Data sheet

SIPLUS HMI KP700 Comfort for medial exposure with conformal coating based on 6AV2124-1GC01-0AX0



Figure similar

General information	
Product type designation	KP700 Comfort
Display	
Display	
Design of display	TFT
Screen diagonal	7 in
Display width	152.4 mm
Display height	91.4 mm
Number of colors	16 777 216
Resolution (pixels)	
Horizontal image resolution	800 Pixel
 Vertical image resolution 	480 Pixel
Backlighting	
MTBF backlighting (at 25 °C)	80 000 h
Backlight dimmable	Yes; 0-100 %
Control elements	
Keyboard fonts	

Function keys	
Number of function keys	24
Number of function keys with LEDs	24
Keys with LED	Yes
System keys	Yes
Numeric keyboard	Yes
alphanumeric keyboard	Yes; similar to mobile phone
Touch operation	, , , , , , , , , , , , , , , , , , ,
Design as touch screen	No
Expansions for operator control of the process	
DP direct LEDs (LEDs as S7 output I/O)	
— F1Fx	24
Direct keys (keys as S7 input I/O)	
— F1Fx	24
Direct keys (touch buttons as S7 input I/O)	0
Direct keys (touch buttons as 37 input 170)	ū
Installation type/mounting	
Mounting position	vertical
Mounting in portrait format possible	No
Mounting in landscape format possible	Yes
maximum permissible angle of inclination without	35°
external ventilation	
Supply voltage	
Supply voltage Type of supply voltage	DC
Type of supply voltage Rated value (DC)	DC 24 V
Type of supply voltage Rated value (DC) permissible range, lower limit (DC)	24 V 19.2 V
Type of supply voltage Rated value (DC)	24 V
Type of supply voltage Rated value (DC) permissible range, lower limit (DC)	24 V 19.2 V
Type of supply voltage Rated value (DC) permissible range, lower limit (DC) permissible range, upper limit (DC)	24 V 19.2 V
Type of supply voltage Rated value (DC) permissible range, lower limit (DC) permissible range, upper limit (DC) Input current	24 V 19.2 V 28.8 V
Type of supply voltage Rated value (DC) permissible range, lower limit (DC) permissible range, upper limit (DC) Input current Current consumption (rated value) Starting current inrush I²t	24 V 19.2 V 28.8 V
Type of supply voltage Rated value (DC) permissible range, lower limit (DC) permissible range, upper limit (DC) Input current Current consumption (rated value) Starting current inrush I²t	24 V 19.2 V 28.8 V 0.5 A 0.5 A ² ·s
Type of supply voltage Rated value (DC) permissible range, lower limit (DC) permissible range, upper limit (DC) Input current Current consumption (rated value) Starting current inrush I²t	24 V 19.2 V 28.8 V
Type of supply voltage Rated value (DC) permissible range, lower limit (DC) permissible range, upper limit (DC) Input current Current consumption (rated value) Starting current inrush I²t Power Active power input, typ.	24 V 19.2 V 28.8 V 0.5 A 0.5 A ² ·s
Type of supply voltage Rated value (DC) permissible range, lower limit (DC) permissible range, upper limit (DC) Input current Current consumption (rated value) Starting current inrush I²t Power Active power input, typ.	24 V 19.2 V 28.8 V 0.5 A 0.5 A ² ·s
Type of supply voltage Rated value (DC) permissible range, lower limit (DC) permissible range, upper limit (DC) Input current Current consumption (rated value) Starting current inrush I²t Power Active power input, typ.	24 V 19.2 V 28.8 V 0.5 A 0.5 A ² ·s
Type of supply voltage Rated value (DC) permissible range, lower limit (DC) permissible range, upper limit (DC) Input current Current consumption (rated value) Starting current inrush I²t Power Active power input, typ. Processor Processor type	24 V 19.2 V 28.8 V 0.5 A 0.5 A ² ·s
Type of supply voltage Rated value (DC) permissible range, lower limit (DC) permissible range, upper limit (DC) Input current Current consumption (rated value) Starting current inrush I²t Power Active power input, typ. Processor Processor type Memory	24 V 19.2 V 28.8 V 0.5 A 0.5 A ² ·s
