## SIEMENS

## Data sheet

## 6ES7512-1DM03-0AB0



SIMATIC DP, CPU 1512SP-1 PN for ET 200SP, central processing unit with work memory 400 KB for program and 2 MB for data, 1st interface: PROFINET IRT with 3-port switch, 25 ns bit performance, SIMATIC Memory Card required, BusAdapter required for port 1 and 2

Figure similar

General information	
Product type designation	CPU 1512SP-1 PN
HW functional status	FS04
Firmware version	V4.0
<ul> <li>FW update possible</li> </ul>	Yes
Product function	
I&M data	Yes; I&M0 to I&M3
<ul> <li>Module swapping during operation (hot swapping)</li> </ul>	Yes; Multi-hot swapping
Isochronous mode	Yes; only with PROFINET; with minimum OB 6x cycle of 500 $\mu s$
SysLog	Yes
Engineering with	
STEP 7 TIA Portal configurable/integrated from version	V20 (FW V4.0) / V18 (FW V3.0) or higher; configurable with older TIA Portal versions as 6ES7 512-1DK01-0AB0
Configuration control	
via dataset	Yes
Control elements	
Mode selector switch	1
Supply voltage	
Rated value (DC)	24 V
permissible range, lower limit (DC)	19.2 V
permissible range, upper limit (DC)	28.8 V
Reverse polarity protection	Yes
Mains buffering	
<ul> <li>Mains/voltage failure stored energy time</li> </ul>	10 ms
Input current	
Current consumption (rated value)	0.48 A
Current consumption, max.	0.7 A
Inrush current, max.	1.34 A; Rated value
l²t	0.3 A <sup>2</sup> ·s
Power	
Infeed power to the backplane bus	8.05 W
Power loss	
Power loss, typ.	3.5 W
Memory	
Number of slots for SIMATIC memory card	1
SIMATIC memory card required	Yes
Work memory	
<ul> <li>integrated (for program)</li> </ul>	400 kbyte
<ul> <li>integrated (for data)</li> </ul>	2 Mbyte

Lad memory  I Play for (MAITC) Memory Candy, max.  Backap  I Play for MAITC) Memory Candy, max.  S2 Gbyte Backap  I Play for Mark To Memory Candy, max.  I Protection of the second of t	Plug-in (SIMATIC Memory Card), max. 32 Gb Backup     maintenance-free Yes      CPU processing times     for bit operations, typ. 6 ns     for word operations, typ. 7 ns     for fixed point arithmetic, typ. 9 ns     for floating point arithmetic, typ. 37 ns     CPU-blocks      Number of elements (total) 4 0000 DB     Number range 166     Size, max. 1 Mby FE     Number range 066     Size, max. 400 kt FC     Number range 066     Size, max. 400 kt OB     Si	; Blocks (OB, FB, FC, DB) and UDTs 0 999; subdivided into: number range that can be used by the user: 1 9, and number range of DBs created via SFC 86: 60 000 60 999 te; For DBs with absolute addressing, the max. size is 64 KB 5 535 byte 5 535 byte
Backur	Backup       Yes         CPU processing times       6 ns         for bit operations, typ.       6 ns         for word operations, typ.       7 ns         for fixed point arithmetic, typ.       9 ns         for floating point arithmetic, typ.       37 ns         CPU-blocks       37 ns         Number of elements (total)       4 000;         DB       1 6;         • Number of elements (total)       4 000;         DB       1 6;         • Number range       1 6;         • Size, max.       400 kl         FC       1 6;         • Number range       0 6;         • Size, max.       400 kl         FC       100 kl         • Number of free cycle OBs       100 kl         • Number of free cycle OBs       100         • Number of ime alarm OBs       20         • Number of cyclic interrupt OBs       20; W         • Number of opcyclic interrupt OBs       20; W         • Number of isochronous mode OBs       1         • Number of startup OBs       20         • Number of startup OBs       20         • Number of startup OBs       2         • Number of startup OBs       100     <	; Blocks (OB, FB, FC, DB) and UDTs 0 999; subdivided into: number range that can be used by the user: 1 9, and number range of DBs created via SFC 86: 60 000 60 999 te; For DBs with absolute addressing, the max. size is 64 KB 5 535 byte 5 535 byte
• realistence-free         Yes           CPU processing lates         6 in s           CPU structures, typ.         6 in s           CPU structures, typ.         7 ns           CPU structures, typ.         9 ns           Number of elements (total)         4 4000; Blocks (OE, FE, FC, DB) and UDTs           DBS         9 structures, typ.         9 structures, typ.           • Number range         0 05 535         9 structures, typ.           • Structures, typ.         0 05 535         9 structures, typ.           • Structures, typ.         0 05 535         9 structures, typ.           • Structures, typ.         0 05 535         9 structures, typ.           • Structures, typ.         0 05 535         9 structures, typ.           • Structures, typ.         0 05 535         9 structures, typ.           • Structures, typ.         0 05 535         9 structures, typ. <t< td=""><td>• maintenance-free         Yes           CPU processing times         6           for bit operations, typ.         7           for word operations, typ.         7           for fixed point arithmetic, typ.         9           for floating point arithmetic, typ.         37           for floating point arithmetic, typ.         37           CPU-blocks         37           Number of elements (total)         4           DB         1           • Number range         1           • Size, max.         1           FB         1           • Number range         0           • Size, max.         400 kl           FC         1           • Number range         0           • Size, max.         400 kl           FC         1           • Number of free cycle OBs         100           • Number of free cycle OBs         100           • Number of effec cycle OBs         100           • Number of elay alarm OBs         20           • Number of elay alarm OBs         20           • Number of process alarm OBs         20           • Number of isochronous mode OBs         1           • Number of startup OBs         <td< td=""><td>0 999; subdivided into: number range that can be used by the user: 1 9, and number range of DBs created via SFC 86: 60 000 60 999 te; For DBs with absolute addressing, the max. size is 64 KB 5 535 byte</td></td<></td></t<>	• maintenance-free         Yes           CPU processing times         6           for bit operations, typ.         7           for word operations, typ.         7           for fixed point arithmetic, typ.         9           for floating point arithmetic, typ.         37           for floating point arithmetic, typ.         37           CPU-blocks         37           Number of elements (total)         4           DB         1           • Number range         1           • Size, max.         1           FB         1           • Number range         0           • Size, max.         400 kl           FC         1           • Number range         0           • Size, max.         400 kl           FC         1           • Number of free cycle OBs         100           • Number of free cycle OBs         100           • Number of effec cycle OBs         100           • Number of elay alarm OBs         20           • Number of elay alarm OBs         20           • Number of process alarm OBs         20           • Number of isochronous mode OBs         1           • Number of startup OBs <td< td=""><td>0 999; subdivided into: number range that can be used by the user: 1 9, and number range of DBs created via SFC 86: 60 000 60 999 te; For DBs with absolute addressing, the max. size is 64 KB 5 535 byte</td></td<>	0 999; subdivided into: number range that can be used by the user: 1 9, and number range of DBs created via SFC 86: 60 000 60 999 te; For DBs with absolute addressing, the max. size is 64 KB 5 535 byte
GPU processing times              for an operations, typ.             for an operations, typ.             for and operations, typ.             for an operan	CPU processing times       6 ns         for bit operations, typ.       6 ns         for word operations, typ.       7 ns         for fixed point arithmetic, typ.       9 ns         for floating point arithmetic, typ.       37 ns         CPU-blocks       37 ns         Number of elements (total)       4 000;         DB       1 66         • Number range       1 66         • Size, max.       1 Mby         FB       0 68         • Number range       0 68         • Size, max.       400 kt         FC       0         • Number range       0 68         • Size, max.       400 kt         OB       0         • Size, max.       400 kt         OB       0         • Size, max.       400 kt         • Number of free cycle OBs       100         • Number of free cycle OBs       100         • Number of free cycle OBs       20; W         • Number of of cyclic interrupt OBs       20; W         • Number of of process alarm OBs       20; W         • Number of process alarm OBs       33         • Number of sochronous mode OBs       1         • Number of sochronoo	0 999; subdivided into: number range that can be used by the user: 1 9, and number range of DBs created via SFC 86: 60 000 60 999 te; For DBs with absolute addressing, the max. size is 64 KB 5 535 byte
for the operations, typ.         8 ns           for word operations, typ.         7 ns           for fixed opini arithmetic, typ.         9 ns           for fixed opini arithmetic, typ.         37 ns           CPUshock         37 ns           CPUshock         4000. Blocks (OE, FB, FC, DB) and UDTs           DB	for bit operations, typ.6 nsfor word operations, typ.7 nsfor fixed point arithmetic, typ.9 nsfor floating point arithmetic, typ.37 nsCPU-blocksNumber of elements (total)4 000,DB1 60• Number range1 60• Size, max.1 MbyFB•• Number range0 60• Size, max.400 kdFC•• Number range0 60• Size, max.400 kdOB•• Size, max.400 kdOB•• Size, max.400 kdOB•• Number of free cycle OBs100• Number of time alarm OBs20• Number of delay alarm OBs20• Number of process alarm OBs20• Number of process alarm OBs3• Number of process alarm OBs3• Number of sochronous mode OBs1• Number of synchronous error OBs4• Number of synchronous error OBs4• Number of diagnostic alarm OBs2• Number of diagnostic alarm OBs1• Number of alagnostic alarm OBs2• Number of synchronous error OBs4• Number of synchronous error OBs4• Number of diagnostic alarm OBs2• Number of diagnostic alarm OBs2• Number of synchronous error OBs4• Number of synchronous error OBs4• Number of diagnostic alarm OBs1• Number	0 999; subdivided into: number range that can be used by the user: 1 9, and number range of DBs created via SFC 86: 60 000 60 999 te; For DBs with absolute addressing, the max. size is 64 KB 5 535 byte
