SIEMENS

Data sheet

6AG1124-1MC01-4AX0

SIPLUS HMI KP1200 Comfort for medial exposure with conformal coating based on 6AV2124-1MC01-0AX0



Figure similar

General information	
Product type designation	KP1200 Comfort
Display	
Design of display	TFT
Screen diagonal	12.1 in
Display width	261.1 mm
Display height	163.2 mm
Number of colors	16 777 216
Resolution (pixels)	
 Horizontal image resolution 	1 280 Pixel
 Vertical image resolution 	800 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	34
 — Number of function keys with LEDs 	34
 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	34
 Direct keys (keys as S7 input I/O) 	
— F1Fx	34
 Direct keys (touch buttons as S7 input I/O) 	0
Installation type/mounting	vertical
Mounting position	
Mounting in portrait format possible Mounting in landscape format possible	Yes
maximum permissible angle of inclination without	35°
maximum permissible angle of inclination without	30
external ventilation	
external ventilation	
Supply voltage	
Supply voltage Type of supply voltage	DC
Supply voltage Type of supply voltage Rated value (DC)	24 V
Supply voltage Type of supply voltage Rated value (DC) permissible range, lower limit (DC)	24 V 19.2 V
Supply voltage Type of supply voltage Rated value (DC)	24 V
Supply voltage Type of supply voltage Rated value (DC) permissible range, lower limit (DC)	24 V 19.2 V
Supply voltage Type of supply voltage Rated value (DC) permissible range, lower limit (DC) permissible range, upper limit (DC)	24 V 19.2 V
Supply voltage 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
Supply voltage 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 0.85 A
Supply voltage 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 I ² t Power	24 V 19.2 V 28.8 V 0.85 A 0.5 A ² ·s
Supply voltage 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 0.85 A
Supply voltage 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 I ² t Power Active power input, typ. Processor	24 V 19.2 V 28.8 V 0.85 A 0.5 A ² ·s 20 W
Supply voltage 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 I ² t Power Active power input, typ.	24 V 19.2 V 28.8 V 0.85 A 0.5 A ² ·s
Supply voltage 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 0.85 A 0.5 A ² ·s 20 W
Supply voltage 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 I ² t Power Active power input, typ. Processor	24 V 19.2 V 28.8 V 0.85 A 0.5 A ² ·s 20 W
Supply voltage 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 0.85 A 0.5 A ² ·s 20 W X86
Supply voltage 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 0.85 A 0.5 A ² ·s 20 W X86
Supply voltage 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 I ² t Power Active power input, typ. Processor Processor type Memory Flash RAM Memory available for user data	24 V 19.2 V 28.8 V 0.85 A 0.5 A ² ·s 20 W X86 Yes Yes
Supply voltage 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 0.85 A 0.5 A ² ·s 20 W X86 Yes Yes 12 Mbyte
Supply voltage 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 I ² t Power Active power input, typ. Processor Processor type Memory Flash RAM Memory available for user data	24 V 19.2 V 28.8 V 0.85 A 0.5 A ² ·s 20 W X86 Yes Yes

Error LED	No
Acoustics	
• Buzzer	No
• Speaker	Yes
Time of day	
Clock	
Hardware clock (real-time)	Yes
Software clock	No
retentive	Yes
	Yes
synchronizable	res
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	
Media redundancy	
— 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	
IP (at the front)	IP65
IP (rear)	IP20
NEMA (front)	
 Enclosure 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	
 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	
• 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- altitude 	Tmin Tmax at 1 140 hPa 795 hPa (-1 000 m +2 000 m) // 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 +5 000 m)
Relative humidity	
 With condensation, tested in accordance with IEC 60068-2-38, max. 	100 %; RH incl. condensation/frost (no commissioning under condensation conditions)
Resistance	
Coolants and lubricants	
 Resistant to commercially available coolants and lubricants 	Yes; Incl. diesel and oil droplets in the air
Use in stationary industrial systems	
 — to biologically active substances according to EN 60721-3-3 	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request
 — to chemically active substances according to EN 60721-3-3 	Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2- 52 (severity degree 3); *
 — to mechanically active substances according to EN 60721-3-3 	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)
 Environmental conditions for process, measuring and control systems acc. to ANSI/ISA-71.04 	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	
 — 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 	Yes
 Protection against fouling acc. to EN 60664-3 	Yes; Type 1 protection

 Military testing according to MIL-I-46058C, Amendment 7 	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	
proprietary	No
pre-installed operating system	
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
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• time-controlledYesHelp system70Number of characters per info text70Message system32• Number of altern classes32• Bit messages4000• Anabog messages200• Anabog messages200• Anabog messages200• System messages procedureYes• System messages, other (SIMATIC S7, System message, System, Syst	Task planner	
Help system • Number of characters per info text 70 Message system 32 • Number of alarm classes 32 • Bit messages 4000 • Analog messages 4000 • Analog messages 200 • S7 alarm number procedure Yes • System messages HMI Yes • System messages, other (SIMATIC S7, Simmerik, Simotion, etc.) Yes • Number of characters per message 80 • Acknowledgment groups Yes • Number of characters per message 80 • Number of roccess values per message 80 • Number of characters per message 80 • Number of roccess values per message 80 • Number of recipes 1024 • Circulating buffer Yes • Number of recipes 300 • Data records per recipe 500 • Entries per data record 1000		Yes
• Number of characters per info text 70 Message system 32 • Number of allarn classes 32 • Bit messages 4000 • Analog messages 4000 • Analog messages 200 • S7 alarn number procedure Yes • System messages other (SIMATIC S7, Sinumerik, Simotion, etc.) Yes • Number of naceters per message 80 • Acknowledgment groups Yes • Message buffer Yes - Oriculating buffer Yes - Mumber of entries 1024 - Circulating buffer Yes - maintenance-free Yes Persite 500 • Data records per recipe 500 • Entries per data record 1000 • Size of internal recipe memory 2 Mbyte • Recipe memory expandable Yes • Number of variables per	 task-controlled 	Yes
Message system 32 • Number of alarm classes 32 • Bit messages 4000 • Analog messages 4000 • Analog messages 200 • S7 alarm number procedure Yes • System messages HMI Yes • System messages, other (SIMATIC S7, Simurerk, Simotion, etc.) Yes • Number of characters per message 80 • Number of process values per message 8 • Acknowledgment groups Yes • Message buffer - - Number of entries 1 024 - Circulating buffer Yes - maintenance-free Yes - maintenance-free Yes - maintenance-free Yes - Exterior of process 300 • Data records per recipe 500 • Entries per data record 1 000 • Size of internal recipe memory Yes • Number of variables per device 2 048 • Number of variables per device 2 048 • Number of variables per device 2 048 • Number of variables per screen 400 • Limit values Yes • Multiplexing Yes • Multiplexing Yes • Multiplexing Yes •	Help system	
• Number of alarm classes 32 • Bit messages 4000 • Analog messages 4000 • Analog messages 200 • S7 alarm number procedure Yes • System messages, other (SIMATIC S7, Yes Yes • System messages, other (SIMATIC S7, Yes Yes • Number of process values per message 80 • Number of process values per message 80 • Number of process values per message 8 • Acknowledgment groups Yes • Message buffer - - Number of entries 1 024 - Citculating buffer Yes - Citculating buffer Yes - Tetentive Yes - maintenance-free Yes • Number of recipes 300 • Data records per recipe 500 • Entries per data record 1000 • Size of internal recipe memory 2 Mbyte • Number of variables per screen 400 • Number of configurable images Yes • Arrays Yes • Multiplexing Yes • Arrays Yes <	 Number of characters per info text 	70
Bit messages 4 000 Analog messages 200 - 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 Acknowledgment groups Yes Acknowledgment groups Yes Message indicator Yes - Number of entries 1024 - Circulating buffer Yes - Number of entries 1024 - Circulating buffer Yes - maintenance-free Yes Number of recipes 300 - Data records per recipe 500 Staze of internal recipe memory 2 Mbyte - Recipe memory expandable Yes Number of variables per device 2048 Number of variables per screen 400 Number of variables per screen 400 Number of variables per screen 400 Number of configurable images Yes Arrays Yes Arrays Yes <td>Message system</td> <td></td>	Message system	
	 Number of alarm classes 	32
