Data sheet

6ES7412-5HK06-0AB0



SIMATIC S7-400H, CPU 412-5H, central processing unit for S7-400H and S7-400F/FH, 5 interfaces: 1x MPI/DP, 1x DP, 1x PN and 2 for sync modules, 1 MB memory (512 KB data/512 KB program)

General information	
Product type designation	CPU 412-5H PN/DP
HW functional status	1
Firmware version	V6.0
Product function	
 Isochronous mode 	No
Engineering with	
 Programming package 	As of STEP 7 V5.5 SP2 with HF1
CiR - Configuration in RUN	
CiR synchronization time, basic load	100 ms
CiR synchronization time, time per I/O byte	0 µs
Supply voltage	
Rated value (DC)	Power supply via system power supply
Input current	
from backplane bus 5 V DC, typ.	1.6 A
from backplane bus 5 V DC, max.	1.9 A
from backplane bus 24 V DC, max.	150 mA; 150 mA per DP interface
from interface 5 V DC, max.	90 mA; At each DP interface
Power loss	
Power loss, typ.	7.5 W
Memory	
Type of memory	RAM
Work memory	
integrated	1 Mbyte
integrated (for program)	512 kbyte
integrated (for data)	512 kbyte
expandable	No
Load memory	
expandable FEPROM	Yes; with Memory Card (FLASH)
 expandable FEPROM, max. 	64 Mbyte
integrated RAM, max.	512 kbyte
expandable RAM	Yes
expandable RAM, max.	64 Mbyte
Backup	
• present	Yes
with battery	Yes; all data
without battery	No
Battery	
Backup battery	

Backup current, typ.	180 μA; Valid up to 40°C
Backup current, max.	1 000 μΑ
Backup time, max.	Dealt with in the module data manual with the secondary conditions and the factors of influence
 Feeding of external backup voltage to CPU 	5 V DC to 15 V DC
CPU processing times	
for bit operations, typ.	31.25 ns
for word operations, typ.	31.25 ns
for fixed point arithmetic, typ.	31.25 ns
for floating point arithmetic, typ.	62.5 ns
CPU-blocks	
DB	
Number, max.	6 000; Number range: 1 to 16000
• Size, max.	64 kbyte
FB	•
Number, max.	3 000; Number range: 0 to 7999
• Size, max.	64 kbyte
FC	
Number, max.	3 000; Number range: 0 to 7999
• Size, max.	64 kbyte
ОВ	
Number, max.	see instruction list
• Size, max.	64 kbyte
Number of free cycle OBs	1; OB 1
Number of time alarm OBs	4; OB 10-13
Number of delay alarm OBs	4; OB 20-23
Number of cyclic interrupt OBs	4; OB 32-35
Number of process alarm OBs	4; OB 40-43
Number of DPV1 alarm OBs	3; OB 55-57
Number of startup OBs	2; OB 100, 102
 Number of asynchronous error OBs 	9; OB 80-88
 Number of synchronous error OBs 	2; OB 121, 122
Nesting depth	
per priority class	24
additional within an error OB	1
Counters, timers and their retentivity	
S7 counter	
Number	2 048
Retentivity	20.0
— adjustable	Yes
— lower limit	0
— upper limit	
abba	2 047
— preset	2 047 Z 0 to Z 7
— preset Counting range	Z 0 to Z 7
Counting range	Z 0 to Z 7
Counting range — lower limit	Z 0 to Z 7
Counting range	Z 0 to Z 7
Counting range — lower limit — upper limit IEC counter	Z 0 to Z 7
Counting range — lower limit — upper limit IEC counter • present	Z 0 to Z 7 0 999 Yes
Counting range — lower limit — upper limit IEC counter • present • Type	Z 0 to Z 7 0 999 Yes SFB
Counting range — lower limit — upper limit IEC counter • present	Z 0 to Z 7 0 999 Yes
Counting range — lower limit — upper limit IEC counter • present • Type • Number	Z 0 to Z 7 0 999 Yes SFB
Counting range — lower limit — upper limit IEC counter • present • Type • Number S7 times • Number	Z 0 to Z 7 0 999 Yes SFB Unlimited (limited only by RAM capacity)
Counting range — lower limit — upper limit IEC counter • present • Type • Number S7 times • Number Retentivity	Z 0 to Z 7 0 999 Yes SFB Unlimited (limited only by RAM capacity) 2 048
Counting range — lower limit — upper limit IEC counter • present • Type • Number S7 times • Number Retentivity — adjustable	Z 0 to Z 7 0 999 Yes SFB Unlimited (limited only by RAM capacity) 2 048 Yes
Counting range — lower limit — upper limit IEC counter • present • Type • Number S7 times • Number Retentivity — adjustable — lower limit	Z 0 to Z 7 0 999 Yes SFB Unlimited (limited only by RAM capacity) 2 048 Yes 0
Counting range — lower limit — upper limit IEC counter • present • Type • Number S7 times • Number Retentivity — adjustable — lower limit — upper limit	Z 0 to Z 7 0 999 Yes SFB Unlimited (limited only by RAM capacity) 2 048 Yes 0 2 047
Counting range — lower limit — upper limit IEC counter • present • Type • Number S7 times • Number Retentivity — adjustable — lower limit — upper limit — preset	Z 0 to Z 7 0 999 Yes SFB Unlimited (limited only by RAM capacity) 2 048 Yes 0
Counting range — lower limit — upper limit IEC counter • present • Type • Number S7 times • Number Retentivity — adjustable — lower limit — upper limit — preset Time range	Z 0 to Z 7 0 999 Yes SFB Unlimited (limited only by RAM capacity) 2 048 Yes 0 2 047 No times retentive
Counting range — lower limit — upper limit IEC counter • present • Type • Number S7 times • Number Retentivity — adjustable — lower limit — upper limit — preset	Z 0 to Z 7 0 999 Yes SFB Unlimited (limited only by RAM capacity) 2 048 Yes 0 2 047