for dependence, typ.         7 ns           for faced point arithmetic, typ.         9 ns           for faced point arithmetic, typ.         9 ns           cPU solvest         1.60 999 subdivided into: number range that can be used by the user 1           Number of demons (ball)         4 000. Blocks (OR, FB, FC, DB) and UDTs           DB         1.60 999 subdivided into: number range that can be used by the user 1           • Size, max.         1 Mbyte, For DBs with absolute addressing, the max. size is 64 KB           FB         0	for word operations, typ.       7 ns         for fixed point arithmetic, typ.       9 ns         for floating point arithmetic, typ.       37 ns         CPU-blocks       4 000;         DB       1 60;         • Number of elements (total)       4 000;         DB       1 60;         • Number range       1 60;         • Size, max.       1 Mby         FB       0 60;         • Number range       0 60;         • Size, max.       400 kl         FC       •         • Number range       0 60;         • Size, max.       400 kl         OB       •         • Size, max.       400 kl         OB       •         • Size, max.       400 kl         • Number of free cycle OBs       100         • Number of free cycle OBs       100         • Number of delay alarm OBs       20         • Number of process alarm OBs       20; W         • Number of DPV1 alarm OBs       3         • Number of schronous mode OBs       1         • Number of startup OBs       100         • Number of agynchronous error OBs       4         • Number of diagnostic alarm OBs	0 999; subdivided into: number range that can be used by the user: 1 9, and number range of DBs created via SFC 86: 60 000 60 999 te; For DBs with absolute addressing, the max. size is 64 KB 5 535 byte
for fixed point arithmetic, typ.     9 ns       for loading point arithmetic, typ.     37 ns       Outbacket     37 ns       Outbacket     4000, Blocks (OB, FB, FC, DB) and UDTs       DB     1600, 900, add ubbracket       Number of elements (total)     4.000, Blocks (OB, FB, FC, DB) and UDTs       DB     1600, 900, and number range of DBs created by the user 1       Size, max.     1600, 900, and number range of DBs created by the user 1       Size, max.     4.000 blyde       FB     -       • Number range     065 535       • Size, max.     400 blyde       • Number of free cycle OBs     100       • Number of free cycle OBs     100       • Number of free cycle OBs     100       • Number of free cycle OBs     20       • Number of free cycle OBs     100       • Number of oblesy alam OBs     20       • Number of oblesy alam OBs     20       • Number of oblesy alam OBs     3       • Number of oblesy alam OBs     3       • Number of sochronous modo OBs     1       • Number of alagnethronous area OBs     1       • Number of alagnethronous area OBs     1       • Num	for fixed point arithmetic, typ.       9 ns         for floating point arithmetic, typ.       37 ns         CPU-blocks       4 000;         DB       1 60;         • Number of elements (total)       4 000;         DB       1 60;         • Number range       1 60;         • Size, max.       1 Mby         FB       0 60;         • Number range       0 60;         • Size, max.       400 kl         FC       •         • Number range       0 60;         • Size, max.       400 kl         FC       •         • Number range       0 60;         • Size, max.       400 kl         OB       •         • Size, max.       400 kl         OB       •         • Number of free cycle OBs       100         • Number of free cycle OBs       100         • Number of delay alarm OBs       20         • Number of process alarm OBs       20; W         • Number of process alarm OBs       20; W         • Number of technology synchronous alarm OBs       2         • Number of startup OBs       3         • Number of asynchronous error OBs       4     <	0 999; subdivided into: number range that can be used by the user: 1 9, and number range of DBs created via SFC 86: 60 000 60 999 te; For DBs with absolute addressing, the max. size is 64 KB 5 535 byte
for finalizing point arithmetic typ.     37 ns       CPU2blocks	for floating point arithmetic, typ.       37 ns         CPU-blocks       37 ns         Number of elements (total)       4 000,         DB       9         • Number range       1 60,         • Size, max.       1 Mby         FB       0 60,         • Number range       0 60,         • Size, max.       400 kl         FC       0         • Number range       0 60,         • Size, max.       400 kl         OB       0         • Size, max.       400 kl         • Number of free cycle OBs       100         • Number of free cycle OBs       100         • Number of free cycle OBs       20         • Number of delay alarm OBs       20         • Number of process alarm OBs       20         • Number of process alarm OBs       31         • Number of process alarm OBs       32         • Number of startup OBs       32         • Number of startup OBs       100         • Number of synchronous error OBs       4         • Number of diagnostic alarm OBs       2         • Number of diagnostic alarm OBs       2         • Number of diagnostic alarm OBs       1 <td< td=""><td>0 999; subdivided into: number range that can be used by the user: 1 9, and number range of DBs created via SFC 86: 60 000 60 999 te; For DBs with absolute addressing, the max. size is 64 KB 5 535 byte</td></td<>	0 999; subdivided into: number range that can be used by the user: 1 9, and number range of DBs created via SFC 86: 60 000 60 999 te; For DBs with absolute addressing, the max. size is 64 KB 5 535 byte
CPU blocks     4 0000 Blocks (OB, FB, FC, DB) and UDTs       DB     1 60 999, subdivided into: number range that can be used by the user: 1 60 999, and number range of DBs created via SFC 606, 600 099       • Number range     1 60 599, and number range of DBs created via SFC 606, 500 000 60 599       • Number range     0 65 535       • Size, max.     400 kbyte       FC     • Number range     0 65 535       • Size, max.     400 kbyte       FC     • Number range     0 65 535       • Size, max.     400 kbyte       FC     • Number range     0 65 535       • Size, max.     400 kbyte       • Size, max.     400 kbyte       • OB     • Number of the cycle OBs     100       • Number of the cycle OBs     100       • Number of the cycle OBs     20       • Number of the cycle OBs     3       • Number of of cycle interrupt OBs     20       • Number of process atam OBs     3       • Number of source OBS     1       • Number of source OBS     1       • Number of source OBS     2       • Number of source OBS     2       • Number of source OBS     2       • Number of source or OBS     2       • Number of source or OBS     2       • Number of of adsynchronous arem OBS     2 <td>CPU-blocks         Number of elements (total)       4 000;         DB       • Number range       1 66         • Number range       1 66       59 99         • Size, max.       1 Mby         FB       • Number range       0 66         • Number range       0 66         • Size, max.       400 kl         FC       • Number range       0 66         • Size, max.       400 kl         OB       • Size, max.       400 kl         OB       • Size, max.       400 kl         • Number of free cycle OBs       100         • Number of free cycle OBs       100         • Number of free cycle OBs       20         • Number of free cycle interrupt OBs       20         • Number of delay alarm OBs       20         • Number of process alarm OBs       50         • Number of process alarm OBs       3         • Number of startup OBs       3         • Number of startup OBs       100         • Number of synchronous error OBs       4         • Number of diagnostic alarm OBs       2         • Number of diagnostic alarm OBs       2         • Number of diagnostic alarm OBs       1         • Numbe</td> <td>0 999; subdivided into: number range that can be used by the user: 1 9, and number range of DBs created via SFC 86: 60 000 60 999 te; For DBs with absolute addressing, the max. size is 64 KB 5 535 byte</td>	CPU-blocks         Number of elements (total)       4 000;         DB       • Number range       1 66         • Number range       1 66       59 99         • Size, max.       1 Mby         FB       • Number range       0 66         • Number range       0 66         • Size, max.       400 kl         FC       • Number range       0 66         • Size, max.       400 kl         OB       • Size, max.       400 kl         OB       • Size, max.       400 kl         • Number of free cycle OBs       100         • Number of free cycle OBs       100         • Number of free cycle OBs       20         • Number of free cycle interrupt OBs       20         • Number of delay alarm OBs       20         • Number of process alarm OBs       50         • Number of process alarm OBs       3         • Number of startup OBs       3         • Number of startup OBs       100         • Number of synchronous error OBs       4         • Number of diagnostic alarm OBs       2         • Number of diagnostic alarm OBs       2         • Number of diagnostic alarm OBs       1         • Numbe	0 999; subdivided into: number range that can be used by the user: 1 9, and number range of DBs created via SFC 86: 60 000 60 999 te; For DBs with absolute addressing, the max. size is 64 KB 5 535 byte