Type of supply voltage Rated value (DC) permissible range, lower limit (DC) permissible range, upper limit (DC) Input current Current consumption (rated value) Starting current inrush I²t Power Active power input, typ. Processor Processor type Memory Flash	24 V 19.2 V 28.8 V 0.5 A 0.5 A ² -s
Type of supply voltage Rated value (DC) permissible range, lower limit (DC) permissible range, upper limit (DC) Input current Current consumption (rated value) Starting current inrush I²t Power Active power input, typ. Processor Processor type Memory Flash RAM Memory available for user data	24 V 19.2 V 28.8 V 0.5 A 0.5 A²·s 12 W X86
Type of supply voltage Rated value (DC) permissible range, lower limit (DC) permissible range, upper limit (DC) Input current Current consumption (rated value) Starting current inrush I²t Power Active power input, typ. Processor Processor type Memory Flash RAM Memory available for user data Type of output	24 V 19.2 V 28.8 V 0.5 A 0.5 A²-s 12 W X86 Yes Yes 12 Mbyte
Type of supply voltage Rated value (DC) permissible range, lower limit (DC) permissible range, upper limit (DC) Input current Current consumption (rated value) Starting current inrush I²t Power Active power input, typ. Processor Processor type Memory Flash RAM Memory available for user data	24 V 19.2 V 28.8 V 0.5 A 0.5 A²·s 12 W X86

Error LED	No
Acoustics	
• Buzzer	No
Speaker	Yes
Time of day	
Clock	
Hardware clock (real-time)	Yes
Software clock	No
• retentive	Yes
• synchronizable	Yes
Interfaces	
Number of industrial Ethernet interfaces	2
Number of RS 485 interfaces	1; RS 422 / 485 combined
Number of RS 422 interfaces	1
Number of RS 232 interfaces	0
Number of USB interfaces	2; USB 2.0
• USB Mini B	1; 5-pole
Number of 20 mA interfaces (TTY)	0
Number of parallel interfaces	0
Number of other interfaces	0
Number of SD card slots	2
With software interfaces	No
Industrial Ethernet	
 Industrial Ethernet status LED 	2
 Number of ports of the integrated switch 	2
Protocols	
PROFINET	Yes
Supports protocol for PROFINET IO	Yes
IRT	Yes; With WinCC, subsequent version
PROFIBUS	Yes
MPI	Yes
Protocols (Ethernet)	
• TCP/IP	Yes
• DHCP	Yes
• SNMP	Yes
• DCP	Yes
• LLDP	Yes
WEB characteristics	
• HTTP	Yes
• HTTPS	No
• HTML	Yes

• XML	No
• CSS	Yes
Active X	No
JavaScript	Yes
● Java VM	No
Redundancy mode	
• MRP	Yes; With WinCC, subsequent version
Further protocols	
• CAN	No
• EtherNet/IP	Yes
• MODBUS	Yes
Interrupts/diagnostics/status information	
Diagnostic messages	
Diagnostic information readable	Yes; S7 controller
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	IDOS
IP (at the front)	IP65 Yes
Enclosure Type 4 at the front Enclosure Type 4x at the front	Yes
IP (rear)	IP20
ii (icai)	11 20
Ambient conditions	
Suited for indoor use	Yes
Suited for outdoor use	No
Ambient temperature during operation	
Operation (vertical installation)	
For vertical installation, min.	0 °C; = Tmin
For vertical installation, max.	50 °C; = Tmax
Operation (max. tilt angle)	
— At maximum tilt angle, min.	0 °C; = Tmin
— At maximum tilt angle, min.	40 °C; = Tmax
 Operation (vertical installation, portrait format) 	
— For vertical installation, min.	0 °C; = Tmin
 For vertical installation, max. 	40 °C; = Tmax
 Operation (max. tilt angle, portrait format) 	
— At maximum tilt angle, min.	0 °C; = Tmin
— At maximum tilt angle, min.	35 °C; = Tmax
Ambient temperature during storage/transportation	