IEC timer	
• present	Yes
• Type	SFB
Number	Unlimited (limited only by RAM capacity)
Data areas and their retentivity	
Retentive data area (incl. timers, counters, flags), max.	Total working and load memory (with backup battery)
Flag	
• Size, max.	8 192 byte
 Retentivity available 	Yes
 Retentivity preset 	MB 0 to MB 15
Number of clock memories	8; in 1 memory byte
Local data	
adjustable, max.	16 kbyte
• preset	8 kbyte
Address area	
I/O address area	
• Inputs	8 kbyte
Outputs	8 kbyte
Process image	
Inputs, adjustable	8 kbyte
Outputs, adjustable	8 kbyte
• Inputs, default	256 byte
Outputs, default	256 byte
consistent data, max.	244 byte
Access to consistent data in process image	Yes
Subprocess images	
Number of subprocess images, max.	15
Digital channels	
Inputs	65 536
— of which central	65 536
Outputs	65 536
of which central	65 536
Analog channels	
• Inputs	4 096
— of which central	4 096
Outputs	4 096
— of which central	4 096
Hardware configuration	
Number of expansion units, max.	21
connectable OPs	47
Multicomputing	No
Interface modules	
Number of connectable IMs (total), max.	6
Number of connectable IMs (total), max. Number of connectable IM 460s, max.	6
Number of connectable IM 463s, max.	4; Single mode only
Number of DP masters	., cgio modo omj
• integrated	2
• via CP	10; CP 443-5 Extended
Mixed mode IM + CP permitted	No
via interface module	0
Number of IO Controllers	
• integrated	1
• via CP	0
Number of operable FMs and CPs (recommended)	
FM	See manual Automation System S7-400H fault-tolerant systems.
₩ 1 IVI	Limited by number of slots and number of connections
• CP, PtP	See manual Automation System S7-400H fault-tolerant systems. Limited by number of slots and number of connections
	Limited by humber of slots and humber of connections
PROFIBUS and Ethernet CPs	14; Of which max. 10 CP as DP master