Number of elements (total)     4 000: Blocks (OB, FB, FC, DB) and UDTs       OB <ul> <li>Number range</li> <li>Size, max.</li> <lisize, li="" max.<=""></lisize,></ul>	Number of elements (total)       4 000;         DB       .         • Number range       1 60;         • Size, max.       1 Mby         FB       .         • Number range       0 60;         • Size, max.       400 kl         FC	0 999; subdivided into: number range that can be used by the user: 1 9, and number range of DBs created via SFC 86: 60 000 60 999 te; For DBs with absolute addressing, the max. size is 64 KB 5 535 byte
DB       1. 60 999; subdivided into: number range that can be used by the user 1 60 999; subdivided into: number range of DBs created via SFC 86: 60 000 60 999         FB       1. Motyc, For DBs with absolute addressing, the max. size is 64 KB         FB       0 65 535         • Number range       0 65 535         • Size, max.       400 kbyte         FC       • Number range         • Number range       0 65 535         • Size, max.       400 kbyte         OB       • Number of free cycle OBs         • Number of free cycle OBs       100         • Number of free cycle OBs       100         • Number of opces alarm OBs       20         • Number of opces alarm OBs       2         • Number of opces alarm OBs       3         • Number of stacturous more OBs       1         • Number of stacturous error OBs       2         • Number of daynchronous error OBs       2         • Number of daynchronous error OBs       2         • Number of daynchronous error OBs	DB       16i         • Number range       16i         • Size, max.       1 Mby         FB       06i         • Number range       06i         • Size, max.       400 kl         FC       06i         • Number range       06i         • Size, max.       400 kl         OB       06i         • Size, max.       400 kl         OB       06i         • Size, max.       400 kl         • Number of free cycle OBs       100         • Number of free cycle OBs       100         • Number of free cycle OBs       100         • Number of time alarm OBs       20         • Number of cyclic interrupt OBs       20         • Number of process alarm OBs       20         • Number of DPV1 alarm OBs       3         • Number of IDPV1 alarm OBs       3         • Number of schronous mode OBs       1         • Number of startup OBs       1000         • Number of synchronous error OBs       4         • Number of synchronous error OBs       2         • Number of diagnostic alarm OBs       1         • Number of diagnostic alarm OBs       1         • Nesting depth<	0 999; subdivided into: number range that can be used by the user: 1 9, and number range of DBs created via SFC 86: 60 000 60 999 te; For DBs with absolute addressing, the max. size is 64 KB 5 535 byte
• Number range       16.9.999: subdivided into: number range that be used by the user: 1	• Number range1 6i 59 99• Size, max.1 MbyFB0 6i • Size, max.• Number range0 6i • Size, max.• Size, max.400 klOB• Size, max.400 kl• Number of free cycle OBs100 • Number of time alarm OBs• Number of delay alarm OBs20 • Number of delay alarm OBs• Number of cyclic interrupt OBs20; W • Number of process alarm OBs• Number of DPV1 alarm OBs3 • Number of isochronous mode OBs• Number of startup OBs1 • Number of startup OBs• Number of startup OBs100 • Number of synchronous error OBs• Number of diagnostic alarm OBs2 • Number of diagnostic alarm OBs• per priority class24Counters, timers and their retentivity S7 counter	9, and number range of DBs created via SFC 86: 60 000 60 999 te; For DBs with absolute addressing, the max. size is 64 KB 5 535 byte 5 535 byte
69 999, and number range of DBs created via SFC 26: 00 000 60 999       FB       • Number range     0 65 535       • Size, max.     400 byte       FC     • Size, max.       • Number range     0 65 535       • Size, max.     400 byte       FC     • Size, max.       • Size, max.     400 byte       FC     • Size, max.       • Size, max.     400 byte       FC     • Size, max.       • Size, max.     400 byte       FC     • Size, max.       • Number of free cycle OBs     100       • Number of free cycle OBs     100       • Number of delay alarm OBs     20       • Number of olday alarm OBs     20       • Number of olday alarm OBs     50       • Number of olday alarm OBs     3       • Number of sochonous mode OBs     1       • Number of sochonous socho OBs     1       • Number of sochonous socho OBs     100       • Number of sochonous socho OBs     1       • Number of sochonous socho OBs     1 <td>Size, max.59 994• Size, max.0 64• Size, max.400 klFC• Number range • Size, max.0 64• Size, max.0 64• Size, max.400 klOB• Size, max.400 kl• Number of free cycle OBs • Number of free cycle OBs100• Number of free cycle OBs100• Number of delay alarm OBs20• Number of cyclic interrupt OBs20; W• Number of process alarm OBs3• Number of DPV1 alarm OBs3• Number of isochronous mode OBs1• Number of startup OBs100• Number of synchronous error OBs4• Number of agynchronous error OBs1• Number of diagnostic alarm OBs2• Number of diagnostic alarm OBs2• Number of diagnostic alarm OBs2• per priority class24Counters, timers and their retentivity24</td> <td>9, and number range of DBs created via SFC 86: 60 000 60 999 te; For DBs with absolute addressing, the max. size is 64 KB 5 535 byte 5 535 byte</td>	Size, max.59 994• Size, max.0 64• Size, max.400 klFC• Number range • Size, max.0 64• Size, max.0 64• Size, max.400 klOB• Size, max.400 kl• Number of free cycle OBs • Number of free cycle OBs100• Number of free cycle OBs100• Number of delay alarm OBs20• Number of cyclic interrupt OBs20; W• Number of process alarm OBs3• Number of DPV1 alarm OBs3• Number of isochronous mode OBs1• Number of startup OBs100• Number of synchronous error OBs4• Number of agynchronous error OBs1• Number of diagnostic alarm OBs2• Number of diagnostic alarm OBs2• Number of diagnostic alarm OBs2• per priority class24Counters, timers and their retentivity24	9, and number range of DBs created via SFC 86: 60 000 60 999 te; For DBs with absolute addressing, the max. size is 64 KB 5 535 byte 5 535 byte
FB       065 535         • Number range       065 535         • Size, max.       400 kbyte         FC       400 kbyte         • Size, max.       400 kbyte         • Number of free cycle OBs       100         • Number of free cycle OBs       20         • Number of odday larm OBs       20         • Number of odday larm OBs       20         • Number of odday larm OBs       20         • Number of opcies alarm OBs       50         • Number of opcies alarm OBs       5         • Number of locationous mode OBs       1         • Number of locationous mode OBs       100         • Number of locationous error OBs       2         • Number of diagnostic alarm OBs       2         • Number of of synchronous error OBs       24         Counter       epripriotity class       24         Counter       Any (only limited by the main memory)         • Number of algonastic alarm OBs       24         Counter       Any (only limited by the main memory)         • Number       Any (only limited by the main memory)         Reten	FB       0 64         • Number range       0 64         • Size, max.       400 kd         FC       0 64         • Number range       0 64         • Size, max.       400 kd         OB       0 64         • Size, max.       400 kd         • Number of gree cycle OBs       100         • Number of free cycle OBs       100         • Number of free cycle OBs       20         • Number of delay alarm OBs       20         • Number of cyclic interrupt OBs       20         • Number of process alarm OBs       20         • Number of process alarm OBs       3         • Number of isochronous mode OBs       1         • Number of technology synchronous alarm OBs       2         • Number of startup OBs       100         • Number of synchronous error OBs       4         • Number of diagnostic alarm OBs       1         • Number of diagnostic alarm OBs       1         • Number of diagnostic alarm OBs       2         • Number of diagnostic alarm OBs       2         • Number of diagnostic alarm OBs       1         • Number of diagnostic alarm OBs       1         • Per priority class       24	5 535 byte 5 535 byte
<ul> <li>Number range</li> <li>0 65 835</li> <li>Size, max.</li> <li>400 kbyte</li> <li>FC</li> <li>Number range</li> <li>0 65 835</li> <li>Size, max.</li> <li>400 kbyte</li> <li>Size, max.</li> <li>400 kbyte</li> <li>Size, max.</li> <li>400 kbyte</li> <li>Number of free cycle OBs</li> <li>100</li> <li>Number of time alarm OBs</li> <li>20</li> <li>Number of time alarm OBs</li> <li>20, With minimum OB 3x cycle of 250 µs</li> <li>Number of opcies alarn OBs</li> <li>Number of process alarn OBs</li> <li>Number of process alarn OBs</li> <li>Number of loschronous mode OBs</li> <li>Number of loschronous mode OBs</li> <li>Number of slocktronous and OBs</li> <li>Number of slocktronous error OBs</li> <li>Number of asynchronous error OBs</li> <li>Number</li> <li>por priority class</li> <li>24</li> <li>Counters</li> <li>Number</li> <li>Any (only limited by the main memory)</li> <li>Retentivity</li> <li>- adjustable</li> <li>Yes</li> <li>S7 times</li> <li>Number</li> <li>Any (only limited by the main memory)</li> <li>Retentivity</li> <li>- adjustable</li> <li>Yes</li> <li>S7 times</li> <li>Number</li> <li>Any (only limited by the main memory)</li> <li>Retentivity</li> <li>- adjustable</li> <li>Yes</li> <li>S1 times</li> <li>Any (only limited by the main memory)</li> <li>Retentivi</li></ul>	• Number range0 64• Size, max.400 kdFC• Number range0 64• Size, max.400 kdOB•• Size, max.400 kd• Number of free cycle OBs100• Number of time alarm OBs20• Number of delay alarm OBs20• Number of cyclic interrupt OBs20; W• Number of process alarm OBs30• Number of DPV1 alarm OBs3• Number of technology synchronous alarm OBs1• Number of startup OBs100• Number of synchronous error OBs4• Number of diagnostic alarm OBs2• Dumber of diagnostic alarm OBs2• Number of diagnostic alarm OBs2• Number of diagnostic alarm OBs2• String depth• per priority class• String conter24S7 counter	byte 5 535 byte
