes <ul> <li>Yes</li> </ul>  Yes <ul> <li>Yes <ul> <li>Yes</li> </ul>  Yes <ul> <li>Yes <ul> <li>Yes</li> </ul>  Yes <ul> <li>Yes</li> </ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul>		
<ul> <li>Electronic print to file</li> <li>Yes; PDF, HTML</li> </ul> Character sets <ul> <li>Keyboard fonts</li> <li>US English</li> <li>Yes</li> </ul> Transfer (upload/download) <ul> <li>MPI/PROFIBUS DP</li> <li>USB</li> <li>Ethernet</li> <li>using external storage medium</li> </ul> Process coupling <ul> <li>S7-1200</li> <li>S7-1500</li> </ul> Yes; PDF, HTML Yes Yes <ul> <li>Yes</li> </ul> Yes <ul> <li>S7-1500</li> <li>Yes</li> </ul> Yes <ul> <li>Yes <ul> <li>Yes</li> </ul> </li></ul></li></ul></li></ul></li></ul></li></ul>		
Character sets  Keyboard fonts — US English  Yes  Transfer (upload/download)  MPI/PROFIBUS DP  Ves  USB Ethernet Set thernet Set thernet Set to using external storage medium  Process coupling  S7-1200 S7-1500  Yes Yes		
<ul> <li>Keyboard fonts  — US English  Yes</li> <li>Transfer (upload/download)  <ul> <li>MPI/PROFIBUS DP</li> <li>USB</li> <li>Ethernet</li> <li>using external storage medium</li> </ul> </li> <li>Process coupling  <ul> <li>\$7-1200</li> <li>\$7-1500</li> </ul> </li> <li>Yes</li> </ul>		100,1 DI , ITIME
— US English       Yes         Transfer (upload/download)       Yes         ● MPI/PROFIBUS DP       Yes         ● USB       Yes         ● Ethernet       Yes         ● using external storage medium       No         Process coupling         ● S7-1200       Yes         ● S7-1500       Yes		
Transfer (upload/download)  • MPI/PROFIBUS DP  • USB  • Ethernet  • using external storage medium  Process coupling  • S7-1200  • S7-1500  Yes		Vas
<ul> <li>MPI/PROFIBUS DP</li> <li>USB</li> <li>Ethernet</li> <li>using external storage medium</li> <li>Process coupling</li> <li>\$7-1200</li> <li>\$7-1500</li> <li>Yes</li> <li>Yes</li> </ul>		100
<ul> <li>USB         <ul> <li>Ethernet</li> <li>using external storage medium</li> </ul> </li> <li>Process coupling         <ul> <li>S7-1200</li> <li>S7-1500</li> </ul> </li> <li>Yes</li> <li>Yes</li> </ul>		Von
<ul> <li>Ethernet</li> <li>using external storage medium</li> <li>No</li> </ul> Process coupling <ul> <li>\$7-1200</li> <li>\$7-1500</li> <li>Yes</li> </ul> Yes <ul> <li>Yes <ul> <li>Yes</li> </ul> </li> </ul>		
<ul> <li>using external storage medium</li> <li>Process coupling</li> <li>\$7-1200</li> <li>\$7-1500</li> <li>Yes</li> <li>Yes</li> </ul>		
Process coupling           ◆ S7-1200         Yes           ◆ S7-1500         Yes		
• S7-1200 Yes • S7-1500 Yes		NO
• S7-1500 Yes		
• S7-200 Yes		
	• S7-200	Yes

07.000/400	V.
• \$7-300/400	Yes
• LOGO!	Yes
• WinAC	Yes
• SINUMERIK	Yes; with SINUMERIK option package
• SIMOTION	No; With WinCC, subsequent version
<ul> <li>Allen Bradley (EtherNet/IP)</li> </ul>	Yes
<ul> <li>Allen Bradley (DF1)</li> </ul>	Yes
<ul> <li>Mitsubishi (MC TCP/IP)</li> </ul>	Yes
<ul><li>Mitsubishi (FX)</li></ul>	Yes
<ul><li>OMRON (FINS TCP)</li></ul>	No
<ul> <li>OMRON (LINK/Multilink)</li> </ul>	Yes
<ul> <li>Modicon (Modbus TCP/IP)</li> </ul>	Yes
<ul><li>Modicon (Modbus)</li></ul>	Yes
<ul> <li>OPC UA Client</li> </ul>	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
SIMATIC HMI SD memory card: Secure Digital memory	Yes
card	
USB memory	Yes
Network camera	Yes
Mechanics/material	
Enclosure material (front)	
<ul><li>Plastic</li></ul>	No
Aluminum	Yes
Stainless steel	No
Dimensions	
Width of the housing front	274 mm
Height of housing front	190 mm
Mounting cutout, width	251 mm
Mounting cutout, height	166 mm
Overall depth	63 mm
Weights	
Weight without packaging	1.9 kg
Weight incl. packaging	2.6 kg
5 P 5 5	

last modified: 1/16/2021 **C**