Time of day Clook	required slots	2
Clock Feature Cock (real-time) Yes	·	
Hardware clock (real-time)		
Feebrule and synchronizable Yes		Yes
Resolution		
Deviation per day (buffered), max. Deviation per day (unbuffered), max. Operating hours counter Number 16	-	
■ Devation per day (nobulfered), max.		
Number		
Number		
Number/Number range Range of values Range of v		16
Range of values Granularity In retentive Yes Clock synchronization Supported On MPI, master Supported On MPI, master On MPI, slave On DP, slave On SP, slave On		
• Granularity • retentive Clock syncronization • supported • to MPI, aster • to MPI, slave • to DP, master • to MPI, slave • to DP, slave • to DP, slave • in AS, master • in AS, stave • on Ethernet via NTP There difference in system when synchronizing via • Ethernet, max. • Ethernet, max. • Con mellor of the interfaces Number of RS 485 interfaces Number of SR 485 interfaces Number of other interfaces Optical interface Optical interface Interface type • RS 485 • Output current of the interface, max. • TROFIBUS DP master • PROFIBUS DP aster • No MPI • Number of connections • Transmission rate, max. 12 Mbit's Services — PG/OP communication No 16: If a diagnostics repeater is used on the line, the number of connection resources on the line is reduced by 1 - S7 communication - S7 communication - S7 communication - S7 communication, as server PROFIBUS DP master • Number of Connections, max. • Transmission rate, max. 16: If a diagnostics repeater is used on the line, the number of connection resources on the line is reduced by 1 - S7 communication - S7 communication, as server PROFIBUS DP master • Number of Connections, max. • Transmission rate, max. 16: If a diagnostics repeater is used on the line, the number of connection resources on the line is reduced by 1 - S7 communication, as server PROFIBUS DP master • Number of Connections, max. • Number of Connections on the line is reduced by 1 • Number of Connections, max. • Number of Connections, max. • Number of Connections on the line is reduced by 1 • Number of Connections, max. • Number of Connections on the line is reduced by 1 • Number of Connections, max. • Number of Connections on the line is reduced by 1 • Number of Connections on the line is reduced by 1 • Number of	_	SFCs 2, 3 and 4: 0 to 32767 hours SFC 101: 0 to 2^31 - 1 hours
retentive Clock synchronization		
supported io IMPI, master io IMPI, slave io IDP, master io IDP, master io IDP, master io IDP, master io IDP, slave io IDP, slave io IDP, slave io IDP, slave io IAS, slave io IDP, master io ID	• retentive	Yes
• to MPI, master • to MPI, slave • to MPI, slave • to DP, slave • to DP, slave • in AS, slave • in AS, slave • on Ethernet via NTP • Yes • on Ethernet via NTP • Yes • on Ethernet via NTP • Yes • on Ethernet wis NTP • Yes • on Ethernet, max. • On ms Interfaces Number of RS 485 interfaces Number of RS 485 interfaces 2 Rumber of their interfaces Qo ms Interface Interface type Interface type • RS 485 • Output current of the interface, max. Protocois • MPI • PROFIBUS DP master • PROFIBUS DP master • PROFIBUS DP slave No MPI • Number of connections • Transmission rate, max. 12 Mbit/s Services — PG/OP communication — S7 basic communication — S7 basic communication — S7 communication, as server — Yes — PROFIBUS DP master — S7 communication, as server PROFIBUS DP master • S7 communication, as server PROFIBUS DP master • S7 communication, as server PROFIBUS DP master • S7 communication, as server PSOFIBUS DP master • S7 communication, as server PSOFIBUS DP master • Number of Connections, max. • Number of De plaves, max. • Lightify 16; if a diagnostics repeater is used on the line, the number of connection resources on the line is reduced by 1 • Transmission rate, max. • Number of DP plaves, max. • Vimber o	Clock synchronization	
• to MPI, slave • to DP, master • to DP, slave • to DP, slave • in AS, master • in AS, slave • in AS, slave • on Enternet via NTP Time difference in system when synchronizing via • Ethernet, max. • Ethernet, max. • MPI, max. Interfaces No Interface type Interface type • RS 485 • Output current of the interface, max. • TS own munication • PROFIBUS DP master • Number of connection, as server • Pes PROFIBUS DP master • Number of DP slaves, max. • Transmission rate, ma	supported	Yes
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• to DP, slave • in AS, master • in AS, slave • on Ethernet via NTP Time difference in system when synchronizing via • Ethernet, max. • MPI, max. • MPI, max. • MPI, max. Interfaces Valumber of Other interfaces Optical interface Optical interface Optical interface Interface type Interface type • RS 485 • Output current of the interface, max. Protocols • MPI • PROFIBUS DP master • PROFIBUS DP slave No MPI • Number of connections • Transmission rate, max. Services — PG/OP communication — S7 communication, as client — S7 communication, as server PROFIBUS DP master • Number of connections, max. • Transmission rate, max. • Transmission rate, max. • Transmission rate, max. • Transmission rate, max. • Transmission as client — S7 communication, as server PROFIBUS DP max. • Transmission rate, max. • Trans	● to MPI, slave	Yes
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in AS, slave on Ethernet via NTP Yes on Ethernet max. On Silva NTP Ethernet, max. On Silva NTP Number of RS 485 interfaces Number of RS 485 interfaces No Interface No Interface Interface Interface type Interface type Interface types POBJERUS DP master PROFIBUS DP master PROFIBUS DP slave No MPI No Interface Interface Interface types PROFIBUS DP master PROFIBUS DP slave Interface Interface types Interface ty		
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Ethernet, max, 10 ms; Via NTP Ethernet, max, 200 ms Interfaces Number of RS 495 interfaces 2 Number of RS 495 interfaces 2; Fiber-optic interface Optical interface No Interface Interface Vpe Interface Wpe Isolated 7 Eves Output current of the interface, max. 150 mA Protocols MPI PROFIBUS DP master Yes PROFIBUS DP paster Yes PROFIBUS DP slave No MPI Number of connections 32; If a diagnostics repeater is used on the line, the number of connection resources on the line is reduced by 1 Profocols No Services PG/OP communication Yes PROFIBUS DP master Sor communication, as client Yes PROFIBUS DP master PROFIBUS DP master Sor communication, as server PROFIBUS DP master Yes PROFIBUS DP master	•	
■ Ethernet, max.		Yes; As client
MPI, max. Interfaces Number of RS 485 interfaces Quital interface No I. Interface No I. Interface Interface type Isolated Yes Interface type Interface types ■ RS 485 ■ Output current of the interface, max. Protocols ■ MPI ■ PROFIBUS DP master ■ PROFIBUS DP slave MPI ■ Number of connections ■ Transmission rate, max. Services ■ PGOP communication — S7 communication, as client — S7 communication, as server PROFIBUS DP master ■ No PROFIBUS DP master ■ S7 communication, as server PROFIBUS DP master ■ No ■ S7 communication, as server PROFIBUS DP master ■ No ■ S7 communication, as server P Yes PROFIBUS DP master ■ No ■ S7 communication, as server P Yes PROFIBUS DP master ■ No ■ S7 communication, as server P Yes PROFIBUS DP master ■ Number of connections, max. ■ Number of p Slaves, max. ■ Services — PG/OP communication ■ Transmission rate, max. ■ Transmission rate, max. ■ Number of DP slaves, max. ■ PGOP communication ■ Transmission rate, max. ■ PGOP communication ■ PGOP		40 15 15
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 — S7 communication, as client — S7 communication, as server Yes PROFIBUS DP master • Number of connections, max.	 S7 basic communication 	No
— S7 communication, as server Yes PROFIBUS DP master 16; If a diagnostics repeater is used on the line, the number of connection resources on the line is reduced by 1 ● Transmission rate, max. 12 Mbit/s ● Number of DP slaves, max. 32 Services Yes	— S7 communication	Yes
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 Number of connections, max. 16; If a diagnostics repeater is used on the line, the number of connection resources on the line is reduced by 1 Transmission rate, max. Number of DP slaves, max. Services PG/OP communication Yes 	— S7 communication, as server	Yes
connection resources on the line is reduced by 1 • Transmission rate, max. • Number of DP slaves, max. Services — PG/OP communication Yes	PROFIBUS DP master	
● Number of DP slaves, max. 32 Services — PG/OP communication Yes		connection resources on the line is reduced by 1
Services — PG/OP communication Yes	·	
— PG/OP communication Yes		32
— Routing Yes		
	— Routing	Yes