• Size, max.     400 kbyte       FC     65 535       • Number range     0 65 535       • Size, max.     400 kbyte       OB     65 535       OB     65 535       • Number of tree cycle OBs     100       • Number of tree cycle OBs     100       • Number of delay alam OBs     20       • Number of odelay alam OBs     20       • Number of DPC1 alam OBs     50       • Number of DPC1 alam OBs     3       • Number of stortup OBs     1       • Number of stortup OBs     2       • Number of stortup OBs     1       • Number of stortup OBs     2       • Number of alam OBs     2       • Number     Any (only limited by the main memory)   <	• Size, max.400 ktFC• Number range • Size, max.0 64 • 400 kt• OB• Size, max.400 kt• Size, max.400 kt• Number of free cycle OBs • Number of time alarm OBs20 • Number of delay alarm OBs• Number of delay alarm OBs20 • Number of process alarm OBs• Number of process alarm OBs20 • Number of DPV1 alarm OBs• Number of DPV1 alarm OBs3 • Number of technology synchronous alarm OBs• Number of startup OBs100 • Number of synchronous error OBs• Number of synchronous error OBs4 • Number of diagnostic alarm OBs• Number of diagnostic alarm OBs2 • Per priority class• Per priority class24 • S7 counter	byte 5 535 byte
• Size, max.     400 kbyte       FC     65 535       • Number range     0 65 535       • Size, max.     400 kbyte       OB     65 535       OB     65 535       • Number of tree cycle OBs     100       • Number of tree cycle OBs     20       • Number of delay alarn OBs     20       • Number of odelay alarn OBs     20       • Number of DPV1 alarn OBs     3       • Number of DPV1 alarn OBs     3       • Number of startup OBs     1       • Number of startup OBs     100       • Number of startup OBs     2       • Number of startup OBs     100       • Number of startup OBs     2       • Number of startup OBs     2       • Number of startup OBs     2       • Number of alarn OBs     2       • Number of alarn OBs     2       • Number of startup OBs     1       • Number of alarn OBs     2       • Number of alarn OBs     2       • Number of alarn OBs     2       • Number of startup OBs     2       • Number of algustable     Yes       IEC counter     Any (only limited by the main memory)       Retentivity     -       adjustable     Yes       IEC counter     Yes	• Size, max.400 ktFC• Number range • Size, max.0 64 • 400 kt• OB• Size, max.400 kt• Size, max.400 kt• Number of free cycle OBs • Number of time alarm OBs20 • Number of delay alarm OBs• Number of delay alarm OBs20 • Number of process alarm OBs• Number of process alarm OBs20 • Number of DPV1 alarm OBs• Number of DPV1 alarm OBs3 • Number of technology synchronous alarm OBs• Number of startup OBs100 • Number of synchronous error OBs• Number of synchronous error OBs4 • Number of diagnostic alarm OBs• Number of diagnostic alarm OBs2 • Per priority class• Per priority class24 • S7 counter	5 535 byte
<ul> <li>Number range</li> <li>0 65 535</li> <li>Size, max.</li> <li>400 kbyte</li> <li>OB</li> <li>Size, max.</li> <li>Number of free cycle OBs</li> <li>Number of time almo OBs</li> <li>Number of delay alarn OBs</li> <li>Number of process alarn OBs</li> <li>Number of process alarn OBs</li> <li>Number of process alarn OBs</li> <li>Number of technology synchronous alarn OBs</li> <li>Number of technology synchronous alarn OBs</li> <li>Number of synchronous error OBs</li> <li>Number of synchronous error OBs</li> <li>Number of alarnotic alarn OBs</li> <li>Number of alagnostic alarn OBs</li> <li>Number</li> <li>Alagna ald their retentivity</li> <li>Socuriter</li> <li>Number</li> <li>Any (only limited by the main memory)</li> <li>Retentivity</li> <li>- adjustable</li> <li>Yes</li> <li>So times</li> <li>Number</li> <li>Any (only limited by the main memory)</li> <li>Retentivity</li> <li>- adjustable</li> <li>Yes</li> <li>Solat area (ind. times, counters, flags), max.</li> <li>256 kbyte; in total; available retentive memory for bit memories, timers,</li> </ul>	• Number range • Size, max.0 64 • 400 kdOB• Size, max.400 kd• Size, max.400 kd• Number of free cycle OBs100 • Number of time alarm OBs20 • Number of delay alarm OBs• Number of delay alarm OBs20 • Number of process alarm OBs20 • Number of process alarm OBs• Number of DPV1 alarm OBs3 • Number of DPV1 alarm OBs3 • Number of isochronous mode OBs• Number of technology synchronous alarm OBs2 • Number of startup OBs100 • Number of synchronous error OBs• Number of synchronous error OBs4 • per priority class1 • 24 • Z4 • Z4Counters, timers and their retentivity S7 counter24	byte
<ul> <li>Size, max.</li> <li>400 kbyte</li> <li>Size, max.</li> <li>Number of free cycle OBs</li> <li>Number of tree cycle OBs</li> <li>Number of tree alam OBs</li> <li>Number of delay alam OBs</li> <li>Number of policinterupt OBs</li> <li>Number of policinterupt OBs</li> <li>Number of DPV1 alam OBs</li> <li>Number of sochronous mode OBs</li> <li>Number of startup OBs</li> <li>Number of synchronous error OBs</li> <li>Number of asynchronous error OBs</li> <li>Number</li> <li>Also as a differentiation</li> <li>Yes</li> <li>S7 counter</li> <li>Number</li> <li>Algustable</li> <li>Yes</li> <li>Yes</li> <li>S7 times</li> <li>Algustable</li> <li>Yes</li> <li>S7 times</li> <li>Algustable</li> <li>Yes</li> <li>Ves</li> <li>Ves</li> <li>IEC time tarea (incl. times, counters, flags), max.</li> <li>Z68 kbyte; in total; available reletive memory for bit memories, timers,</li> </ul>	• Size, max.400 klOB•• Size, max.400 kl• Number of free cycle OBs100• Number of time alarm OBs20• Number of delay alarm OBs20• Number of cyclic interrupt OBs20; W• Number of process alarm OBs50• Number of DPV1 alarm OBs3• Number of isochronous mode OBs1• Number of startup OBs100• Number of startup OBs100• Number of asynchronous error OBs4• Number of diagnostic alarm OBs1• Number of diagnostic alarm OBs2• Number of diagnostic alarm OBs2• Number of diagnostic alarm OBs2• String depth24Counters, timers and their retentivity57 counter	byte
<ul> <li>Size, max.</li> <li>400 kbyte</li> <li>Size, max.</li> <li>Number of free cycle OBs</li> <li>Number of tree cycle OBs</li> <li>Number of tree alam OBs</li> <li>Number of delay alam OBs</li> <li>Number of policinterupt OBs</li> <li>Number of policinterupt OBs</li> <li>Number of DPV1 alam OBs</li> <li>Number of sochronous mode OBs</li> <li>Number of startup OBs</li> <li>Number of synchronous error OBs</li> <li>Number of asynchronous error OBs</li> <li>Number</li> <li>Also as a differentiation</li> <li>Yes</li> <li>S7 counter</li> <li>Number</li> <li>Algustable</li> <li>Yes</li> <li>Yes</li> <li>S7 times</li> <li>Algustable</li> <li>Yes</li> <li>S7 times</li> <li>Algustable</li> <li>Yes</li> <li>Ves</li> <li>Ves</li> <li>IEC time tarea (incl. times, counters, flags), max.</li> <li>Z68 kbyte; in total; available reletive memory for bit memories, timers,</li> </ul>	• Size, max.400 klOB•• Size, max.400 kl• Number of free cycle OBs100• Number of time alarm OBs20• Number of delay alarm OBs20• Number of cyclic interrupt OBs20; W• Number of process alarm OBs50• Number of DPV1 alarm OBs3• Number of isochronous mode OBs1• Number of startup OBs100• Number of startup OBs100• Number of asynchronous error OBs4• Number of diagnostic alarm OBs1• Number of diagnostic alarm OBs2• Number of diagnostic alarm OBs2• Number of diagnostic alarm OBs2• String depth24Counters, timers and their retentivity57 counter	
OB     Vol ktyle       • Number of free cycle OBs     100       • Number of time alarm OBs     20       • Number of time alarm OBs     20       • Number of time alarm OBs     20       • Number of process alarm OBs     20       • Number of process alarm OBs     20       • Number of process alarm OBs     3       • Number of Isochronous mode OBs     1       • Number of technology synchronous alarm OBs     2       • Number of sinchronous error OBs     4       • Number of asynchronous error OBs     2       • Number of diagnostic alarm OBs     1       • Number of diagnostic alarm OBs     1       • Number of diagnostic alarm OBs     2       • Number of diagnostic alarm OBs     1       • Number of diagnostic alarm OBs     1       • Number of diagnostic alarm OBs     2       • Number of diagnostic alarm OBs     2       • Number of diagnostic alarm OBs     2       • Number     2 048       Retentivity     -       - adjustable     Yes       IEC counter        - adjustable     Yes       IEC timer     - adjustable       Yes        IEC timer     - adjustable       Yes        IEC timer     - adjustable	OB• Size, max.400 kl• Number of free cycle OBs100• Number of time alarm OBs20• Number of delay alarm OBs20• Number of delay alarm OBs20• Number of cyclic interrupt OBs20; W• Number of process alarm OBs50• Number of DPV1 alarm OBs3• Number of isochronous mode OBs1• Number of technology synchronous alarm OBs2• Number of startup OBs100• Number of asynchronous error OBs4• Number of diagnostic alarm OBs1• per priority class24Counters, timers and their retentivity57 counter	
• Number of free cycle OBs     100       • Number of free alarn OBs     20       • Number of delay alarn OBs     20       • Number of cyclic interrupt OBs     20; With minimum OB 3x cycle of 250 µs       • Number of DPV1 alarn OBs     3       • Number of bortons mode OBs     1       • Number of technology synchronous alarn OBs     2       • Number of technology synchronous alarn OBs     1       • Number of asynchronous error OBs     4       • Number of diagnostic alarn OBs     2       • Number of diagnostic alarn OBs     2       • Number of diagnostic alarn OBs     2       • Number of diagnostic alarn OBs     1       • Number of diagnostic alarn OBs     2       • Number of unders     2/d4       Counter     - adjustable       Yes     - adjustable <tr< td=""><td>• Number of free cycle OBs100• Number of time alarm OBs20• Number of delay alarm OBs20• Number of cyclic interrupt OBs20; W• Number of process alarm OBs50• Number of DPV1 alarm OBs3• Number of isochronous mode OBs1• Number of technology synchronous alarm OBs2• Number of startup OBs100• Number of synchronous error OBs4• Number of synchronous error OBs1• Number of diagnostic alarm OBs1• per priority class24Counters, timers and their retentivity57 counter</td><td>byte</td></tr<>	• Number of free cycle OBs100• Number of time alarm OBs20• Number of delay alarm OBs20• Number of cyclic interrupt OBs20; W• Number of process alarm OBs50• Number of DPV1 alarm OBs3• Number of isochronous mode OBs1• Number of technology synchronous alarm OBs2• Number of startup OBs100• Number of synchronous error OBs4• Number of synchronous error OBs1• Number of diagnostic alarm OBs1• per priority class24Counters, timers and their retentivity57 counter	byte