Analog messages - Number of analog messages S7 alarm number procedure System messages HMI System messages, dher (SIMATIC S7, Sinumerik, Simotion, etc.) Number of haracters per message Number of process values per message Acknowledgment groups Number of process values per message Acknowledgment groups Sease and controls - Number of entries - retentive - Recipe memory expandable S00 - Data record per recipe S00 - Data record per recipe - Number of variables per device - S00 - Entries per data record - Dive - Number of variables per device - S00 - Entries per data record - Dive - Number of variables per screen - Number of configurable images - Arrays - Number of configurable images - Permanent window/default - Permanet window/default - Permanet per permanet per	• Bit messages	
Number of analog messages200•S7 alarm number procedureYes•System messages HMIYes•System messages, other (SIMATIC S7, Sinumerik, Simotion, etc.)Yes•Number of characters per message80•Number of process values per message82•Acknowledgment groupsYes•Mumber of entries1024-Number of entries1024- Number of entriesYes- Number of entries1024- Number of recipesYes•Mumber of recipes300- netentiveYes- netentiveYes- Number of recipes300•Data record per recipe500•Data record per recipe1000•Extension2Mbyte•Number of variables per device2048•Number of variables per screen400•Limit valuesYes•Number of variables per screen400•Limit valuesYes•Number of configurable imagesYes•Number of configurable imagesSo0•Number of variables per screen400•Number of configurable imagesYes•Number of configurable imagesYes•Number of configurable imagesYes•Number of configurable imagesSo0•Number of configurable imagesYes•Number of configurable<	- Number of bit messages	4 000
• S7 alarm number procedureYes• System messages HMIYes• System messages, other (SIMATIC S7, Sinumerik, Simotion, etc.)Yes• Number of haracters per message80• Number of process values per message8• Acknowledgment groupsYes• Acknowledgment groupsYes• Message buffer1024- Number of entries1024- Circulating bufferYes- netentiveYes- maintenance-freeYesPolata records per recipe500• Entries per data record1000• Extre of variables per device2048• Number of variables per device2048• Number of variables per screen400• Number of variables per screenYes• Number of variables per screen400• Number of variables per screenYes• Number of variables per screenYes• Number of variables per screen400• Limit valuesYes• Number of variables per screenYes• Number of configurable imagesYes• Number of configurable imagesSo0• StructuresYes• Permanent window/defaultYes	 Analog messages 	
System messages HMIYesSystem messages, other (SIMATIC S7, Sinumerik, Simotion, etc.)YesNumber of characters per message80Number of characters per message8Acknowledgment groupsYesAcknowledgment groupsYesMessage indicatorYesMessage buffer1024- Number of entries1024- Circulating bufferYes- netentiveYes- maintenance-freeYesNumber of recipes300- Data records per recipe500Size of internal recipe memory2 Mbyte- Recipe memory expandableYesVariables2048Number of variables per device2 048Number of variables per screen400Number of variables per screen400Number of variables per screenYesNumber of variables per screen500Number of variables per screen400Number of variables per screenYesNumber of variables per screenYesNumber of variables per screenYesNumber of configurable imagesYesNumber of configurable imagesYesNumber of configurable images500Permanent window/defaultYes	— Number of analog messages	200
System messages, other (SIMATIC S7, Sinumerik, Simotion, etc.)Yes• Number of characters per message80• Number of process values per message8• Acknowledgment groupsYes• Message indicatorYes• Message indicatorYes• Mumber of entries1024• Circulating bufferYes- Circulating bufferYes- retentiveYes- maintenance-freeYes• Number of recipes300• Data records per recipe500• Entries per data record1000• Size of internal recipe memory2 Mbyte• Recipe memory expandableYesVariablesYes• Number of variables per device2 048• Number of variables per screen400• Limit valuesYes• MultiplexingYes• Number of variables per screenYes• Number of variables per screen500• Number of variables per screenYes• Number of configurable imagesYes• Number of configurable images500• Permanent window/defaultYes	 S7 alarm number procedure 	Yes
Sinumerik, Simotion, etc.)Number of characters per message80Number of characters per message80Number of process values per message8Acknowledgment groupsYesMessage indicatorYesMessage buffer1024- Number of entries1024- Circulating bufferYes- retentiveYes- maintenance-freeYesPreciper management700Size of internal recipe memory200Size of internal recipe memory2048Number of variables per device2048Number of variables per screen400Limit valuesYesMuthiplexingYesMuttiplexingYesNumber of configurable images500ParametYesNumber of variables per screen400Number of variables per screen400Number of variables per screenYesMuttiplexingYesNumber of configurable images500Permanent window/defaultYes	 System messages HMI 	Yes
Number of process values per messageB• Number of process values per messageB• Acknowledgment groupsYes• Message indicatorYes• Message buffer1024- Number of entries1024- Circulating bufferYes- retentiveYes- maintenance-freeYes• Number of recipes300• Data records per recipe500• Entries per data record1000• Size of internal recipe memory2 Mbyte• Recipe memory expandableYes• Number of variables per device2 048• Number of variables per screen400• Limit valuesYes• MutiplexingYes• StructuresYes• MutiplexingYes• Number of configurable images500• Entries per data record100• Number of variables per screen400• Number of variables per screen400• Number of variables per screen500• Number of variables per screenYes• Number of configurable imagesYes• Parmanent window/default500• Permanent window/defaultYes		Yes
Acknowledgment groupsYesMessage indicatorYesMessage buffer1024- Number of entries1024- Circulating bufferYes- retentiveYes- maintenance-freeYesNumber of recipes300Data records per recipe500Entries per data record1 000Size of internal recipe memory2 MbyteRecipe memory expandableYesNumber of variables per device2 048Number of variables per screen400Limit valuesYesMultiplexingYesStructuresYesArraysYesNumber of configurable images500Permanent window/default500	 Number of characters per message 	80
Name Permanent window/defaultYes• Names of entries1024• Number of entries1024• Circulating bufferYes• Circulating bufferYes• naintenance-freeYes• maintenance-free300 Recipe management 500• Data records per recipe500• Data records per recipe500• Entries per data record1000• Size of internal recipe memory2 Mbyte• Rumber of variables per device2 048• Number of variables per device2 048• Number of variables per screen400• Limit valuesYes• MultiplexingYes• Munter of offigrable images500• Permanent window/default500• Permanent window/defaultYes	 Number of process values per message 	8
Message buffer- Number of entries1 024- Circulating bufferYes- retentiveYes- maintenance-free800Recipe management• Number of recipes300• Data records per recipe500• Entries per data record1 000• Size of internal recipe memory2 Mbyte• Recipe memory expandableYes• Number of variables per device2 048• Number of variables per screen400• Limit valuesYes• MultiplexingYes• StructuresYes• StructuresYes• Number of configurable images500• Number of configurable images500• Permanent window/defaultYes	 Acknowledgment groups 	Yes
- Number of entries1 024- Circulating bufferYes- retentiveYes- maintenance-freeYesRecipe management• Number of recipes300• Data records per recipe500• Data records per recipe500• Entries per data record1 000• Size of internal recipe memory2 Mbyte• Recipe memory expandableYes• Number of variables per device2 048• Number of variables per screen400• Limit valuesYes• MultiplexingYes• StructuresYes• Number of configurable images500• Number of configurable images500• Permanent window/defaultYes	Message indicator	Yes
- Circulating bufferYes- retentiveYes- maintenance-freeYesRecipe managementState of recipes• Number of recipes300• Data records per recipe500• Entries per data record1 000• Size of internal recipe memory2 Mbyte• Recipe memory expandableYes• Number of variables per device2 048• Number of variables per screen400• Limit valuesYes• MultiplexingYes• StructuresYes• Number of configurable images500• Number of configurable images500• Permanent window/defaultYes	Message buffer	
- retentiveYes- maintenance-freeYesRecipe management300• Number of recipes300• Data records per recipe500• Entries per data record1 000• Size of internal recipe memory2 Mbyte• Recipe memory expandableYes• Number of variables per device2 048• Number of variables per screen400• Limit valuesYes• MultiplexingYes• StructuresYes• ArraysYes• Number of configurable images500• Permanent window/default500	— Number of entries	1 024
InstantionYes— maintenance-freeYesRecipe management300• Number of recipes300• Data records per recipe500• Entries per data record1 000• Size of internal recipe memory2 Mbyte• Recipe memory expandableYes• Number of variables per device2 048• Number of variables per screen400• Limit valuesYes• MultiplexingYes• StructuresYes• ArraysYes• Number of configurable images500• Permanent window/defaultYes	— Circulating buffer	Yes
Recipe management• Number of recipes300• Data records per recipe500• Entries per data record1 000• Size of internal recipe memory2 Mbyte• Recipe memory expandableYesVariables2 048• Number of variables per device2 048• Number of variables per screen400• Limit valuesYes• MultiplexingYes• StructuresYes• ArraysYes• Number of configurable images500• Permanent window/defaultYes	— retentive	Yes
Number of recipes300Data records per recipe500Entries per data record1 000Size of internal recipe memory2 MbyteRecipe memory expandableYesVariables2 048Number of variables per device2 048Number of variables per screen400Limit valuesYesMultiplexingYesArraysYesImagesYesNumber of configurable images500Permanent window/defaultYes	— maintenance-free	Yes
• Data records per recipe500• Data records per recipe1 000• Entries per data record1 000• Size of internal recipe memory2 Mbyte• Recipe memory expandableYes• Number of variables per device2 048• Number of variables per screen400• Limit valuesYes• MultiplexingYes• StructuresYes• ArraysYesInagesYes• Number of configurable images500• Permanent window/defaultYes	Recipe management	
 Entries per data record Entries per data record Size of internal recipe memory Size of internal recipe memory Recipe memory expandable Ves Variables Variables • Number of variables per device 2 048 Number of variables per screen 400 Limit values Yes Multiplexing Structures Arrays Yes Images • Number of configurable images 500 Permanent window/default Yes 	Number of recipes	300
Size of internal recipe memory2 MbyteRecipe memory expandableYesVariables2 048• Number of variables per device400• Number of variables per screen400• Limit valuesYes• MultiplexingYes• StructuresYes• ArraysYesImagesYes• Number of configurable images500• Permanent window/defaultYes	 Data records per recipe 	500
Recipe memory expandableYesVariables2 048• Number of variables per device2 048• Number of variables per screen400• Limit valuesYes• MultiplexingYes• StructuresYes• ArraysYesImagesYes• Number of configurable images500• Permanent window/defaultYes	 Entries per data record 	1 000
Variables • Number of variables per device 2 048 • Number of variables per screen 400 • Limit values Yes • Multiplexing Yes • Structures Yes • Arrays Yes Images Yes • Number of configurable images 500 • Permanent window/default Yes	 Size of internal recipe memory 	2 Mbyte
• Number of variables per device2 048• Number of variables per screen400• Limit valuesYes• MultiplexingYes• StructuresYes• ArraysYesImagesYes• Number of configurable images500• Permanent window/defaultYes	 Recipe memory expandable 	Yes
• Number of variables per screen400• Limit valuesYes• MultiplexingYes• StructuresYes• ArraysYesImagesYes• Number of configurable images500• Permanent window/defaultYes	Variables	
• Limit valuesYes• MultiplexingYes• MultiplexingYes• StructuresYes• ArraysYesImagesYes• Number of configurable images500• Permanent window/defaultYes	 Number of variables per device 	2 048
 Multiplexing Multiplexing Structures Arrays Yes Yes Images Number of configurable images Sol Permanent window/default Yes 	 Number of variables per screen 	400
• Structures Yes • Arrays Yes Images Yes • Number of configurable images 500 • Permanent window/default Yes	• Limit values	Yes
 Arrays Yes Images Number of configurable images 500 Permanent window/default Yes 	Multiplexing	Yes
Images • Number of configurable images 500 • Permanent window/default Yes	Structures	Yes
Number of configurable images 500 Permanent window/default Yes	• Arrays	Yes
Permanent window/default Yes	Images	
	 Number of configurable images 	500
Global image Yes	 Permanent window/default 	Yes
	Global image	Yes
Image selection by PLC Yes	 Image selection by PLC 	Yes

 Image number in the PLC 	Yes
mage 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
ists	
 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	Nee
— Memory card	Yes
— USB memory	Yes
— Ethernet	Yes
Data storage format	
— CSV	Yes
— TXT	Yes
— RDB	Yes
Security	
 Number of user groups 	50
 Number of user rights 	32
Number of users	50
 Password export/import 	Yes
SIMATIC Logon	Yes
Logging through printer	
• Alarms	Yes
 Report (shift log) 	Yes
Hardcopy	Yes
Electronic print to file	Yes; PDF, HTML
Character sets	
 Keyboard fonts 	
— US English	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
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 OMRON (LINK/Multilink) 	Yes
 Modicon (Modbus TCP/IP) 	Yes
 Modicon (Modbus) 	Yes
Service tools/configuration aids	
 Backup/Restore manually 	Yes
 Backup/Restore automatically 	Yes
Simulation	Yes
Device switchover	Yes
Peripherals/Options	
Printer	Yes
SIMATIC HMI MM memory card: Multi Media Card	Yes
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	454 mm
Height of housing front	289 mm
Mounting cutout, width	434 mm
Mounting cutout, height	269 mm
Overall depth	65 mm
Weights	
Weight without packaging	4.4 kg
Weight incl. packaging	5.7 kg
last modified:	05/13/2020