Clobal data communication	No
— Global data communication	No No
— S7 basic communication	No
— S7 communication	Yes
— S7 communication, as client	Yes
— S7 communication, as server	Yes
— Equidistance	No
— Isochronous mode	No
— SYNC/FREEZE	No
Activation/deactivation of DP slaves	No
 Direct data exchange (slave-to-slave communication) 	No
— DPV1	Yes
Address area	
— Inputs, max.	2 kbyte
— Outputs, max.	2 kbyte
User data per DP slave	
User data per DP slave, max.	244 byte
— Inputs, max.	244 byte
— Outputs, max.	244 byte
— Slots, max.	244
— per slot, max.	128 byte
PROFIBUS DP slave	
Number of connections	No configuration of CPU as DP slave
2. Interface	
Interface type	PROFINET
Isolated	Yes
automatic detection of transmission rate	Yes; Autosensing
Autonegotiation	Yes
Autocrossing	Yes
Change of IP address at runtime, supported	No
Number of connection resources	48
Interface types	
• RJ 45 (Ethernet)	Yes
 Number of ports 	2
integrated switch	Yes
Protocols	
 PROFINET IO Controller 	Yes
 PROFINET IO Device 	No
PROFINET CBA	No
 PROFIBUS DP master 	No
PROFIBUS DP slave	No
Open IE communication	Yes
Web server	No
Point-to-point connection	No
Media redundancy	Yes
PROFINET IO Controller	
Transmission rate, max.	100 Mbit/s
Services	
— PG/OP communication	Yes
— S7 communication	Yes
— Isochronous mode	No
— Shared device	Yes; Single mode only
Prioritized startup	No
Number of connectable IO Devices, max.	256; In redundant mode via both interfaces
Number of connectable IO Devices for RT,	256
max.	
— of which in line, max.	256
 Activation/deactivation of IO Devices 	No
 — IO Devices changing during operation (partner ports), supported 	No
Device replacement without swap medium	Yes