<ul> <li>Number of time alarn OBs</li> <li>20</li> <li>Number of delay alarn OBs</li> <li>20</li> <li>Number of cyclic interrupt OBs</li> <li>20; With minimum OB 3x cycle of 250 µs</li> <li>Number of process alarn OBs</li> <li>Number of biochorous mode OBs</li> <li>Number of technology synchronous alarn OBs</li> <li>Number of startup OBs</li> <li>Number of startup OBs</li> <li>Number of synchronous error OBs</li> <li>Number of algonotic alarn OBs</li> <li>Number of algonotic alarn OBs</li> <li>Number of synchronous error OBs</li> <li>Number of algonotic alarn OBs</li> <li>Number</li> <li>Algonotic retentivity</li> <li>adjustable</li> <li>Yes</li> <li>S7 counter</li> <li>Number</li> <li>Any (only limited by the main memory)</li> <li>Retentivity</li> <li>adjustable</li> <li>Yes</li> <li>S7 times</li> <li>Number</li> <li>Any (only limited by the main memory)</li> <li>Retentivity</li> <li>adjustable</li> <li>Yes</li> <li>IEC timer</li> <li>Number</li> <li>Any (only limited by the main memory)</li> <li>Retentivity</li> <li>adjustable</li> <li>Yes</li> <li>Data arcas and their retentivity</li> <li>Z58 kbyte; in total; available retentive memor</li></ul>	<ul> <li>Number of time alarm OBs</li> <li>Number of delay alarm OBs</li> <li>Number of delay alarm OBs</li> <li>Number of cyclic interrupt OBs</li> <li>Number of process alarm OBs</li> <li>Number of DPV1 alarm OBs</li> <li>Number of DPV1 alarm OBs</li> <li>Number of isochronous mode OBs</li> <li>Number of technology synchronous alarm OBs</li> <li>Number of startup OBs</li> <li>Number of asynchronous error OBs</li> <li>Number of alagnostic alarm OBs</li> <li>Number of diagnostic alarm OBs</li> <li>Nesting depth</li> <li>per priority class</li> <li>24</li> </ul>	
• Number of delay alarm OBs     20       • Number of opcici interrupt OBs     20; With minimum OB 3x cycle of 250 µs       • Number of DPV1 alarm OBs     50       • Number of DPV1 alarm OBs     3       • Number of locknonous mode OBs     1       • Number of technology synchronous alarm OBs     2       • Number of startup OBs     100       • Number of asynchronous error OBs     4       • Number of synchronous error OBs     1       • Number of synchronous error OBs     2       • Number     Any (only limited by the main memory)       Retentivity        — adjustable     Yes       IEC counter        • Number     2       • Number     2       • Number     2       • Num	• Number of delay alarm OBs20• Number of cyclic interrupt OBs20; W• Number of process alarm OBs50• Number of DPV1 alarm OBs3• Number of isochronous mode OBs1• Number of technology synchronous alarm OBs2• Number of startup OBs100• Number of asynchronous error OBs4• Number of diagnostic alarm OBs2• Number of diagnostic alarm OBs1• Nesting depth24Counters, timers and their retentivity57 counter	
• Number of cyclic interrupt OBs     20; With minimum OB 3x cycle of 250 μs       • Number of process alarm OBs     50       • Number of DPV1 alarm OBs     3       • Number of isochronous mode OBs     1       • Number of startup OBs     100       • Number of startup OBs     100       • Number of startup OBs     100       • Number of startup OBs     2       • Number of startup OBs     2       • Number of startup OBs     100       • Number of startup OBs     2       • Number of diagnostic alarm OBs     2       • Number of diagnostic alarm OBs     1       • Number of diagnostic alarm OBs     1       • Number of diagnostic alarm OBs     24       Counters, timers and their retentivity     24       S7 counter     2 048       • Number     2 048       Retentivity     -       - adjustable     Yes       • Number     Any (only limited by the main memory)       Retentivity     -       - adjustable     Yes       S7 times     -       - adjustable     Yes       IEC counter     -       • Number     2 048       Retentivity     -       - adjustable     Yes       IEC timer     -       • Number	• Number of cyclic interrupt OBs       20; W         • Number of process alarm OBs       50         • Number of DPV1 alarm OBs       3         • Number of isochronous mode OBs       1         • Number of technology synchronous alarm OBs       2         • Number of startup OBs       100         • Number of asynchronous error OBs       4         • Number of synchronous error OBs       1         • Number of diagnostic alarm OBs       1         • Number of diagnostic alarm OBs       1         • Number of diagnostic alarm OBs       2         • String depth       24         Counters, timers and their retentivity       57 counter	
• Number of cyclic interrupt OBs     20; With minimum OB 3x cycle of 250 μs       • Number of process alarm OBs     50       • Number of DPV1 alarm OBs     3       • Number of isochronous mode OBs     1       • Number of startup OBs     100       • Number of startup OBs     100       • Number of startup OBs     100       • Number of startup OBs     2       • Number of startup OBs     2       • Number of startup OBs     100       • Number of startup OBs     2       • Number of diagnostic alarm OBs     2       • Number of diagnostic alarm OBs     1       • Number of diagnostic alarm OBs     1       • Number of diagnostic alarm OBs     24       Counters, timers and their retentivity     24       S7 counter     2 048       • Number     2 048       Retentivity     -       - adjustable     Yes       • Number     Any (only limited by the main memory)       Retentivity     -       - adjustable     Yes       S7 times     -       - adjustable     Yes       IEC counter     -       • Number     2 048       Retentivity     -       - adjustable     Yes       IEC timer     -       • Number	• Number of cyclic interrupt OBs       20; W         • Number of process alarm OBs       50         • Number of DPV1 alarm OBs       3         • Number of isochronous mode OBs       1         • Number of technology synchronous alarm OBs       2         • Number of startup OBs       100         • Number of asynchronous error OBs       4         • Number of synchronous error OBs       1         • Number of diagnostic alarm OBs       1         • Number of diagnostic alarm OBs       1         • Number of diagnostic alarm OBs       2         • String depth       24         Counters, timers and their retentivity       57 counter	
• Number of process alarn OBs     50       • Number of DPV1 alarn OBs     3       • Number of isochronous mode OBs     1       • Number of technology synchronous alarn OBs     2       • Number of startup OBs     100       • Number of synchronous error OBs     4       • Number of synchronous error OBs     2       • Number of dispnotricous alarn OBs     1       • Number of dispnotricous alarn OBs     1       • Number of dispnotricous error OBs     2       • Number of dispnotricous alarn OBs     1       • Number of dispnotricous error OBs     2       • Number     24       Counters, timers and their retentivity     57       \$7 counter     2 048       Retentivity     - adjustable       - adjustable     Yes       \$7 times     Yes       \$7 times     - adjustable       - adjustable     Yes       IEC timer     Any (only limited by the main memory)       Retentivity     - adjustable       - adjustable     Yes       IEC timer     Any (only limited by the main memory)	• Number of process alarm OBs50• Number of DPV1 alarm OBs3• Number of DPV1 alarm OBs1• Number of isochronous mode OBs1• Number of technology synchronous alarm OBs2• Number of startup OBs100• Number of asynchronous error OBs4• Number of synchronous error OBs2• Number of diagnostic alarm OBs1Nesting depth24Counters, timers and their retentivityS7 counter	ith minimum OB 3x cycle of 250 µs
• Number of DPV1 alarm OBs     3       • Number of iscohronous mode OBs     1       • Number of iscohronous mode OBs     2       • Number of iscohronous alarm OBs     2       • Number of asynchronous error OBs     4       • Number of agnochronous error OBs     2       • Number of agnochronous error OBs     24       Counters, timers and their retentivity     2       - adjustable     Yes       IEC counter     - adjustable       • Number     Any (only limited by the main memory)       Retentivity     - adjustable       - adjustable     Yes       S7 times     -       • Number     2 048       Retentivity     - adjustable       - adjustable     Yes       IEC timer     -       - adjustable     Yes       IEC timer     -       - adjustable     Yes <td< td=""><td>• Number of DPV1 alarm OBs       3         • Number of isochronous mode OBs       1         • Number of isochronous mode OBs       2         • Number of technology synchronous alarm OBs       2         • Number of startup OBs       100         • Number of asynchronous error OBs       4         • Number of synchronous error OBs       2         • Number of diagnostic alarm OBs       1         Nesting depth       1         • per priority class       24         Counters, timers and their retentivity       S7 counter</td><td></td></td<>	• Number of DPV1 alarm OBs       3         • Number of isochronous mode OBs       1         • Number of isochronous mode OBs       2         • Number of technology synchronous alarm OBs       2         • Number of startup OBs       100         • Number of asynchronous error OBs       4         • Number of synchronous error OBs       2         • Number of diagnostic alarm OBs       1         Nesting depth       1         • per priority class       24         Counters, timers and their retentivity       S7 counter	
• Number of isochronous mode OBs       1         • Number of schnology synchronous alarm OBs       2         • Number of startup OBs       100         • Number of synchronous error OBs       4         • Number of synchronous error OBs       2         • Number of diagnostic alarm OBs       1         • Number of diagnostic alarm OBs       1         • Number of diagnostic alarm OBs       2         • Number of diagnostic alarm OBs       24         Counters, timers and their retentivity       2048         • Number       2 048         Retentivity       — adjustable         — adjustable       Yes         IEC counter	• Number of isochronous mode OBs       1         • Number of technology synchronous alarm OBs       2         • Number of startup OBs       100         • Number of asynchronous error OBs       4         • Number of synchronous error OBs       2         • Number of diagnostic alarm OBs       1         Nesting depth       24         Counters, timers and their retentivity       S7 counter	
<ul> <li>Number of startup OBS</li> <li>Number of saynchronous error OBS</li> <li>Number of synchronous error OBS</li> <li>Number of synchronous error OBS</li> <li>Number of diagnostic alarm OBS</li> <li>Nesting depth</li> <li>oper priority class</li> <li>24</li> </ul> Counters, timers and their retentivity S7 counter <ul> <li>Augustable</li> <li>Yes</li> <li>IEC counter</li> <li>Number</li> <li>Any (only limited by the main memory)</li> <li>Retentivity</li> <li>- adjustable</li> <li>Yes</li> <li>S7 times</li> <li>S7 times</li> <li>Any (only limited by the main memory)</li> <li>Retentivity</li> <li>- adjustable</li> <li>Yes</li> </ul> IEC counter <ul> <li>Any (only limited by the main memory)</li> <li>Retentivity</li> <li>- adjustable</li> <li>Yes</li> </ul> S7 times <ul> <li>Any (only limited by the main memory)</li> <li>Retentivity</li> <li>- adjustable</li> <li>Yes</li> </ul> S7 times <ul> <li>Any (only limited by the main memory)</li> <li>Retentivity</li> <li>- adjustable</li> <li>Yes</li> </ul> Ves IEC timer <ul> <li>Any (only limited by the main memory)</li> <li>Retentivity</li> <li>- adjustable</li> <li>Yes</li> </ul> IEC timer <ul> <li>Any (only limited by the main memory)</li> <li>Retentivity</li> <li>- adjustable</li> <li>Yes</li> </ul> Data areas and their retentivity <ul> <li>256 kbyte; in total; available retentive memory for bit memories, timers,</li> </ul>	Number of startup OBs     Number of asynchronous error OBs     Number of synchronous error OBs     Number of diagnostic alarm OBs     Number of diagnostic alarm OBs     Number of diagnostic alarm OBs     S7 counters, timers and their retentivity	
• Number of startup OB     100       • Number of asynchronous error OBs     4       • Number of synchronous error OBs     2       • Number of diagnostic alarm OBs     1       Nesting depth     1       • per priority class     24       Counters, timers and their retentivity     2       S7 counter     2       • Number     2       048     Retentivity       - adjustable     Yes       IEC counter     Any (only limited by the main memory)       Retentivity     - adjustable       • Number     2       048     Retentivity       - adjustable     Yes       IEC counter     - adjustable       • Number     Any (only limited by the main memory)       Retentivity     - adjustable       - adjustable     Yes       S7 times     - adjustable       Yes     - adjustable       Ye	Number of startup OBs     100     Number of asynchronous error OBs     Number of synchronous error OBs     Number of diagnostic alarm OBs     Number of diagnostic alarm OBs     1 Nesting depth     e per priority class     24 Counters, timers and their retentivity S7 counter	
• Number of asynchronous error OBs       4         • Number of diagnostic alarm OBs       1         • Number of diagnostic alarm OBs       1         Nesting depth       2         • per priority class       24         Counters, timers and their retentivity       2         S7 counter       2         • Number       2         0 Number       2         - adjustable       Yes         IEC counter       4         • Number       Any (only limited by the main memory)         Retentivity	Number of asynchronous error OBs     A     Number of synchronous error OBs     Number of diagnostic alarm OBs     Number of diagnostic alarm OBs     1 Nesting depth     oper priority class     24 Counters, timers and their retentivity S7 counter	
• Number of synchronous error OBs       2         • Number of diagnostic alarm OBs       1         Nesting depth       24         • per priority class       24         Counters, timers and their retentivity       2048         S7 counter       2 048         • Number       2 048         Retentivity       - adjustable         - adjustable       Yes         IEC counter       Any (only limited by the main memory)         Retentivity       - adjustable         - adjustable       Yes         S7 times       - adjustable         Yes       - adjustable         Data areas and their retentivity	Number of synchronous error OBs 2     Number of diagnostic alarm OBs 1 Nesting depth     oper priority class 24 Counters, timers and their retentivity S7 counter	
<ul> <li>Number of diagnostic alarm OBs</li> <li>Nesting depth         <ul> <li>per priority class</li> <li>24</li> </ul> </li> <li>Counters, timers and their retentivity</li> <li>S7 counter</li> <li>Number</li> <li>2 048</li> <li>Retentivity         <ul> <li>- adjustable</li> <li>Yes</li> </ul> </li> <li>IEC counter</li> <li>Any (only limited by the main memory)</li> <li>Retentivity         <ul> <li>- adjustable</li> <li>Yes</li> </ul> </li> <li>S7 times</li> <li>Number</li> <li>adjustable</li> <li>Yes</li> <li>Yes</li> <li>S7 times</li> <li>Number</li> <li>Any (only limited by the main memory)</li> <li>Retentivity         <ul> <li>- adjustable</li> <li>Yes</li> </ul> </li> <li>S7 times</li> <li>Number</li> <li>Any (only limited by the main memory)</li> <li>Retentivity         <ul> <li>- adjustable</li> <li>Yes</li> </ul> </li> <li>Padjustable</li> <li>Yes</li> <li>Tec timer</li> <li>Number</li> <li>Any (only limited by the main memory)</li> <li>Retentivity         <ul> <li>- adjustable</li> <li>Yes</li> </ul> </li> <li>Padjustable</li> <li>Yes</li> <li>Zes and their retentivity</li> <li>- adjustable</li> <li>Yes</li> <li>Data areas and their retentivity</li> <li>Zes (kbyte; in total; available retentive memory for bit memories, timers,</li> </ul>	Number of diagnostic alarm OBs     1 Nesting depth     oper priority class     24 Counters, timers and their retentivity S7 counter	
Nesting depth         • per priority class       24         Counters, timers and their retentivity         \$7 counter       2 048         Retentivity       2 048         Retentivity       - adjustable         • Number       2 048         IEC counter       4ny (only limited by the main memory)         Retentivity       - adjustable         • Number       Any (only limited by the main memory)         Retentivity       - adjustable         • Number       2 048         Retentivity       - adjustable         • Number       2 048         Retentivity       - adjustable         Yes       IEC timer         • Number       2 048         Retentivity       - adjustable         Yes       IEC timer         • Number       Any (only limited by the main memory)         Retentivity       - adjustable         Yes       IEC timer         • Number       Any (only limited by the main memory)         Retentivity       - adjustable         Yes       IEC timer         • Adjustable       Yes         IEC timer       Any (only limited by the main memory)         Retentivity       - adjustabl	Nesting depth       • per priority class       24         Counters, timers and their retentivity       S7 counter	
• per priority class       24         Counters, timers and their retentivity       2         \$7 counter       2 048         Retentivity       2 048         — adjustable       Yes         IEC counter       Any (only limited by the main memory)         Retentivity       — adjustable         • Number       Any (only limited by the main memory)         Retentivity       — adjustable         - adjustable       Yes         \$7 times       2 048         Number       2 048         Retentivity       — adjustable         - adjustable       Yes         \$7 times       2 048         IEC timer       Yes         IEC timer       2 048         Retentivity       — adjustable         - adjustable       Yes         IEC timer       Any (only limited by the main memory)         Retentivity       — adjustable         - adjustable       Yes         Data areas and their retentivity       Yes         Data area (incl. timers, counters, flags), max.       256 kbyte; in total; available retentive memory for bit memories, timers,	per priority class     24 Counters, timers and their retentivity S7 counter	
Counters, timers and their retentivity         S7 counter       2 048         Retentivity       - adjustable         - adjustable       Yes         IEC counter       Any (only limited by the main memory)         Retentivity       - adjustable         - adjustable       Yes         S7 times       2 048         Retentivity       - adjustable         - adjustable       Yes         S7 times       2 048         Retentivity       - adjustable         - adjustable       Yes         IEC timer       2 048         Retentivity       - adjustable         - adjustable       Yes         IEC timer       Any (only limited by the main memory)         Retentivity       - adjustable         - adjustable       Yes         IEC timer       Any (only limited by the main memory)         Retentivity       - adjustable         - adjustable       Yes         Data areas and their retentivity       Z56 kbyte; in total; available retentive memory for bit memories, timers,	Counters, timers and their retentivity S7 counter	
S7 counter       2 048         Retentivity	S7 counter	
• Number       2 048         Retentivity       - adjustable         - adjustable       Yes         IEC counter       Any (only limited by the main memory)         Retentivity       - adjustable         - adjustable       Yes         S7 times       2 048         • Number       2 048         Retentivity       - adjustable         - adjustable       Yes         IEC timer       Yes         • Number       Any (only limited by the main memory)         Retentivity       - adjustable         - adjustable       Yes         IEC timer       - adjustable         • Number       Any (only limited by the main memory)         Retentivity       - adjustable         - adjustable       Yes         Data areas and their retentivity       Yes         Retentive data area (incl. timers, counters, flags), max.       256 kbyte; in total; available retentive memory for bit memories, timers,		
Retentivity         adjustable       Yes         IEC counter       Any (only limited by the main memory)         Retentivity       adjustable         adjustable       Yes         S7 times       2 048         Retentivity       adjustable         adjustable       Yes         IEC timer       2 048         Number       Yes         IEC timer       Any (only limited by the main memory)         Retentivity       adjustable         adjustable       Yes         IEC timer       Any (only limited by the main memory)         Retentivity       adjustable         adjustable       Yes         IEC timer       Any (only limited by the main memory)         Retentivity       adjustable         adjustable       Yes         Data areas and their retentivity       Yes         Retentive data area (incl. timers, counters, flags), max.       256 kbyte; in total; available retentive memory for bit memories, timers,	Number 2 048	
IEC counter       Any (only limited by the main memory)         Retentivity       - adjustable         - adjustable       Yes         S7 times       2 048         Retentivity       - adjustable         - adjustable       Yes         IEC timer       Yes         • Number       Any (only limited by the main memory)         Retentivity       - adjustable         - adjustable       Yes         IEC timer       Any (only limited by the main memory)         Retentivity       - adjustable         - adjustable       Yes         Data areas and their retentivity       Yes         Retentive data area (incl. timers, counters, flags), max.       256 kbyte; in total; available retentive memory for bit memories, timers,	•	
• Number       Any (only limited by the main memory)         Retentivity       - adjustable         • Number       2 048         Retentivity       - adjustable         - adjustable       Yes         IEC timer       Yes         • Number       Any (only limited by the main memory)         Retentivity       - adjustable         Yes       Yes         IEC timer       Any (only limited by the main memory)         Retentivity       Yes         Data areas and their retentivity       Yes         Retentive data area (incl. timers, counters, flags), max.       256 kbyte; in total; available retentive memory for bit memories, timers,		
Retentivity		only limited by the main memory)
adjustable       Yes         S7 times       2 048         • Number       2 048         Retentivity       adjustable         adjustable       Yes         IEC timer       adjustable         • Number       Any (only limited by the main memory)         Retentivity       adjustable         adjustable       Yes         Data areas and their retentivity       Yes         Retentive data area (incl. timers, counters, flags), max.       256 kbyte; in total; available retentive memory for bit memories, timers,		
S7 times       2 048         • Number       2 048         Retentivity		
• Number         2 048           Retentivity		
Retentivity       Yes         IEC timer       IEC timer         • Number       Any (only limited by the main memory)         Retentivity       - adjustable         - adjustable       Yes         Data areas and their retentivity       256 kbyte; in total; available retentive memory for bit memories, timers,		
IEC timer       Any (only limited by the main memory)         • Number       Any (only limited by the main memory)         Retentivity       Yes         Data areas and their retentivity       Yes         Retentive data area (incl. timers, counters, flags), max.       256 kbyte; in total; available retentive memory for bit memories, timers,		
Number Any (only limited by the main memory)      Retentivity      — adjustable Yes      Data areas and their retentivity      Retentive data area (incl. timers, counters, flags), max. 256 kbyte; in total; available retentive memory for bit memories, timers,		
Retentivity     Yes       — adjustable     Yes       Data areas and their retentivity     Retentive data area (incl. timers, counters, flags), max.       256 kbyte; in total; available retentive memory for bit memories, timers,		only limited by the main memory)
— adjustable     Yes       Data areas and their retentivity     Pate area (incl. timers, counters, flags), max.       Retentive data area (incl. timers, counters, flags), max.     256 kbyte; in total; available retentive memory for bit memories, timers,		
Data areas and their retentivity         Retentive data area (incl. timers, counters, flags), max.         256 kbyte; in total; available retentive memory for bit memories, timers,		
Retentive data area (incl. timers, counters, flags), max. 256 kbyte; in total; available retentive memory for bit memories, timers,		
		ovte: in total: available retentive memory for bit memories timers
Flag	Flag	
• Size, max. 16 kbyte	• Size, max. 16 kby	
Number of clock memories     8; 8 clock memory bit, grouped into one clock memory byte	Number of clock memories     8; 8 cl	yte
Data blaste	Data blocks	

Retentivity adjustable	Yes
<ul> <li>Retentivity adjustable</li> <li>Retentivity preset</li> </ul>	res No
Ketentivity preset Local data	NO
	C4 libites may 4C KD meriliant
per priority class, max.  Address area	64 kbyte; max. 16 KB per block
Number of IO modules	2 048; max. number of modules / submodules
I/O address area	2 040, max. number of modules / submodules
	32 kbyte; All inputs are in the process image
Inputs	
Outputs	32 kbyte; All outputs are in the process image
per integrated IO subsystem — Inputs (volume)	0 khuto
	8 kbyte
— Outputs (volume)	8 kbyte
per CM/CP	0 khuto
— Inputs (volume)	8 kbyte
— Outputs (volume)	8 kbyte
Subprocess images	32
Number of subprocess images, max.	32
Address space per module	200 huto: Ear input and quitaut data reasonitivaly
Address space per module, max.	288 byte; For input and output data respectively
Address space per station	2.560 hyter for control inputs and outputs depending an configuration 0.040
<ul> <li>Address space per station, max.</li> </ul>	2 560 byte; for central inputs and outputs; depending on configuration; 2 048 bytes for ET 200SP modules + 512 bytes for ET 200AL modules
Hardware configuration	
Number of distributed IO systems	32; A distributed I/O system is characterized not only by the integration of distributed I/O via PROFINET or PROFIBUS communication modules, but also by the connection of I/O via AS-i master modules or links (e.g. IE/PB-Link)
Number of DP masters	
• Via CM	1
Number of IO Controllers	
integrated	1
• Via CM	0
Rack	
<ul> <li>Modules per rack, max.</li> </ul>	82; CPU + 64 modules + server module (mounting width max. 1 m) + 16 ET 200AL modules
<ul> <li>Quantity of operable ET 200SP modules, max.</li> </ul>	64
<ul> <li>Quantity of operable ET 200AL modules, max.</li> </ul>	16
Number of lines, max.	1
PtP CM	
Number of PtP CMs	the number of connectable PtP CMs is only limited by the number of available slots
Time of day	300
Clock	
• Туре	Hardware clock
Backup time	6 wk; At 40 °C ambient temperature, typically
Deviation per day, max.	10 s; Typ.: 2 s
Operating hours counter	
• Number	16
Clock synchronization	
supported	Yes
• to DP, master	Yes; Via CM DP module
• on DP, device	Yes; Via CM DP module
• in AS, master	Yes
• in AS, device	Yes
• on Ethernet via NTP	Yes
Interfaces	
Number of PROFINET interfaces	1
Number of PROFIBUS interfaces	1; Via CM DP module
Optical interface	Yes; Via SIMATIC BusAdapter
1. Interface	
Interface types	
RJ 45 (Ethernet)	Yes; X1 P3; opt. X1 P1 and X1 P2 via BusAdapter BA 2x RJ45
Number of ports	3; 1. integr. + 2. via BusAdapter
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integrated switch	Yes
BusAdapter (PROFINET)	Yes; compatible BusAdapters: BA 2x RJ45, BA 2x M12, BA 2x FC, BA 2x LC, BA LC/RJ45, BA LC/FC, BA 2x SCRJ, BA SCRJ/RJ45, BA SCRJ/FC
Protocols	
IP protocol	Yes; IPv4
PROFINET IO Controller	Yes
PROFINET IO Device	Yes
SIMATIC communication	Yes
Open IE communication	Yes; Optionally also encrypted
Web server	Yes
Media redundancy	Yes
PROFINET IO Controller	
Services	
— Isochronous mode	Yes
— Direct data exchange	Yes; Requirement: IRT and isochronous mode (MRPD optional)
— IRT	Yes
- PROFlenergy	Yes; per user program
— Prioritized startup	Yes; Max. 32 PROFINET devices
— Number of connectable IO Devices, max.	128; In total, up to 512 distributed I/O devices can be connected via AS-i, PROFIBUS or PROFINET
— Of which IO devices with IRT, max.	64
- Number of connectable IO Devices for RT, max.	128
— of which in line, max.	128
<ul> <li>Number of IO Devices that can be simultaneously activated/deactivated, max.</li> </ul>	8; in total across all interfaces
<ul> <li>Number of IO Devices per tool, max.</li> </ul>	8
— Updating times	The minimum value of the update time also depends on communication share set for PROFINET IO, on the number of IO devices, and on the quantity of configured user data
- PROFINET Security Class	1
Update time for IRT	
— for send cycle of 250 μs	250 $\mu s$ to 4 ms; Note: In the case of IRT with isochronous mode, the minimum update time of 500 $\mu s$ of the isochronous OB is decisive
— for send cycle of 500 µs	500 μs to 8 ms
— for send cycle of 1 ms	1 ms to 16 ms
— for send cycle of 2 ms	2 ms to 32 ms
— for send cycle of 4 ms	4 ms to 64 ms
— With IRT and parameterization of "odd" send cycles	Update time = set "odd" send clock (any multiple of 125 $\mu s$ : 375 $\mu s$ , 625 $\mu s$ 3 875 $\mu s)$
Update time for RT	
— for send cycle of 250 µs	250 μs to 128 ms
— for send cycle of 500 µs	500 μs to 256 ms
— for send cycle of 1 ms	1 ms to 512 ms
— for send cycle of 2 ms	2 ms to 512 ms
— for send cycle of 4 ms	4 ms to 512 ms
PROFINET IO Device	
Services	
— Isochronous mode	No
— IRT	Yes
- PROFlenergy	Yes; per user program
— Shared device	Yes
— Number of IO Controllers with shared device, max.	4
- activation/deactivation of I-devices	Yes; per user program
— Asset management record	Yes; per user program
— PROFINET Security Class	SNMP Configuration and DCP Read Only
. Interface	
Interface types	
• RS 485	Yes; Via CM DP module
Number of ports	
Protocols	Vec
PROFIBUS DP master	Yes
PROFIBUS DP device	Yes
<ul> <li>SIMATIC communication</li> </ul>	Yes

PROFIBUS DP master	
Number of connections, max.	48; Of which 4 each reserved for ES and HMI
max. number of DP devices	125; In total, up to 512 distributed I/O devices can be connected via AS-i,
	PROFIBUS or PROFINET
Services	
— Equidistance	No
— Isochronous mode	No
<ul> <li>activation/deactivation of DP devices</li> </ul>	Yes
Interface types	
RJ 45 (Ethernet)	
• 100 Mbps	Yes
Autonegotiation	Yes
Autocrossing	Yes
<ul> <li>Industrial Ethernet status LED</li> </ul>	Yes
RS 485	
Transmission rate, max.	12 Mbit/s
Protocols	
PROFIsafe	No
Number of connections	
<ul> <li>Number of connections, max.</li> </ul>	128; via integrated interfaces of the CPU and connected CPs / CMs
<ul> <li>Number of connections reserved for ES/HMI/web</li> </ul>	10
<ul> <li>Number of connections via integrated interfaces</li> </ul>	88
<ul> <li>Number of connections per CP/CM</li> </ul>	32
Number of S7 routing paths	16
Redundancy mode	
H-Sync forwarding	Yes
Media redundancy	
— Media redundancy	Yes; only via BusAdapter
— MRP	Yes; MRP Automanager according to IEC 62439-2 Edition 2.0, MRP Manager; MRP Client
- MRP interconnection, supported	Yes; as MRP ring node according to IEC 62439-2 Edition 3.0
— MRPD	Yes; Requirement: IRT
— Switchover time on line break, typ.	200 ms; For MRP, bumpless for MRPD
— Number of stations in the ring, max.	50
SIMATIC communication	
PG/OP communication	Yes; encryption with TLS V1.3 pre-selected
S7 routing	Yes
Data record routing	Yes
<ul> <li>S7 communication, as server</li> </ul>	Yes
<ul> <li>S7 communication, as client</li> </ul>	Yes
• User data per job, max.	See online help (S7 communication, user data size)
Open IE communication	
• TCP/IP	Yes
— Data length, max.	64 kbyte
- several passive connections per port, supported	Yes
<ul> <li>ISO-on-TCP (RFC1006)</li> </ul>	Yes
— Data length, max.	64 kbyte
• UDP	Yes
— Data length, max.	2 kbyte; 1 472 bytes for UDP broadcast
— UDP multicast	Yes; max. 78 multicast circuits
• DHCP	Yes
• DNS	Yes
• SNMP	Yes
• DCP	Yes
• LLDP	Yes
Encryption	Yes; Optional
Web server	
• HTTP	Yes; Standard and user pages
• HTTPS	Yes; Standard and user pages
OPC UA	
Runtime license required	Yes; "Small" license required

OPC UA Client	Yes; Data Access (registered Read/Write), Method Call
— Application authentication	Yes
— Security policies	Available security policies: None, Basic128Rsa15, Basic256Rsa15, Basic256Sha256
— User authentication	"anonymous" or by user name & password
- Number of connections, max.	4
<ul> <li>— Number of nodes of the client interfaces, recommended max.</li> </ul>	1 000
<ul> <li>— Number of elements for one call of OPC_UA_NodeGetHandleList/OPC_UA_ReadList/OPC_L max.</li> </ul>	300
<ul> <li>— Number of elements for one call of OPC_UA_NameSpaceGetIndexList, max.</li> </ul>	20
<ul> <li>— Number of elements for one call of OPC_UA_MethodGetHandleList, max.</li> </ul>	100
<ul> <li>— Number of simultaneous calls of the client instructions for session management, per connection, max.</li> </ul>	1
<ul> <li>— Number of simultaneous calls of the client instructions for data access, per connection, max.</li> </ul>	5
<ul> <li>— Number of registerable nodes, max.</li> </ul>	5 000
<ul> <li>— Number of registerable method calls of OPC_UA_MethodCall, max.</li> </ul>	100
<ul> <li>— Number of inputs/outputs when calling OPC_UA_MethodCall, max.</li> </ul>	20
OPC UA Server	Yes; data access (read, write, subscribe), method call, alarms & condition (A&C), custom address space, role-based access control
— Application authentication	Yes
— Security policies	available security policies: None, Basic128Rsa15, Basic256Rsa15, Basic256Sha256, Aes128Sha256RsaOaep, Aes256Sha256RsaPss
— User authentication	"anonymous" or by user name & password
<ul> <li>— GDS support (certificate management)</li> </ul>	Yes
- Number of sessions, max.	32
<ul> <li>Number of accessible variables, max.</li> </ul>	50 000
<ul> <li>— Number of registerable nodes, max.</li> </ul>	10 000
<ul> <li>Number of subscriptions per session, max.</li> </ul>	50
— Sampling interval, min.	100 ms
— Publishing interval, min.	200 ms
— Number of server methods, max.	20; max. 20 concurrently running jobs each for asynchronous instructions OPC_UA_ServerMethodPre and OPC_UA_ServerMethodPost
<ul> <li>— Number of inputs/outputs per server method, max.</li> </ul>	20
<ul> <li>— Number of monitored items, recommended max.</li> </ul>	4 000; for 1 s sampling interval and 1 s send interval
— Number of server interfaces, max.	10 of each "Server interfaces" / "Companion specification" type and 20 of the type "Reference namespace"
<ul> <li>— Number of nodes for user-defined server interfaces, max.</li> </ul>	15 000
Alarms and Conditions	Yes
— Number of program alarms	100
— Number of alarms for system diagnostics	50
Further protocols	
MODBUS	Yes; MODBUS TCP
S7 message functions	
Number of login stations for message functions, max.	32
number of subscriptions, max.	250
number of tags/attributes for subscriptions, max.	2 000
Program alarms	Yes
Number of configurable program messages, max.	5 000; Program messages are generated by the "Program_Alarm" block, ProDiag or GRAPH
Number of loadable program messages in RUN, max.	5 000
Test commissioning functions	
Joint commission (Team Engineering)	Yes; Parallel online access possible for up to 5 engineering systems
Status block	Yes; Up to 8 simultaneously (in total across all ES clients)
Single step	Yes
Number of breakpoints	8
Profiling	Yes
Status/control	

<ul> <li>Status/control variable</li> </ul>	Yes
Variables	Inputs/outputs, memory bits, DBs, distributed I/Os, timers, counters
<ul> <li>Number of variables, max.</li> </ul>	
— of which status variables, max.	200; per job
- of which control variables, max.	200; per job
Forcing	
• Forcing	Yes
Forcing, variables	Peripheral inputs/outputs
Number of variables, max.	200
	200
Diagnostic buffer	No.
• present	Yes
<ul> <li>Number of entries, max.</li> </ul>	1 000
— of which powerfail-proof	500
Traces	
<ul> <li>Number of configurable Traces</li> </ul>	4
<ul> <li>Memory size per trace, max.</li> </ul>	512 kbyte
Interrupts/diagnostics/status information	
Diagnostics indication LED	
RUN/STOP LED	Yes
• ERROR LED	Yes
MAINT LED	Yes
Monitoring of the supply voltage (PWR-LED)	Yes
Connection display LINK TX/RX	Yes
Supported technology objects	
Motion Control	Yes; Note: The number of technology objects affects the cycle time of the PLC program; selection guide via the TIA Selection Tool
<ul> <li>Number of available Motion Control resources for</li> </ul>	
technology objects	1 120
Required Motion Control resources	
— per speed-controlled axis	40
— per positioning axis	80
— per synchronous axis	160
— per external encoder	80
— per output cam	20
— per cam track	160
— per probe	40
<ul> <li>Positioning axis</li> </ul>	
<ul> <li>— Number of positioning axes at motion control cycle of 4 ms (typical value)</li> </ul>	11
<ul> <li>— Number of positioning axes at motion control cycle of 8 ms (typical value)</li> </ul>	14
Controller	
PID_Compact	Yes; Universal PID controller with integrated optimization
PID_3Step	Yes; PID controller with integrated optimization for valves
PID-Temp	Yes; PID controller with integrated optimization for temperature
Counting and measuring	
High-speed counter	Yes
Standards, approvals, certificates	
Ecological footprint	
environmental product declaration	Yes
Global warming potential	
	83.2 kg
<ul> <li>global warming potential, (total) [CO2 eq]</li> <li>global warming potential, (during production) [CO2</li> </ul>	83.2 kg
<ul> <li>global warming potential, (during production) [CO2 eq]</li> </ul>	22.3 kg
्य] — global warming potential, (during operation) [CO2 eq]	61.8 kg
— global warming potential, (after end of life cycle) [CO2 eq]	-0.949 kg
product functions / security / header	
PROFINET Security Class	1
signed firmware update	Yes
Secure Boot	Yes
safelv removing data	Yes
	100

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Ambient conditions	
Ambient temperature during operation	
<ul> <li>horizontal installation, min.</li> </ul>	-30 °C; No condensation
<ul> <li>horizontal installation, max.</li> </ul>	60 °C
<ul> <li>vertical installation, min.</li> </ul>	-30 °C; No condensation
<ul> <li>vertical installation, max.</li> </ul>	50 °C
Altitude during operation relating to sea level	
<ul> <li>Installation altitude above sea level, max.</li> </ul>	5 000 m; Restrictions for installation altitudes > 2 000 m, see manual
configuration / header	
configuration / programming / header	
Programming language	
— LAD	Yes
— FBD	Yes
— STL	Yes
— SCL	Yes
— CFC	Yes
— GRAPH	Yes
Know-how protection	
<ul> <li>User program protection/password protection</li> </ul>	Yes
Copy protection	Yes
Block protection	Yes
Access protection	
<ul> <li>protection of confidential configuration data</li> </ul>	Yes
Protection level: Write protection	Yes
<ul> <li>Protection level: Read/write protection</li> </ul>	Yes
<ul> <li>Protection level: Write protection for Failsafe</li> </ul>	No
<ul> <li>Protection level: Complete protection</li> </ul>	Yes
User administration	Yes; device-wide and centralized
Number of users	100
Number of groups	100
Number of roles	50
programming / cycle time monitoring / header	
lower limit	adjustable minimum cycle time
• upper limit	adjustable maximum cycle time
Dimensions	
Width	100 mm
Height	117 mm
Depth	75 mm
Neights	
Weight, approx.	265 g
last modified.	12/2/2024

last modified:

12/2/2024 🖸