Installation altitude above sea level Installation altitude above sea level, max. Ambient air temperature-barometric pressurealtitude Timin (Tmax. 10 K) at 795 hPa (-1 000 m +2 000 m) // Tmin (Tmax20 K) at 658 hPa 558 hPa (+2 000 m +3 500 m) // Tmin (Tmax20 K) at 658 hPa 540 hPa (+3 500 m +5 000 m) // Tmin (Tmax20 K) at 658 hPa 540 hPa (+3 500 m +5 000 m) // Tmin (Tmax20 K) at 658 hPa 540 hPa (+3 500 m +5 000 m) // Tmin (Tmax20 K) at 658 hPa 540 hPa (+3 500 m +5 000 m) // Tmin (Tmax20 K) at 795 hPa (-1 000 m +2 000 m) // Tmin (Tmax20 K) at 795 hPa (-1 000 m +2 000 m) // Tmin (Tmax20 K) at 795 hPa (-1 000 m +2 000 m) // Tmin (Tmax20 K) at 795 hPa (-1 000 m +2 000 m) // Tmin (Tmax20 K) at 795 hPa (-1 000 m +2 000 m) // Tmin (Tmax20 K) at 795 hPa (-1 000 m +2 000 m) // Tmin (Tmax20 K) at 795 hPa (-1 000 m +2 000 m) // Tmin (Tmax20 K) at 795 hPa (-1 000 m +2 000 m) // Tmin (Tmax20 K) at 795 hPa (-1 000 m +2 000 m) // Tmin (Tmax20 K) at 795 hPa (-2 000 m +3 500 m) // Tmin (Tmax20 K) at 795 hPa (-2 000 m +3 500 m) // Tmin (Tmax20 K) at 795 hPa (-2 000 m +3 500 m) // Tmin (Tmax20 K) at 795 hPa (-2 000 m +3 500 m) // Tmin (Tmax20 K) at 795 hPa (-2 000 m +3 500 m) // Tmin (Tmax20 K) at 795 hPa (-2 000 m +3 500 m) // Tmin (Tmax20 K) at 795 hPa (-2 000 m +3 500 m) // Tmin (Tmax20 K) at 795 hPa (-2 000 m +3 500 m) // Tmin (Tmax20 K) at 795 hPa (-2 000 m +3 500 m) // Tmin (Tmax20 K) at 795 hPa (-2 000 m +3 500 m) // Tmin (Tmax20 K) at 795 hPa (-2 000 m +2 500 m) // Tmin (Tmax20 K) at 795 hPa (-2 000 m +2 500 m) // Tmin (Tmax20 K) at 795 hPa (-2 000 m) // Tmin (Tmax20 K) at 795 hPa (-2 000 m) // Tmin (Tmax20 K) at 795 hPa (-2 000 m) // Tmin (Tmax20 K) at 795 hPa (-2 000 m) // Tmin (Tmax20 K) at 79	• min.	-20 °C
In the stallation altitude above sea level, max. Ambient air temperature-barometric pressurealitude Ambient air temperature-barometric pressurealitude Trimi Trmax - 10 K) at 795 hPa 658 hPa 540 hPa (+3 500 m) +5 5000 m) Relative humidity With condensation, tested in accordance with IEC 60068-2-38, max. Resistance Coolants and lubricants Resistance Coolants and lubricants Tesistance Tesistant to commercially available coolants and lubricants Tesistance Tesistanc	• max.	60 °C
Tmin Tmax at 1 140 hPa 795 hPa (-1 000 m +2 000 m) // Tmin (Tmax -10 K) at 795 hPa (-1 000 m +3 000 m) // Tmin (Tmax -20 K) at 658 hPa (-2 000 m +3 000 m) // Tmin (Tmax -20 K) at 658 hPa 540 hPa (+3 500 m +5 000 m) // Tmin (Tmax -20 K) at 658 hPa 540 hPa +5 000 m, // Tmin (Tmax -20 K) at 658 hPa 540 hPa +5 000 m, // Tmin Tmax at 140 hPa +5 000 m, // Tmin Tmax at 140 hPa +5 000 m	Altitude during operation relating to sea level	
### Timin (Tmax - 10 K) at 795 hPa 658 hPa (+2 000 m +3 500 m) // Tmin (Tmax -20 K) at 658 hPa 540 hPa (+2 000 m +3 500 m) // Tmin (Tmax -20 K) at 658 hPa 540 hPa (+3 500 m +5 000 m) ### Resistance Coolants and lubricants	 Installation altitude above sea level, max. 	5 000 m
With condensation, tested in accordance with IEC 60088-2-38, max. Resistance Coolants and lubricants — Resistant to commercially available colants and lubricants Use in stationary industrial systems — to biologically active substances according to EN 60721-3-3 — to chemically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 — to biologically active substances according to EN 60721-3-6 — to chemically active substances according to EN 60721-3-6 — to chemically active substances according to EN 60721-3-6 — to chemically active substances according to EN 60721-3-6 — to chemically active substances according to EN 60721-3-6 — to mechanically active substances according to EN 60721-3-6 — to mechanically active substances according to EN 60721-3-6 — to mechanically active substances according to EN 60654-4 — Environmental conditions for process, measuring and control systems acc. to EN 60654-4 — Environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04 Conformal coating • Coatings for printed circuit board assemblies acc. to EN 61086 • Protection against fouling acc. to EN 60664-3 • Military testing according to MIL-I-46058C, Wiss, Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request Yes; Class 6B2 mold and fungal sp		Tmin (Tmax - 10 K) at 795 hPa 658 hPa (+2 000 m +3 500 m) // Tmin (Tmax -20 K) at 658 hPa 540 hPa (+3 500 m +5
Resistance Coolants and lubricants Resistant to commercially available coolants and lubricants Use in stationary industrial systems to biologically active substances according to EN 60721-3-3 to chemically active substances according to EN 60721-3-3 to mechanically active substances according to EN 60721-3-3 Use on ships/at sea to biologically active substances according to EN 60721-3-3 Use on ships/at sea to biologically active substances according to EN 60721-3-6 to mechanically active substances according to EN 60721-3-6 to chemically active substances according to EN 60721-3-6 to mechanically active substances according to EN 60721-3-6 to mechanically active substances according to EN 60721-3-6 To mechanically active substances according to EN 60721-3-6 To chemically active substances according to EN 60721-3-3 (according	Relative humidity	
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Test Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); * Yes; Class 3S4 incl. sand, dust, * Yes; Class 3S4 incl. sand, dust, * Yes; Class 3S4 incl. sand, dust, * Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request Yes; Class 6B3 incl. sand, dust, * Yes; Class 6B3 incl. sand, dust; * Yes; Class 3 (excluding trichlorethylene) Yes; Class 3 (excluding trichlorethylen	-	Yes; Incl. diesel and oil droplets in the air
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Test biologically active substances according to EN 60721-3-6 — to chemically active substances according to EN 60721-3-6 — to mechanically active substances according to EN 60721-3-6 — to mechanically active substances according to EN 60721-3-6 — to mechanically active substances according to EN 60721-3-6 Usage in industrial process technology — Against chemically active substances acc. to EN 60654-4 — Environmental conditions for process, measuring and control systems acc. to ANSI/ISA-71.04 Remark — Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04 Conformal coating • Coatings for printed circuit board assemblies acc. to EN 61086 • Protection against fouling acc. to EN 60664-3 • Military testing according to MIL-I-46058C, Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); * Yes; Class 6S3 incl. sand, dust; * Yes; Class 3 (excluding trichlorethylene) 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) * The supplied plug covers must remain in place over the unused interfaces during operation! Yes; Class 2 for high availability Yes; Type 1 protection Yes; Type 1 protection		Yes; Class 3S4 incl. sand, dust, *
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usage in industrial process technology — Against chemically active substances acc. to EN 60654-4 — Environmental conditions for process, measuring and control systems acc. to ANSI/ISA-71.04 Remark — Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04 Conformal coating • Coatings for printed circuit board assemblies acc. to EN 61086 • Protection against fouling acc. to EN 60664-3 • Military testing according to MIL-I-46058C, Yes; Class 3 (excluding trichlorethylene) Yes; Class 3 (excluding trichlorethylene) 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) * The supplied plug covers must remain in place over the unused interfaces during operation! Yes; Class 2 for high availability Yes; Type 1 protection Yes; Type 1 protection Yes; Discoloration of coating possible during service life	•	• • •
- Against chemically active substances acc. to EN 60654-4 - Environmental conditions for process, measuring and control systems acc. to ANSI/ISA-71.04 Remark - Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04 Conformal coating • Coatings for printed circuit board assemblies acc. to EN 61086 • Protection against fouling acc. to EN 60664-3 • Military testing according to MIL-I-46058C, Yes; Class 3 (excluding trichlorethylene) Yes; Class 3 (excluding trichlorethylene) Yes; Class 3 (excluding trichlorethylene) 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) * The supplied plug covers must remain in place over the unused interfaces during operation! Yes; Class 2 for high availability Yes; Type 1 protection Yes; Type 1 protection Yes; Discoloration of coating possible during service life	•	Yes; Class 6S3 incl. sand, dust; *
to EN 60654-4 — Environmental conditions for process, measuring and control systems acc. to ANSI/ISA-71.04 Remark — Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04 Conformal coating • Coatings for printed circuit board assemblies acc. to EN 61086 • Protection against fouling acc. to EN 60664-3 • Military testing according to MIL-I-46058C, 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) * The supplied plug covers must remain in place over the unused interfaces during operation! Yes; Class 2 for high availability Yes; Type 1 protection Yes; Type 1 protection Yes; Discoloration of coating possible during service life	Usage in industrial process technology	
measuring and control systems acc. to ANSI/ISA-71.04 concentrations up to the limits of EN 60721-3-3 class 3C4 permissible); level LC3 (salt spray) and level LB3 (oil) Remark — Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04 Conformal coating • Coatings for printed circuit board assemblies acc. to EN 61086 • Protection against fouling acc. to EN 60664-3 • Military testing according to MIL-I-46058C, Concentrations up to the limits of EN 60721-3-3 class 3C4 permissible); level LC3 (salt spray) and level LB3 (oil) * The supplied plug covers must remain in place over the unused interfaces during operation! Yes; Class 2 for high availability Yes; Type 1 protection Yes; Type 1 protection Yes; Discoloration of coating possible during service life		Yes; Class 3 (excluding trichlorethylene)
 Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04 * The supplied plug covers must remain in place over the unused interfaces during operation! * Conformal coating * Coatings for printed circuit board assemblies acc. to EN 61086 * Protection against fouling acc. to EN 60664-3 * Military testing according to MIL-I-46058C, * The supplied plug covers must remain in place over the unused interfaces during operation! * Yes; Class 2 for high availability Yes; Type 1 protection Yes; Type 1 protection Yes; Discoloration of coating possible during service life 	measuring and control systems acc. to	concentrations up to the limits of EN 60721-3-3 class 3C4
environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04 Conformal coating • Coatings for printed circuit board assemblies acc. to EN 61086 • Protection against fouling acc. to EN 60664-3 • Military testing according to MIL-I-46058C, interfaces during operation! Yes; Class 2 for high availability Yes; Type 1 protection Yes; Type 1 protection Yes; Discoloration of coating possible during service life	Remark	
 Coatings for printed circuit board assemblies acc. to EN 61086 Protection against fouling acc. to EN 60664-3 Military testing according to MIL-I-46058C, Yes; Class 2 for high availability Yes; Type 1 protection Yes; Type 1 protection Yes; Discoloration of coating possible during service life 	environmental conditions acc. to EN 60721,	
 acc. to EN 61086 Protection against fouling acc. to EN 60664-3 Military testing according to MIL-I-46058C, Yes; Type 1 protection Yes; Discoloration of coating possible during service life 	Conformal coating	
 Military testing according to MIL-I-46058C, Yes; Discoloration of coating possible during service life 		Yes; Class 2 for high availability
	 Protection against fouling acc. to EN 60664-3 	Yes; Type 1 protection
		Yes; Discoloration of coating possible during service life

• Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A

Yes; Conformal coating, Class A

Operating systems	
Operating systems proprietary	No
pre-installed operating system	140
Windows CE	Yes
Configuration	
Message indicator	Yes
Alarm system (incl. buffer and acknowledgment)	Yes
Process value display (output)	Yes
Process value default (input) possible	Yes
Recipe management	Yes
Configuration software	
STEP 7 Basic (TIA Portal)	No
STEP 7 Professional (TIA Portal)	No
 WinCC flexible Compact 	No
 WinCC flexible Standard 	No
 WinCC flexible Advanced 	No
 WinCC Basic (TIA Portal) 	No
 WinCC Comfort (TIA Portal) 	Yes; from V11
 WinCC Advanced (TIA Portal) 	Yes; from V11
 WinCC Professional (TIA Portal) 	Yes; from V11
Languages	
Online languages	
Number of online/runtime languages	32
Project languages	
● Languages per project	32
Functionality under WinCC (TIA Portal)	
Libraries	Yes
Applications/options	
 Web browser 	Yes
Pocket Word	Yes
Pocket Excel	Yes
PDF Viewer	Yes
Media Player	Yes
SIMATIC WinCC Sm@rtServer	Yes
SIMATIC WinCC Audit	Yes
Number of Visual Basic Scripts	Yes
Task planner	
• time-controlled	Yes
• time-controlled	165

• task-controlled	Yes
Help system	
 Number of characters per info text 	70
Message system	
 Number of alarm classes 	32
Bit messages	
 Number of bit messages 	4 000
 Analog messages 	
 Number of analog messages 	200
 S7 alarm number procedure 	Yes
 System messages HMI 	Yes
 System messages, other (SIMATIC S7, Sinumerik, Simotion, etc.) 	Yes
 Number of characters per message 	80
 Number of process values per message 	8
 Acknowledgment groups 	Yes
Message indicator	Yes
Message buffer	
Number of entries	1 024
— Circulating buffer	Yes
— retentive	Yes
— maintenance-free	Yes
Recipe management	
Number of recipes	300
 Data records per recipe 	500
Entries per data record	1 000
 Size of internal recipe memory 	2 Mbyte
 Recipe memory expandable 	Yes
Variables	
 Number of variables per device 	2 048
 Number of variables per screen 	400
• Limit values	Yes
Multiplexing	Yes
• Structures	Yes
• Arrays	Yes
Images	
 Number of configurable images 	500
 Permanent window/default 	Yes
Global image	Yes
Image selection by PLC	Yes
 Image number in the PLC 	Yes
Image objects	

 Number of objects per image 	400
• Text fields	Yes
• I/O fields	Yes
 Graphic I/O fields (graphics list) 	Yes
 Symbolic I/O fields (text list) 	Yes
• Date/time fields	Yes
• Switches	Yes
• Buttons	Yes
Graphic display	Yes
• Icons	Yes
Geometric objects	Yes
Complex image objects	
Number of complex objects per screen	20
Alarm view	Yes
• Trend view	Yes
• User view	Yes
Status/control	Yes
Sm@rtClient view	Yes
• Recipe view	Yes
• f(x) trend view	Yes
 System diagnostics view 	Yes
Media Player	Yes
Bar graphs	Yes
• Sliders	Yes
 Pointer instruments 	Yes
Analog/digital clock	Yes
Lists	
 Number of text lists per project 	500
 Number of entries per text list 	500
 Number of graphics lists per project 	500
 Number of entries per graphics list 	500
Archiving	
Number of archives per device	50
 Number of entries per archive 	20 000
Message archive	Yes
 Process value archive 	Yes
Archiving methods	
— Sequential archive	Yes
— Short-term archive	Yes
 Memory location 	
— Memory card	Yes

Ethernet Yes	— USB memory	Yes
- CSV		
- TXT		Yes
Number of user groups 50		
Number of user groups 50		
Number of user groups Number of user rights Number of users Number of user gights Number of users Number of user gights Number of users Number of users		
Number of user rights Number of users Number of users Password export/import Yes SIMATIC Logon Yes SIMATIC Logon Yes Logging through printer Alarms Report (shift log) Yes Neyboard fonts — Us English Yes Yes Report (upload/download) MPI/PROFIBUS DP Yes Report (upload/download) Yes Report (upload/		50
Number of users Password export/import SIMATIC Logon Yes SIMATIC Logon Yes Logging through printer Alarms	- '	32
● 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 —US English Yes ● USE (Piper Fibus DP) Yes • USB Yes • Ethernet Yes • Ethernet Yes • USB Yes • Ethernation (Piper Piper Pi		50
SIMATIC Logon Yes		Yes
Logging through printer		Yes
Report (shift log) Hardcopy Yes Electronic print to file Yes; PDF, HTML Character sets Keyboard fonts — US English Yes Transfer (upload/download) MPI/PROFIBUS DP Yes USB Sethernet using external storage medium No Process coupling S7-1200 Yes S7-1500 Yes S7-200 Yes S7-300/400 Yes SINUMERIK No SINUMERIK SINUMERIK SINOTION Allen Bradley (EtherNet/IP) Allen Bradley (DF1) Mitsubishi (MC TCP/IP) Mitsubishi (FX) OMRON (FINS TCP) OMRON (FINS TCP) OMRON (LINK/Multilink) Pres Ves Yes Yes Yes Yes Yes Yes Y		
# 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 • \$7-1200 • \$7-300/400 • \$7-300/400 • UGGO! • WinAC • SINUMERIK • SINUMERIK • SIMOTION • Allen Bradley (EtherNet/IP) • Allen Bradley (DF1) • Mitsubishi (MC TCP/IP) • Mitsubishi (FX) • OMRON (FINS TCP) • OMRON (LINK/Multilinik) *Yes *Yes Yes Yes Yes Yes Yes	Alarms	Yes
Hardcopy Electronic print to file Yes; PDF, HTML Character sets Keyboard fonts — US English Yes Transfer (upload/download) MPI/PROFIBUS DP Yes USB Ves Ethernet vising external storage medium No Process coupling S7-1200 Yes S7-1500 Yes S7-200 Yes S7-200 Yes S7-300/400 Yes SINUMERIK No SINUMERIK No Allen Bradley (EtherNet/IP) Allen Bradley (EtherNet/IP) Mitsubishi (MC TCP/IP) Mitsubishi (MC TCP/IP) Mitsubishi (FX) OMRON (FINS TCP) OMRON (LINK/Multilink) Yes Yes Yes Yes Yes Yes Yes Ye	• Report (shift log)	Yes
	Hardcopy	Yes
		Yes; PDF, HTML
— US English Yes Transfer (upload/download) • MPI/PROFIBUS DP Yes • USB Yes • Ethernet Yes • using external storage medium No Process coupling • \$7-1200 Yes • \$7-200 Yes • \$7-200 Yes • LOGO! Yes • WinAC Yes • SINUMERIK No • SINUMERIK No; With WinCC, subsequent version • Allen Bradley (EtherNet/IP) Yes • Allen Bradley (DF1) Yes • Mitsubishi (MC TCP/IP) Yes • Mitsubishi (FX) Yes • OMRON (FINS TCP) No • OMRON (LINK/Multilink) Yes		
Transfer (upload/download) • MPI/PROFIBUS DP Yes • USB Yes • Ethernet Yes • using external storage medium No Process coupling • S7-1200 Yes • S7-1500 Yes • S7-200 Yes • S7-300/400 Yes • LOGO! Yes • WinAC Yes • SINUMERIK No • SIMOTION No; With WinCC, subsequent version • Allen Bradley (EtherNet/IP) Yes • Allen Bradley (DF1) Yes • Mitsubishi (MC TCP/IP) Yes • Mitsubishi (FX) Yes • OMRON (FINS TCP) No • OMRON (LINK/Multilink) Yes	Keyboard fonts	
	— US English	Yes
■ USB ■ Ethernet ■ Using external storage medium No Process coupling ■ S7-1200 ■ S7-1500 ■ S7-200 ■ S7-200 ■ S7-300/400 ■ S7-300/400 ■ LOGO! ■ WinAC ■ WinAC ■ SINUMERIK ■ SINUMERIK ■ SIMOTION ■ Allen Bradley (EtherNet/IP) ■ Allen Bradley (DF1) ■ Mitsubishi (MC TCP/IP) ■ Mitsubishi (FX) ● OMRON (FINS TCP) ● OMRON (LINK/Multilink) Yes ● OMRON (LINK/Multilink) Yes	Transfer (upload/download)	
 Ethernet using external storage medium No Process coupling S7-1200 Yes S7-1500 Yes S7-200 Yes S7-300/400 LOGO! WinAC WinAC SINUMERIK SIMOTION Allen Bradley (EtherNet/IP) Allen Bradley (EtherNet/IP) Allen Bradley (DF1) Mitsubishi (MC TCP/IP) Mitsubishi (FX) OMRON (FINS TCP) No OMRON (LINK/Multilink) Yes 	MPI/PROFIBUS DP	Yes
● using external storage medium No Process coupling ● S7-1200 Yes ● S7-1500 Yes ● S7-200 Yes ● S7-300/400 Yes ● LOGO! Yes ● WinAC Yes ● SINUMERIK No ● SIMOTION No; With WinCC, subsequent version ● Allen Bradley (EtherNet/IP) Yes ● Allen Bradley (DF1) Yes ● Mitsubishi (MC TCP/IP) Yes ● Mitsubishi (FX) Yes ● OMRON (FINS TCP) No ● OMRON (LINK/Multilink) Yes	• USB	Yes
Process coupling • S7-1200 Yes • S7-1500 Yes • S7-200 Yes • S7-300/400 Yes • LOGO! Yes • WinAC Yes • SINUMERIK No • SIMOTION No; With WinCC, subsequent version • Allen Bradley (EtherNet/IP) Yes • Allen Bradley (DF1) Yes • Mitsubishi (MC TCP/IP) Yes • Mitsubishi (FX) Yes • OMRON (FINS TCP) No • OMRON (LINK/Multilink) Yes	• Ethernet	Yes
 \$7-1200 \$7-1500 \$7-200 \$7-300/400 \$1-300/400 \$1-	 using external storage medium 	No
 \$7-1500 \$7-200 \$7-300/400 \$Yes \$LOGO! \$WinAC \$SINUMERIK \$SIMOTION Allen Bradley (EtherNet/IP) Allen Bradley (DF1) Mitsubishi (MC TCP/IP) Mitsubishi (FX) OMRON (FINS TCP) OMRON (LINK/Multilink) Yes Yes 	Process coupling	
 S7-200 S7-300/400 Yes LOGO! WinAC SINUMERIK SIMOTION Allen Bradley (EtherNet/IP) Allen Bradley (DF1) Mitsubishi (MC TCP/IP) Mitsubishi (FX) OMRON (FINS TCP) OMRON (LINK/Multilink) Yes Yes 	• S7-1200	Yes
 S7-300/400 LOGO! WinAC SINUMERIK SIMOTION Allen Bradley (EtherNet/IP) Allen Bradley (DF1) Mitsubishi (MC TCP/IP) Mitsubishi (FX) OMRON (FINS TCP) OMRON (LINK/Multilink) Yes Yes 	• S7-1500	Yes
 LOGO! WinAC SINUMERIK SIMOTION Allen Bradley (EtherNet/IP) Allen Bradley (DF1) Mitsubishi (MC TCP/IP) Mitsubishi (FX) OMRON (FINS TCP) OMRON (LINK/Multilink) Yes 	• S7-200	Yes
 WinAC SINUMERIK SIMOTION Allen Bradley (EtherNet/IP) Allen Bradley (DF1) Mitsubishi (MC TCP/IP) Mitsubishi (FX) OMRON (FINS TCP) OMRON (LINK/Multilink) 	• S7-300/400	Yes
 SINUMERIK SIMOTION Allen Bradley (EtherNet/IP) Allen Bradley (DF1) Mitsubishi (MC TCP/IP) Mitsubishi (FX) OMRON (FINS TCP) OMRON (LINK/Multilink) 	• LOGO!	Yes
 SIMOTION Allen Bradley (EtherNet/IP) Allen Bradley (DF1) Mitsubishi (MC TCP/IP) Mitsubishi (FX) OMRON (FINS TCP) OMRON (LINK/Multilink) No; With WinCC, subsequent version Yes Yes No Yes OMRON (LINK/Multilink) 	• WinAC	Yes
 Allen Bradley (EtherNet/IP) Allen Bradley (DF1) Yes Mitsubishi (MC TCP/IP) Mitsubishi (FX) OMRON (FINS TCP) OMRON (LINK/Multilink) 	• SINUMERIK	No
 Allen Bradley (DF1) Mitsubishi (MC TCP/IP) Mitsubishi (FX) OMRON (FINS TCP) OMRON (LINK/Multilink) 	• SIMOTION	No; With WinCC, subsequent version
 Mitsubishi (MC TCP/IP) Mitsubishi (FX) OMRON (FINS TCP) OMRON (LINK/Multilink) Yes 	 Allen Bradley (EtherNet/IP) 	Yes
 Mitsubishi (FX) OMRON (FINS TCP) OMRON (LINK/Multilink) Yes 	Allen Bradley (DF1)	Yes
OMRON (FINS TCP) OMRON (LINK/Multilink) No Yes	Mitsubishi (MC TCP/IP)	Yes
OMRON (LINK/Multilink) Yes	Mitsubishi (FX)	Yes
	• OMRON (FINS TCP)	No
Modicon (Modbus TCP/IP) Yes	OMRON (LINK/Multilink)	Yes
	Modicon (Modbus TCP/IP)	Yes

Modicon (Modbus)	Yes
Service tools/configuration aids	
	Yes
Backup/Restore manually	
 Backup/Restore automatically 	Yes
Simulation	Yes
Device switchover	Yes
Peripherals/Options	
Peripherals	
• Printer	Yes
 SIMATIC HMI MM memory card: Multi Media 	Yes
Card	
SIMATIC HMI SD memory card: Secure Digital	Yes
memory card	
• USB memory	Yes
Mechanics/material	
Enclosure material (front)	
Plastic	No
Aluminum	Yes
Stainless steel	No
Dimensions	
Width of the housing front	308 mm
Height of housing front	204 mm
Mounting cutout, width	281 mm
Mounting cutout, height	177 mm
Overall depth	63 mm
Weights	
Weight without packaging	2.2 kg
Weight incl. packaging	2.8 kg
last modified:	08/31/2019