	050 500 4 0 4
— Send cycles	250 µs, 500 µs, 1 ms, 2 ms, 4 ms
 Updating time 	250 µs to 512 ms, minimum value depends on the number of configured user data and the configured single or redundant mode
Address area	user data and the configured single of redditidant mode
	8 kbyte
— Inputs, max.	
— Outputs, max.	8 kbyte
User data consistency, max. Open IE communication	1 024 byte
•	40
Number of connections, max.	46
 Local port numbers used at the system end 	0, 20, 21, 25, 102, 135, 161, 34962, 34963, 34964, 65532, 65533, 65534, 65535
 Keep-alive function, supported 	Yes
3. Interface	100
	PROFIBUS DP
Interface type	
Number of connection resources	16
Interface types	Voc
• RS 485	Yes
Output current of the interface, max.	150 mA
Protocols	
PROFIBUS DP master PROFIBUS DP aleres	Yes
PROFIBUS DP slave	No
PROFIBUS DP master	10
Number of connections, max.	16
 Transmission rate, max. 	12 Mbit/s
 Number of DP slaves, max. 	64
Services	
— PG/OP communication	Yes
— Routing	Yes
 Global data communication 	No
 S7 basic communication 	No
— S7 communication	Yes
 S7 communication, as client 	Yes
 S7 communication, as server 	Yes
— Equidistance	No
 Isochronous mode 	No
— SYNC/FREEZE	No
 Activation/deactivation of DP slaves 	No
 Direct data exchange (slave-to-slave 	No
communication)	
— DPV0	Yes
— DPV1	Yes
Address area	
— Inputs, max.	4 kbyte
— Outputs, max.	4 kbyte
User data per DP slave	
User data per DP slave, max.	244 byte
— Inputs, max.	244 byte
— Outputs, max.	244 byte
— Slots, max.	244
— per slot, max.	128 byte
4. Interface	
Interface type	Pluggable synchronization submodule (FO)
Plug-in interface modules	Synchronization modules 6ES7960-1AA06-0XA0 or 6ES7960-1AB06-
	0XA0
5. Interface	
Interface type	Pluggable synchronization submodule (FO)
Plug-in interface modules	Synchronization modules 6ES7960-1AA06-0XA0 or 6ES7960-1AB06-
	0XA0
Protocols	
Redundancy mode	
Media redundancy	

 Switchover time on line break, typ. 	200 ms
— Switchover time of line break, typ. — Number of stations in the ring, max.	50
SIMATIC communication	
• S7 routing	Yes
Open IE communication	
• TCP/IP	Yes; via integrated PROFINET interface and loadable FBs
Number of connections, max.	46
— Data length, max.	32 kbyte
several passive connections per port,	Yes
supported	163
• ISO-on-TCP (RFC1006)	Yes; Via integrated PROFINET interface or CP 443-1 and loadable FBs
 Number of connections, max. 	46
— Data length, max.	32 kbyte; 1 452 bytes via CP 443-1 Adv.
• UDP	Yes; via integrated PROFINET interface and loadable FBs
 Number of connections, max. 	46
— Data length, max.	1 472 byte
Web server	
supported	No
Isochronous mode	
Equidistance	No
communication functions / header	
PG/OP communication	Yes
 Number of connectable OPs without message 	47
processing	
 Number of connectable OPs with message 	47; When using Alarm_S/SQ and Alarm_D/DQ
processing	Ver
Data record routing	Yes
Global data communication	N.
• supported	No
S7 basic communication	No
supported S7 communication	INO
supported	Yes
as server	Yes
as server as client	Yes
User data per job, max.	64 kbyte
 User data per job (of which consistent), max. 	462 byte; 1 variable
S5 compatible communication	402 byte, i variable
supported	Yes; (via CP max. 10 and FC AG_SEND and FC AG_RECV)
User data per job, max.	8 kbyte
 User data per job (of which consistent), max. 	240 byte
Number of simultaneous AG-SEND/AG-RECV	64/64
orders per CPU, max.	01101
Standard communication (FMS)	
• supported	Yes; Via CP and loadable FB
Number of connections	
• overall	48
 usable for PG communication 	
 reserved for PG communication 	1
 adjustable for PG communication, max. 	0
 usable for OP communication 	
 reserved for OP communication 	1
 adjustable for OP communication, max. 	0
 usable for S7 basic communication 	
 reserved for S7 basic communication 	0
 adjustable for S7 basic communication, max. 	0
 usable for S7 communication 	
 reserved for S7 communication 	0
 adjustable for S7 communication, max. 	0
usable for routing	
 reserved for routing 	0

— adjustable for routing, max.	0
S7 message functions	
Number of login stations for message functions, max.	47; Max. 47 with Alarm_S/SQ and Alarm_D/DQ (OPs); max. 8 with Alarm, Alarm_8, Alarm_8P, Notify and Notify_8 (e.g. WinCC)
Symbol-related messages	No
SCAN procedure	No
Program alarms	Yes
Process diagnostic messages	Yes
simultaneously active Alarm-S blocks, max.	250; Simultaneously active alarm_S/SQ blocks or alarm_D/DQ blocks
Alarm 8-blocks	Yes
 Number of instances for alarm 8 and S7 communication blocks, max. 	600
• preset, max.	300
Process control messages	Yes
Number of archives that can log on simultaneously (SFB 37 AR_SEND)	16
Test commissioning functions	
	Vee
Status block	Yes
Single step	Yes
Number of breakpoints	16
Status/control	Van Un ta 40 ominhia tahi
Status/control variable	Yes; Up to 16 variable tables
• Variables	Inputs/outputs, memory bits, DBs, distributed I/Os, timers, counters
Number of variables, max.	70
Forcing	
Forcing	Yes
Forcing, variables	Inputs/outputs, bit memories, distributed I/Os
Number of variables, max.	256
Diagnostic buffer	
• present	Yes
 Number of entries, max. 	3 200
— adjustable	Yes
— preset	120
Service data	
• can be read out	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
configuration / header	
Configuration software	
STEP 7	Yes
configuration / programming / header	100
Command set	see instruction list
	see instruction list 7
Nesting levels Access to consistent data in process image.	
Access to consistent data in process image System functions (SEC)	Yes
System functions (SFC) System function blocks (SFR)	see instruction list
System function blocks (SFB) Programming language	see instruction list
Programming language	Vec
— LAD	Yes
— FBD	Yes
— STL	Yes
— SCL	Yes
— CFC	Yes
— GRAPH	Yes
— HiGraph®	Yes
configuration / programming / number of simultaneously a	
— RD_REC	8
— WR_REC	8
— WR_PARM	

— PARM_MOD	1
— WR_DPARM	2
— DPNRM_DG	8
— RDSYSST	8
— DP_TOPOL	1
configuration / programming / number of simultaneously	active SFB / header
— RDREC	8
— WRREC	8
Know-how protection	
 User program protection/password protection 	Yes
 Block encryption 	Yes; With S7 block Privacy
Dimensions	
Width	50 mm
Height	290 mm
Depth	219 mm
Weights	
Weight, approx.	995 g

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last modified: