**Data sheet** 

## 6ES7416-2XN05-0AB0



\*\*\*\*\*\*\*\*\*\*\* Replacement part \*\*\*\*\*\*\*\*\* SIMATIC S7-400, CPU 416-2 Central processing unit with: work memory 5.6 MB, (2.8 MB code, 2.8 MB data), 1st interface MPI/DP 12 Mbit/s, 2nd interface PROFIBUS DP

Figure similar

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General information	
Product type designation	CPU 416-2
HW functional status	04
Firmware version	V5.3
Product function	
Isochronous mode	Yes; For PROFIBUS only
Engineering with	
<ul> <li>Programming package</li> </ul>	STEP 7 V5.3 SP2 or higher with HW update
CiR - Configuration in RUN	
CiR synchronization time, basic load	100 ms
CiR synchronization time, time per I/O byte	10 µs
Supply voltage	
Rated value (DC)	Power supply via system power supply
Input current	
from backplane bus 5 V DC, typ.	0.9 A
from backplane bus 5 V DC, max.	1.1 A
from backplane bus 24 V DC, max.	300 mA; 150 mA per DP interface
from interface 5 V DC, max.	90 mA; At each DP interface
Power loss	
Power loss, typ.	4.5 W
Memory	
Type of memory	RAM
Work memory	
• integrated	5.6 Mbyte
<ul><li>integrated (for program)</li></ul>	2.8 Mbyte
<ul><li>integrated (for data)</li></ul>	2.8 Mbyte
expandable	No
Load memory	
<ul> <li>expandable FEPROM</li> </ul>	Yes; with Memory Card (FLASH)
<ul> <li>expandable FEPROM, max.</li> </ul>	64 Mbyte
<ul><li>integrated RAM, max.</li></ul>	1 Mbyte
<ul><li>expandable RAM</li></ul>	Yes; with Memory Card (RAM)
expandable RAM, max.	64 Mbyte
Backup	
• present	Yes
<ul><li>with battery</li></ul>	Yes; all data
<ul><li>without battery</li></ul>	No
Battery	

Backup current, typ.	125 μA; up to 40 °C
Backup current, max.	550 μA
Backup time, max.	See reference manual, module data, Chapter 3.3
<ul> <li>Feeding of external backup voltage to CPU</li> </ul>	5 V DC to 15 V DC
CPU processing times	
for bit operations, typ.	30 ns
for word operations, typ.	30 ns
for fixed point arithmetic, typ.	30 ns
for floating point arithmetic, typ.	90 ns
CPU-blocks	
DB	
Number, max.	10 000; Number range: 1 to 16000
• Size, max.	64 kbyte
FB	
Number, max.	5 000; Number range: 0 to 7999
• Size, max.	64 kbyte
FC	,
Number, max.	5 000; Number range: 0 to 7999
• Size, max.	64 kbyte
OB	
Number, max.	see instruction list
• Size, max.	64 kbyte
Number of free cycle OBs	1; OB 1
Number of time alarm OBs	8; OB 10-17
Number of delay alarm OBs	4; OB 20-23
Number of delay alarm obs     Number of cyclic interrupt OBs	9; OB 30-38 (shortest cycle that can be set = 500 μs)
Number of cyclic interrupt OBs     Number of process alarm OBs	8; OB 40-47
Number of process alarm OBs     Number of DPV1 alarm OBs	
	3; OB 55-57
Number of isochronous mode OBs  Alumber of multicomputing OBs	4; OB 61-64
Number of multicomputing OBs	1; OB 60
Number of background OBs	1; OB 90
Number of startup OBs	3; OB 100-102
Number of asynchronous error OBs	9; OB 80-88
Number of synchronous error OBs	2; OB 121, 122
Nesting depth	
<ul> <li>per priority class</li> </ul>	24
additional within an error OB	2
Counters, timers and their retentivity	
S7 counter	
Number	2 048
Retentivity	
— adjustable	Yes
— preset	Z 0 to Z 7
Counting range	
— lower limit	0
— upper limit	999
IEC counter	
• present	Yes
• Type	SFB
Number	Unlimited (limited only by RAM capacity)
S7 times	, , , , , , , , , , , , , , , , , , , ,
Number	2 048
Retentivity	
— adjustable	Yes
— adjustable — preset	No times retentive
	TWO UNITED TELETILIAGE
Time range	10 mg
— lower limit	10 ms
— upper limit IEC timer	9 990 s
• present	Yes

<ul> <li>Type</li> </ul>	SFB
Number	Unlimited (limited only by RAM capacity)
Data areas and their retentivity	Offiliatilited (littilled offly by KAWI Capacity)
•	Total working and load moment (with backup batton)
Retentive data area (incl. timers, counters, flags), max.  Flag	Total working and load memory (with backup battery)
• Size, max.	16 kbyte; Size of bit memory address area
Retentivity available	Yes
•	MB 0 to MB 15
<ul> <li>Retentivity preset</li> <li>Number of clock memories</li> </ul>	8; in 1 memory byte
Local data	o, iii i iiieiiioiy byte
adjustable, max.	32 kbyte
• preset	16 kbyte
Address area	To holy to
I/O address area	
• Inputs	16 kbyte
• Outputs	16 kbyte
Process image	
Inputs, adjustable	16 kbyte
Outputs, adjustable	16 kbyte
Inputs, default	512 byte
Outputs, default	512 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	131 072
— of which central	131 072
Outputs	131 072
— of which central	131 072
Analog channels	
• Inputs	8 192
— of which central	8 192
<ul><li>Outputs</li></ul>	8 192
— of which central	8 192
Hardware configuration	
Integrated power supply	No
Number of expansion units, max.	21
connectable OPs	63
Multicomputing	Yes; 4 CPUs max. (with UR1 or UR2)
Interface modules	
<ul> <li>Number of connectable IMs (total), max.</li> </ul>	6
<ul> <li>Number of connectable IM 460s, max.</li> </ul>	6
Number of connectable IM 463s, max.	4; IM 463-2
Number of DP masters	
<ul><li>integrated</li></ul>	2
• via CP	10; CP 443-5 Extended
via IM 467	4
Mixed mode IM + CP permitted	No; IM 467 not suitable for use with CP 443-5 Ext. and CP 443-1 EX4x, EX20, GX20 (in PROFINET IO mode)
• via interface module	0
<ul> <li>Number of pluggable S5 modules (via adapter capsule in central device), max.</li> </ul>	6
Number of IO Controllers	
• integrated	0
• via CP	4; No mixed operation of CP443-1 EX40 and CP443-1 EX 41/EX20/GX20,
- VIU OI	max. 4 in central controller
Number of operable FMs and CPs (recommended)	
• FM	Limited by number of slots and number of connections
• CP, PtP	CP 440: Limited by number of slots; CP 441: limited by number of connections
<ul> <li>PROFIBUS and Ethernet CPs</li> </ul>	14; Of which 10 CPs max. or IMs as DP master, 4 PROFINET controller
	maximum

Slots	
• required slots	1
Time of day	
Clock	
Hardware clock (real-time)	Yes
retentive and synchronizable	Yes
Resolution	1 ms
<ul> <li>Deviation per day (buffered), max.</li> </ul>	1.7 s; Power off
<ul> <li>Deviation per day (unbuffered), max.</li> </ul>	8.6 s; For power On
Operating hours counter	
<ul><li>Number</li></ul>	16
<ul> <li>Number/Number range</li> </ul>	0 to 15
<ul> <li>Range of values</li> </ul>	SFCs 2, 3 and 4: 0 to 32767 hours SFC 101: 0 to 2^31 - 1 hours
<ul> <li>Granularity</li> </ul>	1 h
retentive	Yes
Clock synchronization	
• supported	Yes
• to MPI, master	Yes
• on MPI, device	Yes
• to DP, master	Yes
on DP, device     in AS, meeter	Yes
• in AS, master	Yes Yes
<ul><li>in AS, device</li><li>on Ethernet via NTP</li></ul>	Yes No; Via CP
• to IF 964 DP	No.
Time difference in system when synchronizing via	INO
MPI, max.	200 ms
Interfaces	200 1110
Interfaces/bus type	1 x MPI/PROFIBUS DP, 1 x PROFIBUS DP
Number of RS 485 interfaces	2; Combined MPI / PROFIBUS DP and PROFIBUS DP
Optical interface	No
1. Interface	
Interface type	MPI/PROFIBUS DP
Isolated	Yes
Interface types	
• RS 485	Yes
<ul> <li>Output current of the interface, max.</li> </ul>	150 mA
Protocols	
• MPI	Yes
<ul> <li>PROFIBUS DP master</li> </ul>	Yes
PROFIBUS DP device	Yes
MPI	
<ul> <li>Number of connections</li> </ul>	44; 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
Services	
— PG/OP communication	Yes
— Routing	Yes
Global data communication	Yes
	Yes
<ul> <li>S7 basic communication</li> </ul>	
<ul><li>— S7 basic communication</li><li>— S7 communication</li></ul>	Yes
	Yes Yes
— S7 communication	
<ul><li>— S7 communication</li><li>— S7 communication, as client</li></ul>	Yes
<ul><li>— S7 communication</li><li>— S7 communication, as client</li><li>— S7 communication, as server</li></ul>	Yes Yes 32; If a diagnostics repeater is used on the line, the number of connection
<ul> <li>— S7 communication</li> <li>— S7 communication, as client</li> <li>— S7 communication, as server</li> <li>PROFIBUS DP master</li> <li>Number of connections, max.</li> </ul>	Yes Yes 32; 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 client — S7 communication, as server  PROFIBUS DP master  • Number of connections, max.  • Transmission rate, max.	Yes Yes 32; If a diagnostics repeater is used on the line, the number of connection resources on the line is reduced by 1 12 Mbit/s
<ul> <li>S7 communication</li> <li>S7 communication, as client</li> <li>S7 communication, as server</li> <li>PROFIBUS DP master</li> <li>Number of connections, max.</li> <li>Transmission rate, max.</li> <li>max. number of DP devices</li> </ul>	Yes Yes 32; 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 client — S7 communication, as server  PROFIBUS DP master  • Number of connections, max.  • Transmission rate, max.  • max. number of DP devices  Services	Yes Yes  32; If a diagnostics repeater is used on the line, the number of connection resources on the line is reduced by 1  12 Mbit/s  32
<ul> <li>S7 communication</li> <li>S7 communication, as client</li> <li>S7 communication, as server</li> <li>PROFIBUS DP master</li> <li>Number of connections, max.</li> <li>Transmission rate, max.</li> <li>max. number of DP devices</li> </ul>	Yes Yes 32; If a diagnostics repeater is used on the line, the number of connection resources on the line is reduced by 1 12 Mbit/s

Clabal data companiation	No
— Global data communication	No Van
— S7 basic communication	Yes
— S7 communication	Yes
— S7 communication, as client	Yes
— S7 communication, as server	Yes
— Equidistance	Yes
— Isochronous mode	Yes
— SYNC/FREEZE	Yes
<ul> <li>activation/deactivation of DP devices</li> </ul>	Yes
Direct data exchange (slave-to-slave communication)	Yes
— DPV1	Yes
Address area	
— Inputs, max.	2 kbyte
— Outputs, max.	2 kbyte
User data per DP device	
— user data per DP device, max.	244 byte
— Inputs, max.	244 byte
— Outputs, max.	244 byte
— Slots, max.	244
— per slot, max.	128 byte
1st interface / PROFIBUS DP device / header	
<ul> <li>Number of connections</li> </ul>	32
• GSD file	http://support.automation.siemens.com/WW/view/en/113652
Transmission rate, max.	12 Mbit/s
automatic baud rate search	No
Address area, max.	32; Virtual slots
<ul> <li>User data per address area, max.</li> </ul>	32 byte
— of which consistent, max.	32 byte
Services	,
— PG/OP communication	Yes; with interface active
— Routing	Yes; with interface active
Global data communication	No
— S7 basic communication	No
— S7 communication	Yes
— S7 communication, as client	Yes
— S7 communication, as server	Yes
Direct data exchange (slave-to-slave)	No
communication)	INO
— DPV1	No
Transfer memory	
— Inputs	244 byte
— Outputs	244 byte
2. Interface	.,,
Interface type	PROFIBUS DP
Interface type Isolated	Yes
Interface types	1 03
*	Von
• RS 485	Yes
Output current of the interface, max.	150 mA
Protocols	
PROFIBUS DP master	Yes
PROFIBUS DP device	Yes
PROFIBUS DP master	
<ul> <li>Number of connections, max.</li> </ul>	32
<ul> <li>Transmission rate, max.</li> </ul>	12 Mbit/s
max. number of DP devices	125
Services	
<ul><li>— PG/OP communication</li></ul>	Yes
— Routing	Yes; S7 routing
<ul> <li>Global data communication</li> </ul>	No
<ul> <li>S7 basic communication</li> </ul>	Yes

— 57 communication   Yes		Yes		Voc
- S7 communication, as server - Equidistance - SVNCFREEZE - acharation/deacharbain of DP devices - SYNCFREEZE - acharation/deacharbain of DP devices - Direct data exchange (slave-to-slave communication) - DPV1 - Address area - Inputs, max Outputs, max Outputs, max Outputs, max User data per DP device user data per DP device user data per DP device user data per Device per sich max 244 byte - Slots, max 244 byte - Slots, max 248 byte - Transmission rate, max 128 byte  2 diagnoral automation siemens, com/WW/view/and/13852  2 visuas area, max 12 Mbrits - Variance area, max 12 Mbrits - Variance area, max of which consistent, max 32 byte - of which consistent, max Storytose - Routing - Yes, with interface active - Inputs - Outputs - Ves - User data per adotted ST routing - Yes - User data per adotted ST routing - Yes - User data per adotted ST routing - Yes - User data per adotted ST routing - Yes - User data per incorrumous lave Inputs - Storytose - Storytose - Storytose - Potal length, max 1 452 bytes via CP 443-1 Adv.  Web sever - supported - No - Storytose - Routing - Yes - User data per adotted storytose with message processing - Number of connectable OPs without message processing - Number of connectable OPs witho	— S7 communication, as server — Equidistance — Isochronous mode — SYNC/FREEZE — activation/deactivation of DP devices — Direct data exchange (slave-to-slave communication) — DPV1 — Address area — Inputs, max. — Outputs, max. — Outputs, max. — User data per DP device, max. — Inputs, max. — Outputs, max. — Per slot, max. — Outputs, max. — Outputs, max. — Per slot, max. — Outputs or according to the slot of the slot	Yes	— 57 communication, as client	Yes
- Equidistance	— Equidistance — Isochronous mode — SYNC/FREZE — a activation/deactivation of DP devices — Direct data exchange (slave-to-slave communication) — DPV1 — Yes  Address area — Inputs, max. — Outputs, max. — Per slot, max. — Slots, max. — Per slot, max. — Vad byte — Transmission rate, max. — outputs or connections — Transmission rate, max. — outputs or device — Inputs, max. — Outputs, max. — Outputs, max. — Per slot, max. — Outputs, pax.	Yes	C7 communication as conver	
- Isochronous mode - SYNCFREEZE - Servicion of De Devices - SYNCFREEZE - Servicion of Section of De Devices - Direct data exchange (slave-to-slave communication) - DPV1 Yes - Drivet data exchange (slave-to-slave communication) - DPV1 Yes - Address area - Inputs, max. 8 kbyte - Outputs, max. 8 kbyte - User data per DP device, max. 244 byte - User data per DP device, max. 244 byte - User data per Store of Connections - Profit of Connections - Solots, max. 244 byte - Outputs, max. 244 byte - Silots, max. 244 byte - Silots, max. 244 byte - Profit of Connections - Profit of Connections - Solots of Connections - Routing - Profit of Connections - Solots		Yes Yes Yes Yes Yes Yes Yes  8 kbyte  8 kbyte  244 byte 244 byte 244 to byte 244 to byte 245 byte  32 2 http://support.automation.slemens.com/WW/view/en/113652 12 Mbit/s 32 32 byte 32 byte  Yes; with interface active  244 byte  Yes Via CP 443-1 and loadable FB 1 452 bytes via CP 443-1 Adv.  No  Yes 2 244 byte  1 ms; 0.5 ms without use of SFC 126, 127 32 ms  Yes 63; When using Alarm_S/SQ and Alarm_D/DQ 63 Yes  Yes 16 16 16 32 54 byte 1 variable		
- SYNC/FREEZE - activation/deactivation of DP devices - Direct data exchange (slave-to-slave communication) - DPV1 - Address area - Inputs, max Outputs, max Per stot,	SYNC/FREEZE activation/deactivation of DP devices Direct data exchange (slave-to-slave communication) DPV1 Address area Inputs, max.	Yes Yes Yes Yes Yes Yes Yes  S kbyte  8 kbyte  244 byte 244 byte 244 byte 244 128 byte  32 32 http://support.automation.siemens.com/\text{AVW/view/en/113652}} 32 32 byte 32 32 byte 32 byte  Yes; with interface active  244 byte 244 byte  Yes  Via CP 443-1 and loadable FB 1 452 bytes via CP 443-1 Adv.  No  Yes 2 244 byte 1 ms; 0.5 ms without use of SFC 126, 127 32 ms  Yes 63; When using Alarm_S/SQ and Alarm_D/DQ 63 Yes  Yes 16 16 16 32 54 byte 1 variable	•	
activation/deactivation of DP devices Direct data exchange (slave-to-slave communication) OPV1 Yes  Address area Inputs, max Upputs, max	activation/deactivation of DP devices Direct data exchange (slave-to-slave communication) DPV1 PV9  Address area Inputs, max Outputs, max Slots, max Slots, max Per slot, max Per slot, max PROFIBUS DP device / header Number of connections SSD file Transmission rate, max Outputs part address area, max Outputs Protocols Routing Transfer memory Inputs Outputs O	Yes Yes Yes Yes  A kbyte  8 kbyte  244 byte 244 byte 244 byte 244 128 byte  32  http://support.automation.siemens.com/\text{AVM/view/en/113652}}  12 Mbit/support.automation.siemens.com/\text{AVM/view/en/113652}}  12 Mbit/s 32 32 byte 32 byte  Yes; with interface active  244 byte  Yes  Via CP 443-1 and loadable FB 1 452 bytes via CP 443-1 Adv.  No  Yes 2 244 byte 1 ms; 0.5 ms without use of SFC 126, 127 32 ms  Yes 63; \text{When using Alarm_S/SQ and Alarm_D/DQ}} 63 Yes  Yes 16 16 16 32 54 byte 1 variable		
- Direct data exchange (slave-to-slave communication) - DPV1 Address area - Inputs, max Outputs, max Outputs, max User data per DP device, max Slots, max Per slot, max User data per address area, max User data per address area, max User data per address area, max Of which consistent, max Outputs - Routing - Routing - Ves; with interface active - Routing - Ves; with interface active - Routing - Ves - Ves - Outputs - User data per address area, max User data per address area, max Outputs - User data per address area, max Outputs - User data per address area, max User data per address area, max User data per address area, max User data per slothonous slave, max Ves - Number of DP masters with isochronous mode - User data per slothonous slave, max Ves - Number of DP masters with isochronous mode - User data per slothonous slave, max Ves - Number of Connectable OPs with message processing - Number of Connectable OPs with outputs assage processing - Number of connectable OPs with outputs assage processing - Number of connectable OPs without message processing - Number of connectable OPs with message processing - Ves	- Direct data exchange (slave-to-slave communication) - DPV1 - Address area - Inputs, max. 8 kbyte - Outputs, max. 8 kbyte  User data per DP device, max. 244 byte - Inputs, max. 244 byte - User data per DP device, max. 244 byte - User data per DP device, max. 244 byte - User data per DP device wax. 244 byte - User data per DP device wax. 244 byte - User data per DP device wax. 244 byte - User data per DP device wax. 244 byte - User data per DP device wax. 244 byte - Outputs, max. 244 byte - Slots, max. 244 byte - Slots, max. 244 byte - Outputs wax. 244 byte - Outputs on Connections - SD file - Transmission rate, max. 12 Mbit/s - Address area, max. 32 byte - Of which consistent, max. 32 byte - Of which consistent, max. 32 byte - Of which consistent, max. 32 byte - Outputs - Outputs wax. 32 byte - Outputs wax. 34 byte - Outputs wax. 35 byte - Outputs wax. 35 byte - Outputs wax. 36 byte - Outputs wax. 37 byte - Outputs wax. 38 byte - Outputs wax. 39 byte - Outputs wax. 31 byte - Outputs wax. 32 byte - Outputs wax. 33 byte - Outputs wax. 34 byte - Outputs wax. 35 byte - Outputs wax. 37 byte - Outputs wax. 38 byte	Yes  Yes  8 kbyte  8 kbyte  244 byte  244 byte  244 byte  244 128 byte  32  12 http://support.automation.siemens.com/\text{AVV/view/en/113652}}  12 Mbit/s  32  32 byte  32  32 byte  Yes; with interface active  Yes  Yia CP 443-1 and loadable FB  1 452 bytes via CP 443-1 Adv.  No  Yes  2  244 byte  1 ms; 0.5 ms without use of SFC 126, 127  32 ms  Yes  63; When using Alarm_S/SQ and Alarm_D/DQ  63  Yes  Yes  16  16  16  12  22  54 byte  1 variable		
communication)  - DPV1  Address area  - Inputs, max Outputs, max User data per DP device  - user data per DP device, max Inputs, max User data per DP device, max Inputs, max User data per DP device, max Inputs, max Inputs, max User data per DP device, max Inputs, max Inputs, max It is byte  244 byte - Outputs, max Per slot, max Per slot, max Per slot, max Per slot, max It is byte  25 byte  26 interface / PROFIBUS DP device / header  • Number of connections  32 contineface / PROFIBUS DP device / header  • Number of connections  32 contineface / PROFIBUS DP device / header  • Number of connections  32 contineface / PROFIBUS DP device / header  • Number of connections  32 contineface / PROFIBUS DP device / header  • Number of connections  32 contineface / PROFIBUS DP device / header  • Number of connections  32 contineface / PROFIBUS DP device / header  • Number of Connections  • Strouting  • Strouting  • Strouting  • Strouting  • Vac CP 443-1 and loadable FB  - Data length, max.  * Vac Device Services  - Audress area, max - Interface active  • Supported  No  Socionaria device / Services  • Vac CP 443-1 and loadable FB  - Data length, max.  * Vac Services  - Audress area, max - Interface active  - User data per address area, max - Interface active  - User data per address area, max - Interface active  - Ves  * Supported  No  Socionaria device / Service / S	communication)  DPV1  Address area  Inputs, max.  Outputs, max.  User data per DP device  — user data per DP device, max.  — Unputs, max.  — Siots, max.  — Per slot, max.  — 128 byte  244 byte  444 byte  258 byte  268 bit bit olders area, max.  279 byte  17 transmission rate, max.  280 byte  17 transmission rate, max.  290 byte  291 byte  292 byte  292 byte  292 byte  294 byte  294 byte  295 byte  296 byte  297 byte  297 byte  297 byte  297 byte  297 byte  297 byte  298 byte  299 byt	8 kbyte  244 byte  244 byte  244 byte  244 byte  244 128 byte  32  http://support.automation.siemens.com/\text{WV/view/en/113652}}  32 32 byte  32 byte  32 byte  Yes; with interface active  Yes; with or active  Yes  Via CP 443-1 and loadable FB  1 452 bytes via CP 443-1 Adv.  No  Yes  2 244 byte  1 ms; 0.5 ms without use of SFC 126, 127  32 ms  Yes  63; When using Alarm_S/SQ and Alarm_D/DQ  63  Yes  Yes  16  16  16  19  32  54 byte  1 variable		
Address area  - Inputs, max Outputs, max Outputs, max Outputs, max Outputs, max Inputs, max Outputs, max Outputs, max Stols, max Stols, max Stols, max Stols, max Per stol, max Stols, max Per stol, max Stols, max Per stol, max Inputs, max Per stol, max Inputs, max.	Address area  Inputs, max. Outputs, max. Outputs, max. Sk kbyte  User data per DP device  - user data per DP device, max. User data per DP device, max. Outputs, max. Outp	8 kbyte 8 kbyte 244 byte 244 byte 244 byte 244 128 byte  32 http://support.automation.siemens.com/\text{AWV/view/en/113652}} 32 byte 32 byte 32 byte 32 byte 32 byte  Yes; with interface active  244 byte 244 byte  Yes  Via CP 443-1 and loadable FB 1 452 bytes via CP 443-1 Adv.  No  Yes 2 244 byte 1 ms; 0.5 ms without use of SFC 126, 127 32 ms  Yes 63; When using Alarm_S/SQ and Alarm_D/DQ 63 Yes  Yes 16 16 16 32 54 byte 1 variable		Yes
Address area  - Inputs, max. 8 kbyte  - User data per DP device - user data per DP device, max. 244 byte - Inputs, max. 244 byte - User, max. 244 byte - Outputs, max. 244 byte - Slots, max. 244 byte - Slots, max. 244 byte - Slots, max. 245 byte  Zent interface / PROFIBUS DP device / header  • Number of connections  • SSD file • Introvisupport, automation, siemens, com/WW/view/en/113852  • Transmission rate, max. 12 byte • Transmission rate, max. 32 • User data per address area, max. 32 • User data per address area, max. 32 byte - Outputs - Or which consistent, max. 32 byte  - Inputs - Culputs - Culputs - Culputs - Outputs -	Address area — Inputs, max.	8 kbyte 8 kbyte 244 byte 244 byte 244 byte 244 128 byte  32 http://support.automation.siemens.com/\text{AWV/view/en/113652}} 32 byte 32 byte 32 byte 32 byte 32 byte  Yes; with interface active  244 byte 244 byte  Yes  Via CP 443-1 and loadable FB 1 452 bytes via CP 443-1 Adv.  No  Yes 2 244 byte 1 ms; 0.5 ms without use of SFC 126, 127 32 ms  Yes 63; When using Alarm_S/SQ and Alarm_D/DQ 63 Yes  Yes 16 16 16 32 54 byte 1 variable	•	Yes
- Inputs, max. 8 kbyte - Outputs, max. 8 kbyte - Outputs, max. 8 kbyte  - User data per DP device - user data per DP device, max. 244 byte - Inputs, max. 244 byte - Outputs, max. 244 byte - Slots, max. 244 byte - Slots, max. 244 byte - Per slot, max. 244 byte - Slots, max. 244 byte - Per slot, max. 244 byte - Per slot, max. 244 byte - Slots, max. 244 byte - Per slot, max. 244 byte - Number of connections 32 - GSD file - Intramission rate, max. 12 Mbb/s - Transmission rate, max. 32 - User data per address area, max. 32 - User data per address area, max. 32 - Ord which consistent, max. 32 byte - Ord which consistent, max. 32 byte - Rouling - Rouling - Rouling - Rouling - Cuptuts - Outputs	- Inputs, max. 8 kbyte  - Outputs, max. 8 kbyte   User data per DP device  - user data per DP device, max. 244 byte  - Inputs, max. 244 byte  - User, max. 244 byte  - Slots, max. 244 byte  - Slots, max. 244 byte  - Slots, max. 244  - per slot, max. 128 byte   2nd interface / PROFIBUS DP device / header   • Number of connections 32  • GSD file 1  • Transmission rate, max. 12 Mbit/s  • Address area, max. 32 byte  - of which consistent, max. 32 byte   Services  - Routing Yes; with interface active  Transfer memory  - Inputs 244 byte  - Outputs 244 byte   Protocols  SIMATIC communication  • S7 routing Yes  Open IE communication  • S7 routing Yes  - Data length, max. 40  Web server  • supported No  Isochronous mode  Equidistance Yes  Number of DP masters with isochronous mode 2  User data per isochronous slave, max. 244 byte   Procommunication  • No  Sommunication  • Number of DP masters with isochronous mode 2   User data per isochronous slave, max. 244 byte  shortest clock pulse  1 ms; 0.5 ms without use of SFC  max. cycle  32 ms  Communication  • Number of Connectable OPs with message processing  • Number of Connectable OPs with message processing  • Number of Connectable OPs with message processing  • Number of GD packets, transmitter, max. 16  • Number of GD packets, max. 54 byte  • Size of GD packets, max. 54 byte  • Size of GD packets, max. 54 byte  • Size of GD packets, freceiver, max. 52  • Size of GD packets (of which consistent), max. 54 byte  • Size of GD packets, freceiver, max. 52  • Size of GD packets, freceiver, max. 54 byte  • Size of GD packets, freceiver, max. 54 byte  • Size of GD packets, freceiver, max. 54 byte	8 kbyte  244 byte 244 byte 244 128 byte  32  http://support.automation.siemens.com/\text{WW/view/en/113652}} 12 Mbit/s 32 32 byte 32 byte  Yes; with interface active  Yes  Via CP 443-1 and loadable FB 1 452 bytes via CP 443-1 Adv.  No  Yes 2 244 byte 1 ms; 0.5 ms without use of SFC 126, 127 32 ms  Yes  Yes 43; When using Alarm_S/SQ and Alarm_D/DQ 63 Yes  Yes 16 16 32 54 byte 1 variable		
User data per DP device	User data per DP device	8 kbyte  244 byte 244 byte 244 128 byte  32  http://support.automation.siemens.com/\text{WW/view/en/113652}} 12 Mbit/s 32 32 byte 32 byte  Yes; with interface active  Yes  Via CP 443-1 and loadable FB 1 452 bytes via CP 443-1 Adv.  No  Yes 2 244 byte 1 ms; 0.5 ms without use of SFC 126, 127 32 ms  Yes  Yes 43; When using Alarm_S/SQ and Alarm_D/DQ 63 Yes  Yes 16 16 32 54 byte 1 variable		8 kbyte
User data per DP device	User data per DP device  — user data per DP device, max. — Inputs, max. — Por slot, max. — Slots, max. — per slot, max. — Jes byte  244 byte  244 byte  244 byte  244 byte  245 byte  246 byte  128 byte  247 limetrace / PROFIBUS DP device / header  • Number of connections • GSD file • Transmission rate, max. • Address area, max. • Address area, max. — of which consistent, max.  29 byte  Services — Routing  Transfer memory — Inputs — Outputs — Outputs — Outputs  Protocols  SIMATIC communication • S7 routing  Open IE communication • ISO-on-TCP (RFC1006) — Data length, max.  9 supported No  Isochronous mode  Equidistance  Yes Number of DP masters with isochronous mode  Equidistance  PG/OP communication • Number of connectable OPs with message processing • Number of GD packets, transmitter, max. • Size of GD packets, transmitter, max. • Size of GD packets, transmitter, max. • Size of GD packets, receiver, max. • Size of GD packets, freceiver, max. • Size of GD packets of GD packets, freceiver, max. • Size of GD	244 byte 244 byte 244 byte 242	·	
- user data per DP device, max Inputs, max Uptynts, max Slots, max Slots, max Slots, max per slot, max per slot, max Per slot, max Slots per slot, max Number of connections - Sto file - Number of DP masters with isochronous mode - Equidistance - Sto for DP masters with isochronous mode - Equidistance - Number of DP masters with isochronous mode - Sto for DP masters wi	- user data per DP device, max Inputs, max Outputs, max Slots, max per slot, max 128 byte  2nd interface / PROFIBUS DP device / header  • Number of connections • SSD file • Transmission rate, max. • Address area, max of which consistent, max.  2 User data per address area, max of which consistent, max.  Services - Routing Transfer memory - Inputs - Outputs -	244 byte 244 128 byte  32 http://support.automation.siemens.com/WW/view/en/113652 12 Mbit/s 32 32 byte 32 byte  Yes; with interface active  Yes Via CP 443-1 and loadable FB 1 452 bytes via CP 443-1 Adv.  No  Yes 2 244 byte 1 ms; 0.5 ms without use of SFC 126, 127 32 ms  Yes 63; When using Alarm_S/SQ and Alarm_D/DQ 63 Yes  Yes 16 16 32 54 byte 1 variable		o noyto
- Inputs, max. 244 byte Outputs, max. 244 byte Slots, max. 244 byte Slots, max. 244 per slot, max. 128 byte 128 by	- Inputs, max Outputs, max Outputs, max Slots, max per slot, max per slot, max.  244 - per slot, max.  245  276 Interface / PROFIBUS DP device / header    Number of connections   32	244 byte 244 128 byte  32 http://support.automation.siemens.com/WW/view/en/113652 12 Mbit/s 32 32 byte 32 byte  Yes; with interface active  Yes Via CP 443-1 and loadable FB 1 452 bytes via CP 443-1 Adv.  No  Yes 2 244 byte 1 ms; 0.5 ms without use of SFC 126, 127 32 ms  Yes 63; When using Alarm_S/SQ and Alarm_D/DQ 63 Yes  Yes 16 16 32 54 byte 1 variable		244 hvte
	- Outputs, max Slots, max Slots, max per slot, max.  244 - per slot, max.  246 - per slot, max.  276 287 298 2999 201 201 201 201 201 201 201 201 201 201	244 byte 244 128 byte  32 http://support.automation.siemens.com/WW/view/en/113652 12 Mbit/s 32 32 byte 32 byte 32 byte  Yes; with interface active  Yes  Via CP 443-1 and loadable FB 1 452 bytes via CP 443-1 Adv.  No  Yes 2 244 byte 1 ms; 0.5 ms without use of SFC 126, 127 32 ms  Yes 63; When using Alarm_S/SQ and Alarm_D/DQ 63 Yes  Yes 16 16 32 54 byte 1 variable	•	· · · · · · · · · · · · · · · · · · ·
Slots, max.	— Slots, max. — per slot, max. 128 byte  2nd interface / PROFIBUS DP device / header  • Number of connections • GSD file • Transmission rate, max. • Address area, max. • User data per address area, max. — of which consistent, max.  22 byte  Services — Routing Transfer memory — Inputs — Outputs Protocols  SIMATIC communication • \$7 routing  Open IE communication • ISO-on-TCP (RFC1006) — Data length, max.  Web server • supported  Supported  Routing this isochronous mode Equidistance Number of DP masters with isochronous mode  2 User data per isochronous slave, max. shortest clock pulse max. cycle  communication • Number of connectable OPs with message processing • Number of connectable OPs without message processing • Number of GD packets, transmitter, max. • Size of GD packets, rans. • Size of GD packets, frans. • Size of GD packets, fransmitter, max. • Size of GD packets, fransmitter, max. • Size of GD packets, fransmitter, max. • Size of GD packets, fransmitter	244 128 byte  32 http://support.automation.siemens.com/WW/view/en/113652 12 Mbit/s 32 32 byte 32 byte  244 byte  244 byte  Yes  Via CP 443-1 and loadable FB 1 452 bytes via CP 443-1 Adv.  No  Yes 2 244 byte  1 ms; 0.5 ms without use of SFC 126, 127 32 ms  Yes 63; When using Alarm_S/SQ and Alarm_D/DQ 63 Yes  Yes 16 16 13 22 54 byte 1 variable	·	
- per slot, max. 2nd interface / PROFIBUS DP device / header  • Number of connections • (SgD file http://support.automation.siemens.com/WW/view/en/113652 • Transmission rate, max. • (Address area, max. • (User data per address area, max. • (User	- per slot, max. 128 byte  2nd interface / PROFIBUS DP device / header  • Number of connections • GSD file http://support.automation.siemens • GSD file http://support.automation.siemens • Transmission rate, max. 12 Mbit/s • Address area, max. 32 • User data per address area, max. 32 byte  — of which consistent, max. 32 byte  Services — Routing Yes; with interface active  Transfer memory — Inputs 244 byte — Outputs 244 byte  Protocols  SIMATIC communication • S7 routing Yes  — Data length, max. 1452 bytes via CP 443-1 and loadable FB — Data length, max. 1452 bytes via CP 443-1 Adv.  Web server • supported No  Isochronous mode  Equidistance Yes Number of DP masters with isochronous mode 2 User data per isochronous slave, max. 244 byte  nownunication Ves  PG/OP communication Insight max. 244 byte  Demail of DP masters with isochronous mode 2 User data per isochronous slave, max. 244 byte  shortest clock pulse 1 ms; 0.5 ms without use of SFC max. cycle 32 ms  communication functions / header  PG/OP communication 9 with message processing 10 number of connectable OPs with message processing 10 number of connectable OPs without message processing 10 number of CD packets, receiver, max. 16 number of GD packets, transmitter, max. 16 number of GD packets, transmitter, max. 16 number of GD packets, transmitter, max. 16 number of GD packets, receiver, max. 17 variable 11 variable 11 variable 11 variable 11 variable 12 variable 13 variable 13 variable 14 variable 14 variable 15 var	32 http://support.automation.siemens.com/WW/view/en/113652 12 Mbit/s 32 32 byte 32 byte  Yes; with interface active  Yes  Via CP 443-1 and loadable FB 1 452 bytes via CP 443-1 Adv.  No  Yes 2 244 byte 1 ms; 0.5 ms without use of SFC 126, 127 32 ms  Yes 63; When using Alarm_S/SQ and Alarm_D/DQ 63 Yes  Yes 16 16 13 2 54 byte 1 variable	·	
Author of connections SD file SD file Transmission rate, max. Address area, max. User data per address area, max. Services Routing Transfer memory Inputs Outputs Protocols SIMATIC communication ST routing Yes Open IE communication SD routing SD routing Tas length, max. 14 byte Protocols SIMATIC communication ST routing Yes Open E communication SD routing Yes Supported Sochronous mode Equidistance Ves Number of DP masters with isochronous mode User data per isochronous slave, max. 244 byte Protocols SD routing Yes Open IE communication Sochronous mode Equidistance No Supported Sochronous mode Final Sochronous slave, max. Author S	2nd interface / PROFIBUS DP device / header  Number of connections GSD file Transmission rate, max. Address area, max. Services - Routing Transfer memory - Inputs - Outputs - Outputs  Protocols SIMATIC communication ST routing Yes - Data length, max.  Web server  Supported  Equidistance Equidistance Equidistance For DP masters with isochronous mode Equidistance Suprofer of DP masters with isochronous mode  Equidistance Number of connectable OPs without message processing Number of GD packets, transmitter, max. Size of GD packets, receiver, max. Size of GD packets, receiver, max. Size of GD packets, frax. Size	http://support.automation.siemens.com/WW/view/en/113652  12 Mbit/s  32  32 byte  32 byte  Yes; with interface active  Yes  Via CP 443-1 and loadable FB  1 452 bytes via CP 443-1 Adv.  No  Yes  2  244 byte  1 ms; 0.5 ms without use of SFC 126, 127  32 ms  Yes  63; When using Alarm_S/SQ and Alarm_D/DQ  63  Yes  Yes  16  16  32  54 byte  1 variable		
Number of connections Solution Solutio	Number of connections GSD file Transmission rate, max. Address area, max. User data per address area, max.  User data per address area, max.  User data per address area, max.  User data per address area, max.  User data per address area, max.  User data per address area, max.  User data per address area, max.  User data per address area, max.  User data per address area, max.  User data per address area, max.  User data per address area, max.  User data per address area, max.  User data per soch area data data decided and a service and a ser	http://support.automation.siemens.com/WW/view/en/113652  12 Mbit/s 32 32 byte 32 byte  Yes; with interface active  244 byte  Yes  Via CP 443-1 and loadable FB 1 452 bytes via CP 443-1 Adv.  No  Yes 2 244 byte 1 ms; 0.5 ms without use of SFC 126, 127 32 ms  Yes 63; When using Alarm_S/SQ and Alarm_D/DQ 63 Yes  Yes 16 16 32 54 byte 1 variable		120 Dylo
Solution  Solut	GSD file Transmission rate, max. Address area, max. User data per address area, max.  For outing Transfer memory Inputs Outputs  Protocols  SIMATIC communication SiS-on-TCP (RFC1006) Data length, max.  Web server  Supported No  No  Sochronous mode  Equidistance Number of DP masters with isochronous mode Shumber of connectable OPs without message processing Number of GD packets, transmitter, max.  Suse of SD packets, max.  12 Mbit/s  32 byte	http://support.automation.siemens.com/WW/view/en/113652  12 Mbit/s 32 32 byte 32 byte  Yes; with interface active  244 byte  Yes  Via CP 443-1 and loadable FB 1 452 bytes via CP 443-1 Adv.  No  Yes 2 244 byte 1 ms; 0.5 ms without use of SFC 126, 127 32 ms  Yes 63; When using Alarm_S/SQ and Alarm_D/DQ 63 Yes  Yes 16 16 32 54 byte 1 variable		32
Transmission rate, max. Address area, max. Address area, max. User data per address area, max. Bit Services  Routing Transfer memory  Inputs Cytes; with interface active  Transfer memory  Inputs Cytes; with interface active  Protocols  SIMATIC communication Sor routing  Pes Open IE communication ISO-on-TCP (RFC1006) Data length, max.  Veb server  Supported No  Sochronous mode  Equidistance  Yes Number of DP masters with isochronous mode  User data per isochronous slave, max. Shortest clock pulse max. cycle max. cycle  Tes Open IE communication  Yes  Supported No  Sochronous mode  Equidistance  Yes Number of DP masters with isochronous mode  2 User data per isochronous slave, max. Shortest clock pulse max. cycle  PG/OP communication  Ness Supported  Yes  Number of connectable OPs with message processing Number of connectable OPs without message processing	Transmission rate, max. Address area, max. Address area, max. User data per address area, max. Active of which consistent, max.  Foruiting  Transfer memory  Inputs Outputs  Protocols  SIMATIC communication SIMATIC communication Insumant of Department of Department of Department of Connectable OPs with message processing  Number of connectable OPs without message processing Number of GD packets, transmitter, max. Number of GD packets, max.  Number of GD packets, max.  Number of GD packets, max.  Number of GD packets, max.  Number of GD packets, max.  Number of GD packets, max.  Number of GD packets, max.  Number of GD packets, fransmitter, max.  Number of GD packets, max.  Number of GD packets, max.  Number of GD packets, max.  Size of GD packets, max.  Size of GD packets, max.  Size of GD packets, fransmitter, max.  Size of GD packets, fransmitter, max. Size of GD packets, max.  Size of GD packets, fransmitter, max. Size of GD packets, fransmitter, max. Size of GD packets, max. Size of GD packets, fransmitter, max. Size of GD packets, fransm	12 Mbit/s 32 32 byte 32 byte 32 byte  Yes; with interface active  Yes  Via CP 443-1 and loadable FB 1 452 bytes via CP 443-1 Adv.  No  Yes 2 244 byte 1 ms; 0.5 ms without use of SFC 126, 127 32 ms  Yes 63; When using Alarm_S/SQ and Alarm_D/DQ 63 Yes  Yes 16 16 32 54 byte 1 variable		
Address area, max.  User data per address area, max.  - of which consistent, max.  32 byte  - of which consistent, max.  32 byte  Services  - Routing  Yes; with interface active  Transfer memory  - Inputs - Outputs  244 byte  - Outputs  Protocols  SIMATIC communication  • \$7 routing  Yes  Open IE communication  • ISO-on-TCP (RFC1006) - Data length, max.  1 452 bytes via CP 443-1 and loadable FB  - Data length, max.  1 452 bytes via CP 443-1 Adv.  Web server  • supported  No  Isochronous mode  Equidistance Number of DP masters with isochronous mode  2 User data per isochronous slave, max.  shortest clock pulse max. cycle communication  • Number of connectable OPs with message processing • Number of connectable OPs with message processing • Number of connectable OPs with message processing • Number of connectable OPs without message processing • Signature of Connec	Address area, max.  User data per address area, max.  - of which consistent, max.  Services  - Routing  Transfer memory  - Inputs  - Outputs  Protocols  SIMATIC communication  • S7 routing  Open IE communication  • ISO-on-TCP (RFC1006)  - Data length, max.  Web server  • supported  Isochronous mode  Equidistance  Number of DP masters with isochronous mode  User data per isochronous slave, max.  shortest clock pulse  max. cycle  communication  • Number of connectable OPs with message processing  • Number of connectable OPs without message processing  • Number of GD loops, max.  • Number of GD packets, transmitter, max.  • Number of GD packets, transmitter, max.  • Size of GD packets, max.  • Size of GD packets, max.  • Size of GD packet (of which consistent), max.  S7 basic communication  • Syperical Size of GD packet (of which consistent), max.  S7 basic communication  1 variable  S7 basic communication  1 variable  S7 basic communication	32 32 byte 32 byte  Yes; with interface active  244 byte  Yes  Via CP 443-1 and loadable FB 1 452 bytes via CP 443-1 Adv.  No  Yes 2 244 byte 1 ms; 0.5 ms without use of SFC 126, 127 32 ms  Yes 63; When using Alarm_S/SQ and Alarm_D/DQ 63 Yes  Yes 16 16 16 32 54 byte 1 variable		
User data per address area, max.  — of which consistent, max.  Services  — Routing  Transfer memory  — Inputs — Outputs  SIMATIC communication  • S7 routing  Open IE communication  • ISO-on-TCP (RFC1006) — Data length, max.  Veb server  • supported  Suchronous mode  Equidistance  Number of DP masters with isochronous mode  User data per isochronous slave, max.  As in max.  244 byte  1 ms; 0.5 ms without use of SFC 126, 127  max. cycle  Communication  • Yes  Open IE communication  • 180-on-TCP (RFC1006) — Data length, max.  Veb server  • supported  No  Isochronous mode  Equidistance  Number of DP masters with isochronous mode  2  User data per isochronous slave, max.  244 byte  shortest clock pulse  max. cycle  communication functions / header  PG/OP communication  • Number of connectable OPs with message processing  • Number of connectable OPs without messa	User data per address area, max.  — of which consistent, max.  Services  — Routing Transfer memory  — Inputs — Outputs  Protocols  SIMATIC communication  • S7 routing Open IE communication  • ISO-on-TCP (RFC1006) — Data length, max.  Web server  • supported  Routingster with isochronous mode  Equidistance  Luser data per isochronous slave, max.  shortest clock pulse max. cycle  PG/OP communication  • Number of Denactes be without message processing • Number of connectable OPs with message processing • Number of GD loops, max.  • Number of GD packets, transmitter, max.  • Number of GD packets, max.  • Size of GD packet (of which consistent), max.  S7 basic communication  1 ves: with interface active  Yes; with interface active  1 ves; with interface active  Yes  Value C44 byte  244 byte  1 ves  32 byte  244 byte  244 byte  1 ves  32 ms  32 ms  63; When using Alarm_S/SQ and 63  63  63; When using Alarm_S/SQ and 63  64  65  66  67  68  69  69  69  69  69  69  69  69  69	32 byte 32 byte  Yes; with interface active  244 byte  Yes  Via CP 443-1 and loadable FB 1 452 bytes via CP 443-1 Adv.  No  Yes 2 244 byte 1 ms; 0.5 ms without use of SFC 126, 127 32 ms  Yes 63; When using Alarm_S/SQ and Alarm_D/DQ 63 Yes  Yes 16 16 32 54 byte 1 variable		
	- of which consistent, max.  Services - Routing Transfer memory - Inputs - Outputs 244 byte - Outputs 244 byte  Protocols  SIMATIC communication • S7 routing Open IE communication • ISO-on-TCP (RFC1006) - Data length, max.  Web serve • supported No  Isochronous mode Equidistance Number of DP masters with isochronous mode User data per isochronous slave, max. shortest clock pulse max. cycle ommunication • Number of connectable OPs with message processing • Number of connectable OPs without message processing • Number of GD loops, max. • Number of GD packets, transmitter, max. • Number of GD packets, max. • Size of GD packet (of which consistent), max.  S7 basic communication  Ves; with interface active Yes; with interface active Yes Outputs  Yes  Via CP 443-1 and loadable FB  No I 452 bytes via CP 443-1 Adv.  Via CP 443-1 and loadable FB  No I 452 bytes via CP 443-1 Adv.  Ves Size of GD packets, transmitter, max.  16 16 16 16 16 17 17 18 19 19 19 19 19 19 19 19 19 19 19 19 19	Yes; with interface active  244 byte  Yes  Yes  Via CP 443-1 and loadable FB 1 452 bytes via CP 443-1 Adv.  No  Yes  2 244 byte 1 ms; 0.5 ms without use of SFC 126, 127 32 ms  Yes 63; When using Alarm_S/SQ and Alarm_D/DQ 63 Yes  Yes 16 16 32 54 byte 1 variable		
Services	Services  — Routing Transfer memory  — Inputs — Outputs — Outputs  244 byte  — Outputs  Protocols  SIMATIC communication  • S7 routing  Open IE communication  • ISO-on-TCP (RFC1006) — Data length, max.  Web server  • supported  Supported  Equidistance Number of DP masters with isochronous mode  User data per isochronous slave, max.  shortest clock pulse max. cycle  max. cycle  Ommunication  • Number of connectable OPs with message processing • Number of connectable OPs without message processing  • Number of GD loops, max.  • Number of GD packets, transmitter, max.  • Number of GD packets, transmitter, max.  • Size of GD packets, max.  • Size of GD packet (of which consistent), max.  S7 basic communication  • Size of GD packet (of which consistent), max.  S7 basic communication	Yes; with interface active  244 byte  Yes  Via CP 443-1 and loadable FB 1 452 bytes via CP 443-1 Adv.  No  Yes 2 244 byte 1 ms; 0.5 ms without use of SFC 126, 127 32 ms  Yes 63; When using Alarm_S/SQ and Alarm_D/DQ 63 Yes  Yes 16 16 16 32 54 byte 1 variable	•	
— Routing Yes; with interface active  Transfer memory — Inputs 244 byte — Outputs 244 byte  Protocols  SIMATIC communication	— Routing Transfer memory  — Inputs — Outputs  — Outputs  Protocols  SIMATIC communication  • S7 routing  Open IE communication  • ISO-on-TCP (RFC1006) — Data length, max.  Web server  • supported  No  Isochronous mode  Equidistance Number of DP masters with isochronous mode  User data per isochronous slave, max.  shortest clock pulse max. cycle  communication  • Number of connectable OPs with message processing • Number of connectable OPs without message processing • Number of GD loops, max. • Number of GD packets, transmitter, max. • Number of GD packets, max.  • Size of GD packet, max.  • Size of GD packet (of which consistent), max.  S7 basic communication  • State of County State of State o	Yes  Via CP 443-1 and loadable FB 1 452 bytes via CP 443-1 Adv.  No  Yes 2 244 byte 1 ms; 0.5 ms without use of SFC 126, 127 32 ms  Yes 63; When using Alarm_S/SQ and Alarm_D/DQ 63 Yes  Yes 16 16 16 32 54 byte 1 variable		32 byte
Transfer memory  Inputs Outputs 244 byte  Protocols  SIMATIC communication  • S7 routing  Open IE communication  • ISO-on-TCP (RFC1006) Data length, max.  Web server  • supported  No  Isochronous mode  Equidistance  Number of DP masters with isochronous mode  User data per isochronous slave, max.  244 byte  shortest clock pulse 1 ms; 0.5 ms without use of SFC 126, 127  max. cycle  communication functions / header  PG/OP communication  • Number of connectable OPs with message processing • Number of connectable OPs without message processing Obata record routing  Pass	Transfer memory  — Inputs — Outputs  Protocols  SIMATIC communication • S7 routing  Open IE communication  • ISO-on-TCP (RFC1006) — Data length, max.  Web server • supported  No  Isochronous mode  Equidistance Number of DP masters with isochronous mode  User data per isochronous slave, max.  yele  communication functions / header  PG/OP communication • Number of connectable OPs with message processing • Number of connectable OPs without message processing • Number of GD loops, max. • Number of GD packets, transmitter, max. • Number of GD packets, receiver, max. • Size of GD packet, max.  • Size of GD packet (of which consistent), max.  • Static Communication  • Static Communication • Size of GD packet (of which consistent), max.  • Static Communication  • Size of GD packet (of which consistent), max.  • Static Communication  • Size of GD packet (of which consistent), max.  • Static Communication  • Size of GD packet (of which consistent), max.  • Static Communication  • Size of GD packet (of which consistent), max.  • Static Communication  • Size of GD packet (of which consistent), max.  • Static Communication  • Size of GD packet (of which consistent), max.  • Static Communication  • Size of GD packet (of which consistent), max.  • Static Communication	Yes  Via CP 443-1 and loadable FB 1 452 bytes via CP 443-1 Adv.  No  Yes 2 244 byte 1 ms; 0.5 ms without use of SFC 126, 127 32 ms  Yes 63; When using Alarm_S/SQ and Alarm_D/DQ 63 Yes  Yes 16 16 16 32 54 byte 1 variable		N. W. L. C. P.
Inputs Outputs -	— Inputs    — Outputs    — Outputs    — Outputs    — Outputs  SIMATIC communication    • S7 routing    Open IE communication    • ISO-on-TCP (RFC1006)    — Data length, max.    Web server    • supported    No  Isochronous mode  Equidistance Number of DP masters with isochronous mode User data per isochronous slave, max.  Shortest clock pulse max. cycle  communication functions / header  PG/OP communication    • Number of connectable OPs with message processing    • Number of connectable OPs without message processing    • Number of GD loops, max.    • Number of GD packets, transmitter, max.    • Number of GD packets, max.    • Size of GD packets, max.    • Size of GD packets, max.    • Size of GD packet (of which consistent), max.    • Size of GD packet (of which consistent), max.  S7 basic communication	Yes  Via CP 443-1 and loadable FB 1 452 bytes via CP 443-1 Adv.  No  Yes 2 244 byte 1 ms; 0.5 ms without use of SFC 126, 127 32 ms  Yes 63; When using Alarm_S/SQ and Alarm_D/DQ 63 Yes  Yes 16 16 16 32 54 byte 1 variable		Yes; with interface active
Protocols  SIMATIC communication  ST routing  Open IE communication  IsO-on-TCP (RFC1006)  Data length, max.  Via CP 443-1 and loadable FB  Data length, max.  Via CP 443-1 Adv.  Web server  Supported  No  Isochronous mode  Equidistance  Yes  Number of DP masters with isochronous mode  User data per isochronous slave, max.  shortest clock pulse  max. cycle  Communication functions / header  PG/OP communication  Number of connectable OPs with message processing  Number of connectable OPs without message processing  Number of connectable OPs without message processing  Oata record routing  Pes  Global data communication  Supported  Yes  Global data communication  Supported  Yes	Protocols  SIMATIC communication  Sof routing  Open IE communication  Iso-on-TCP (RFC1006)  Data length, max.  Via CP 443-1 and loadable FB  1 452 bytes via CP 443-1 Adv.  Web server  supported  No  Sochronous mode  Equidistance  Number of DP masters with isochronous mode  User data per isochronous slave, max.  shortest clock pulse  max. cycle  communication functions / header  PG/OP communication  Number of connectable OPs with message processing Number of connectable OPs without message processing Number of GD loops, max.  Number of GD packets, transmitter, max.  Number of GD packets, transmitter, max.  Number of GD packets, max.  Size of GD packets, max.  Size of GD packet (of which consistent), max.	Yes  Via CP 443-1 and loadable FB 1 452 bytes via CP 443-1 Adv.  No  Yes 2 244 byte 1 ms; 0.5 ms without use of SFC 126, 127 32 ms  Yes 63; When using Alarm_S/SQ and Alarm_D/DQ 63 Yes  Yes 16 16 16 32 54 byte 1 variable	·	
SIMATIC communication  Soluting  Sol	Protocols  SIMATIC communication  S7 routing  Pres  Open IE communication  ISO-on-TCP (RFC1006)  Data length, max.  Via CP 443-1 and loadable FB 1 452 bytes via CP 443-1 Adv.  Web server  Supported  No  Isochronous mode  Equidistance  Pumber of DP masters with isochronous mode 2 User data per isochronous slave, max.  Shortest clock pulse  max. cycle  communication functions / header  PG/OP communication  Number of connectable OPs with message processing Number of connectable OPs without message processing Number of connectable OPs without message processing Number of GD loops, max.  Number of GD packets, transmitter, max.  Number of GD packets, receiver, max.  Size of GD packets, max.  Size of GD packet (of which consistent), max.  1 variable  S7 basic communication	Yes  Via CP 443-1 and loadable FB 1 452 bytes via CP 443-1 Adv.  No  Yes 2 244 byte 1 ms; 0.5 ms without use of SFC 126, 127 32 ms  Yes 63; When using Alarm_S/SQ and Alarm_D/DQ 63 Yes  Yes 16 16 16 32 54 byte 1 variable	•	•
SIMATIC communication  ST routing  Open IE communication  ISO-on-TCP (RFC1006)  Data length, max.  Via CP 443-1 and loadable FB  1 452 bytes via CP 443-1 Adv.  Web server  supported  No  Isochronous mode  Equidistance  Equidistance  Yes  Number of DP masters with isochronous mode  2  User data per isochronous slave, max.  244 byte  shortest clock pulse  1 ms; 0.5 ms without use of SFC 126, 127  max. cycle  communication functions / header  PG/OP communication  Number of connectable OPs with message processing Number of connectable OPs without message processing Number of connectable OPs without message processing Star record routing  Pes  Global data communication  supported  Yes	SIMATIC communication  S7 routing  Pes  Open IE communication  ISO-on-TCP (RFC1006)  Data length, max.  Via CP 443-1 and loadable FB 1 452 bytes via CP 443-1 Adv.  Web server  supported  No  Isochronous mode  Equidistance  Number of DP masters with isochronous mode  User data per isochronous slave, max.  shortest clock pulse  max. cycle  communication functions / header  PG/OP communication  Number of connectable OPs with message processing Number of connectable OPs without message processing Number of GD loops, max.  Number of GD packets, transmitter, max.  Number of GD packets, receiver, max.  Size of GD packet (of which consistent), max.  S7 basic communication	Via CP 443-1 and loadable FB 1 452 bytes via CP 443-1 Adv.  No  Yes 2 244 byte 1 ms; 0.5 ms without use of SFC 126, 127 32 ms  Yes 63; When using Alarm_S/SQ and Alarm_D/DQ 63 Yes  Yes 16 16 16 32 54 byte 1 variable		244 byte
Strouting  Open IE communication  ISO-on-TCP (RFC1006)  Data length, max.  Via CP 443-1 and loadable FB  Data length, max.  1 452 bytes via CP 443-1 Adv.  Web server  supported  No  Isochronous mode  Equidistance  Yes  Number of DP masters with isochronous mode  User data per isochronous slave, max.  shortest clock pulse  max. cycle  communication functions / header  PG/OP communication  Number of connectable OPs with message processing Number of connectable OPs without message processing Number of connectable OPs without message processing Strong Alarm_S/SQ and Alarm_D/DQ  Alar record routing  Pes  Global data communication  supported  Yes	● S7 routing Open IE communication  ● ISO-on-TCP (RFC1006)  — Data length, max.  Web server  ● supported  Supported  Equidistance Number of DP masters with isochronous mode User data per isochronous slave, max.  shortest clock pulse max. cycle  PG/OP communication  ● Number of connectable OPs with message processing ● Number of connectable OPs without message processing ● Number of GD loops, max.  Passes of GD packets, transmitter, max.  ● Number of GD packets, max.  ● Size of GD packets (now hich consistent), max.  S7 basic communication  Via CP 443-1 and loadable FB  Via CP 443-1 and loadable FB  1 452 bytes via CP 443-1 Adv.  Via CP 443-1 and loadable FB  1 452 bytes via CP 443-1 and loadable FB  1 452 bytes via CP 443-1 and loadable FB  1 452 bytes via CP 443-1 and loadable FB  1 452 bytes via CP 443-1 and loadable FB  1 452 bytes via CP 443-1 and loadable FB  1 452 bytes via CP 443-1 and loadable FB  1 452 bytes via CP 443-1 and loadable FB  1 452 bytes via CP 443-1 and loadable FB  1 452 bytes via CP 443-1 and loadable FB  1 452 bytes via CP 443-1 and loadable FB  1 452 bytes via CP 443-1 and loadable FB  1 452 bytes via CP 443-1 and loadable FB  1 452 bytes via CP 443-1 and loadable FB  1 452 bytes via CP 443-1 and loadable FB  1 452 bytes via CP 443-1 and loadable FB  1 452 bytes via CP 443-1 and loadable FB  1 452 bytes via CP 443-1 and loadable FB  1 452 bytes via CP 443-1 Adv.  Ves  63; When using Alarm_S/SQ and  64; When using Alarm_S/SQ and  65; When using Alarm_S/SQ and  65; When using Alarm_S/SQ and  64; When using Alarm_S/SQ and  65; When using Alarm_S/SQ and  66; When using Alarm_S/SQ and  67; When using Alarm_S/SQ and  68; When using Alarm_S/SQ and  69; When	Via CP 443-1 and loadable FB 1 452 bytes via CP 443-1 Adv.  No  Yes 2 244 byte 1 ms; 0.5 ms without use of SFC 126, 127 32 ms  Yes 63; When using Alarm_S/SQ and Alarm_D/DQ 63 Yes  Yes 16 16 16 32 54 byte 1 variable	Protocols	
Open IE communication  ISO-on-TCP (RFC1006) Data length, max.  Via CP 443-1 and loadable FB Data length, max.  Via CP 443-1 and loadable FB Via CP 443-1 Adv.  Web server Supported No  Isochronous mode  Equidistance Yes Number of DP masters with isochronous mode 2 User data per isochronous slave, max. 244 byte shortest clock pulse 1 ms; 0.5 ms without use of SFC 126, 127 max. cycle 32 ms  communication functions / header  PG/OP communication Number of connectable OPs with message processing Number of connectable OPs without message processing Number of connectable OPs without message processing Obata record routing Yes Global data communication supported Yes	Open IE communication  ISO-on-TCP (RFC1006) Data length, max.  Web server supported Supported  Equidistance Number of DP masters with isochronous mode User data per isochronous slave, max. Shortest clock pulse Number of connectable OPs with message processing Number of connectable OPs without message processing Number of Connectable OPs without message processing Supported Number of GD loops, max. Number of GD packets, transmitter, max. Number of GD packets, max. Size of GD packet (of which consistent), max.  Via CP 443-1 and loadable FB 1 452 bytes via CP 443-1 Adv.  Via CP 443-1 and loadable FB 1 452 bytes via CP 443-1 Adv.  Via CP 443-1 and loadable FB 1 452 bytes via CP 443-1 and loadable FB 1 452 bytes via CP 443-1 and loadable FB 1 452 bytes via CP 443-1 and loadable FB 1 452 bytes via CP 443-1 and loadable FB 1 452 bytes via CP 443-1 and loadable FB 1 452 bytes via CP 443-1 and loadable FB 1 452 bytes via CP 443-1 and loadable FB 1 452 bytes via CP 443-1 and loadable FB 1 452 bytes via CP 443-1 and loadable FB 1 452 bytes via CP 443-1 and loadable FB 1 452 bytes via CP 443-1 Adv.  Ves  Size of GD packets, max. Size of GD packets, max. Size of GD packet (of which consistent), max.	Via CP 443-1 and loadable FB 1 452 bytes via CP 443-1 Adv.  No  Yes 2 244 byte 1 ms; 0.5 ms without use of SFC 126, 127 32 ms  Yes 63; When using Alarm_S/SQ and Alarm_D/DQ 63 Yes  Yes 16 16 16 32 54 byte 1 variable	ONATIO : "	
● ISO-on-TCP (RFC1006)  — Data length, max.  1 452 bytes via CP 443-1 Adv.  Web server  ● supported  No  Isochronous mode  Equidistance  Number of DP masters with isochronous mode  User data per isochronous slave, max.  shortest clock pulse  max. cycle  communication functions / header  PG/OP communication  ● Number of connectable OPs with message processing  ● Number of connectable OPs without message processing  Other isochronous Slave, max.  Yes  63; When using Alarm_S/SQ and Alarm_D/DQ  ● Number of connectable OPs without message processing  Other isochronous Slave, max.  Yes  Global data communication  ● supported  Yes	● ISO-on-TCP (RFC1006)  — Data length, max.  Web server  ● supported  No  Isochronous mode  Equidistance  Number of DP masters with isochronous mode  User data per isochronous slave, max.  shortest clock pulse  max. cycle  communication functions / header  PG/OP communication  ● Number of connectable OPs with message processing  ● Number of connectable OPs without message processing  Obata record routing  Psychological data communication  ● supported  ● Number of GD loops, max.  ● Number of GD packets, transmitter, max.  ● Number of GD packets, receiver, max.  ● Size of GD packet (of which consistent), max.  State of GD packet (of which consistent), max.  State of GD packet (of which consistent), max.  State of GD packet (of which consistent), max.	1 452 bytes via CP 443-1 Adv.  No  Yes 2 244 byte 1 ms; 0.5 ms without use of SFC 126, 127 32 ms  Yes 63; When using Alarm_S/SQ and Alarm_D/DQ 63 Yes  Yes 16 16 16 32 54 byte 1 variable		V.
— Data length, max.  Web server  ● supported  No  Isochronous mode  Equidistance  Number of DP masters with isochronous mode  User data per isochronous slave, max.  shortest clock pulse  max. cycle  communication functions / header  PG/OP communication  ● Number of connectable OPs with message processing  Number of connectable OPs without message processing  Olata record routing  Pes  Global data communication  ● supported  1 452 bytes via CP 443-1 Adv.  No  No  Yes  244 byte  1 ms; 0.5 ms without use of SFC 126, 127  32 ms  Communication functions / header  Yes  Olata record routing  Yes  Global data communication  ● supported	— Data length, max.  Web server  ● supported  No  Isochronous mode  Equidistance  Number of DP masters with isochronous mode  User data per isochronous slave, max.  shortest clock pulse  max. cycle  communication functions / header  PG/OP communication  ● Number of connectable OPs with message processing  ● Number of connectable OPs without message processing  Obata record routing  Global data communication  ● supported  ● Number of GD loops, max.  ● Number of GD packets, transmitter, max.  ● Number of GD packets, receiver, max.  ● Size of GD packet (of which consistent), max.  ST basic communication	1 452 bytes via CP 443-1 Adv.  No  Yes 2 244 byte 1 ms; 0.5 ms without use of SFC 126, 127 32 ms  Yes 63; When using Alarm_S/SQ and Alarm_D/DQ 63 Yes  Yes 16 16 16 32 54 byte 1 variable	S7 routing	Yes
● supported  ● supported  No  Isochronous mode  Equidistance  Number of DP masters with isochronous mode  User data per isochronous slave, max.  shortest clock pulse  max. cycle  communication functions / header  PG/OP communication  ● Number of connectable OPs with message processing  Number of connectable OPs without message processing  Other images is a supported supported in the supported	Web server  ● supported  Isochronous mode  Equidistance  Number of DP masters with isochronous mode  User data per isochronous slave, max.  shortest clock pulse  max. cycle  communication functions / header  PG/OP communication  ● Number of connectable OPs with message processing  ● Number of connectable OPs without message processing  Otata record routing  Global data communication  ● supported  ● Number of GD loops, max.  ● Number of GD packets, transmitter, max.  ● Number of GD packets, receiver, max.  ● Size of GD packets, max.  ● Size of GD packet (of which consistent), max.  S7 basic communication	Yes 2 244 byte 1 ms; 0.5 ms without use of SFC 126, 127 32 ms  Yes 63; When using Alarm_S/SQ and Alarm_D/DQ 63 Yes  Yes 16 16 32 54 byte 1 variable	S7 routing Open IE communication	
● supported  Isochronous mode  Equidistance  Equidistance  Number of DP masters with isochronous mode  User data per isochronous slave, max.  shortest clock pulse  max. cycle  communication functions / header  PG/OP communication  • Number of connectable OPs with message processing  • Number of connectable OPs without message processing  Old a record routing  Pdes  Global data communication  • supported  No  No  No  Yes  63  When using Alarm_S/SQ and Alarm_D/DQ  Fyes  Global data communication  • supported  Yes	● supported  Isochronous mode  Equidistance  Number of DP masters with isochronous mode  User data per isochronous slave, max.  shortest clock pulse  max. cycle  2244 byte  32 ms  communication functions / header  PG/OP communication  • Number of connectable OPs with message processing • Number of connectable OPs without message processing  • Number of connectable OPs without message processing  Olata record routing  Global data communication  • supported • Number of GD loops, max.  • Number of GD packets, transmitter, max.  • Number of GD packets, receiver, max.  • Size of GD packets, max.  • Size of GD packet (of which consistent), max.  S7 basic communication	Yes 2 244 byte 1 ms; 0.5 ms without use of SFC 126, 127 32 ms  Yes 63; When using Alarm_S/SQ and Alarm_D/DQ 63 Yes  Yes 16 16 16 32 54 byte 1 variable	<ul><li>S7 routing</li><li>Open IE communication</li><li>ISO-on-TCP (RFC1006)</li></ul>	Via CP 443-1 and loadable FB
Equidistance	Equidistance	Yes 2 244 byte 1 ms; 0.5 ms without use of SFC 126, 127 32 ms  Yes 63; When using Alarm_S/SQ and Alarm_D/DQ 63 Yes  Yes 16 16 16 32 54 byte 1 variable	<ul> <li>S7 routing</li> <li>Open IE communication</li> <li>ISO-on-TCP (RFC1006)</li> <li>— Data length, max.</li> </ul>	Via CP 443-1 and loadable FB
Equidistance  Number of DP masters with isochronous mode  User data per isochronous slave, max.  244 byte  shortest clock pulse  max. cycle  communication functions / header  PG/OP communication  Number of connectable OPs with message processing  Number of connectable OPs without message processing  Number of connectable OPs without message processing  State record routing  Global data communication  supported  Yes  Global communication  Yes  Yes	Equidistance  Number of DP masters with isochronous mode  User data per isochronous slave, max.  shortest clock pulse  max. cycle  communication functions / header  PG/OP communication  Number of connectable OPs with message processing Number of connectable OPs without message processing Number of connectable OPs without message processing  Number of connectable OPs without message processing  Obtain record routing  Global data communication  supported  Number of GD loops, max.  Number of GD packets, transmitter, max.  Number of GD packets, receiver, max.  Size of GD packets, max.  Size of GD packet (of which consistent), max.  Size of GD packet (of which consistent), max.  Size of GD packet (of which consistent), max.	2 244 byte 1 ms; 0.5 ms without use of SFC 126, 127 32 ms  Yes 63; When using Alarm_S/SQ and Alarm_D/DQ 63 Yes  Yes 16 16 32 54 byte 1 variable	S7 routing  Open IE communication  ISO-on-TCP (RFC1006)  — Data length, max.  Web server	Via CP 443-1 and loadable FB 1 452 bytes via CP 443-1 Adv.
Number of DP masters with isochronous mode  User data per isochronous slave, max.  shortest clock pulse  1 ms; 0.5 ms without use of SFC 126, 127  max. cycle  32 ms  communication functions / header  PG/OP communication  • Number of connectable OPs with message processing  • Number of connectable OPs without message processing  • Number of connectable OPs without message processing  Obata record routing  Global data communication  • supported  Yes	Number of DP masters with isochronous mode  User data per isochronous slave, max.  shortest clock pulse  max. cycle  PG/OP communication / header  PG/OP communication  Number of connectable OPs with message processing Number of connectable OPs without message processing Number of connectable OPs without message processing  Data record routing  Pes  Global data communication  supported  Number of GD loops, max.  Number of GD packets, transmitter, max.  Number of GD packets, receiver, max.  Size of GD packet (of which consistent), max.  Size of GD packet (of which consistent), max.	2 244 byte 1 ms; 0.5 ms without use of SFC 126, 127 32 ms  Yes 63; When using Alarm_S/SQ and Alarm_D/DQ 63 Yes  Yes 16 16 32 54 byte 1 variable	S7 routing  Open IE communication  ISO-on-TCP (RFC1006)  — Data length, max.  Web server  supported	Via CP 443-1 and loadable FB 1 452 bytes via CP 443-1 Adv.
User data per isochronous slave, max.  shortest clock pulse  1 ms; 0.5 ms without use of SFC 126, 127  max. cycle  232 ms  communication functions / header  PG/OP communication  • Number of connectable OPs with message processing • Number of connectable OPs without message processing  • Number of connectable OPs without message processing  Global data communication  • supported  244 byte  244 byte  245  247  248  249  249  249  249  249  249  249	User data per isochronous slave, max.  shortest clock pulse  max. cycle  communication functions / header  PG/OP communication  Number of connectable OPs with message processing Number of connectable OPs without message processing  Number of connectable OPs without message processing  Data record routing  Yes  Global data communication  supported  Number of GD loops, max.  Number of GD packets, transmitter, max.  Number of GD packets, receiver, max.  Size of GD packets, max.  Size of GD packet (of which consistent), max.  Size of GD packet (of which consistent), max.	244 byte  1 ms; 0.5 ms without use of SFC 126, 127  32 ms  Yes 63; When using Alarm_S/SQ and Alarm_D/DQ 63 Yes  Yes 16 16 32 54 byte 1 variable	S7 routing Open IE communication  ISO-on-TCP (RFC1006)  — Data length, max.  Web server  supported Isochronous mode	Via CP 443-1 and loadable FB 1 452 bytes via CP 443-1 Adv. No
shortest clock pulse  1 ms; 0.5 ms without use of SFC 126, 127  max. cycle  22 ms  communication functions / header  PG/OP communication  Number of connectable OPs with message processing Number of connectable OPs without message processing Number of connectable OPs without message processing Data record routing  Pes  Global data communication  supported  Yes	shortest clock pulse  max. cycle  32 ms  communication functions / header  PG/OP communication  • Number of connectable OPs with message processing • Number of connectable OPs without message processing  Otata record routing  Global data communication  • supported • Number of GD loops, max.  • Number of GD packets, transmitter, max.  • Number of GD packets, receiver, max.  • Size of GD packet (of which consistent), max.  1 ms; 0.5 ms without use of SFC or 32 ms  2 ms  Yes  63; When using Alarm_S/SQ and 63  Yes  63  Pes	1 ms; 0.5 ms without use of SFC 126, 127 32 ms  Yes 63; When using Alarm_S/SQ and Alarm_D/DQ 63 Yes  Yes 16 16 32 54 byte 1 variable	S7 routing  Open IE communication  ISO-on-TCP (RFC1006)  — Data length, max.  Web server  supported  Isochronous mode  Equidistance	Via CP 443-1 and loadable FB 1 452 bytes via CP 443-1 Adv.  No  Yes
max. cycle  communication functions / header  PG/OP communication  • Number of connectable OPs with message processing  • Number of connectable OPs without message processing  • Number of connectable OPs without message processing  Data record routing  Clobal data communication  • supported  32 ms  Yes  63; When using Alarm_S/SQ and Alarm_D/DQ  Yes  Yes	max. cycle  communication functions / header  PG/OP communication  Number of connectable OPs with message processing Number of connectable OPs without message processing  Number of connectable OPs without message processing  Data record routing  Global data communication  supported  Number of GD loops, max.  Number of GD packets, transmitter, max.  Number of GD packets, receiver, max.  Size of GD packets, max.  Size of GD packet (of which consistent), max.  Size of GD packet (of which consistent), max.	Yes 63; When using Alarm_S/SQ and Alarm_D/DQ 63 Yes  Yes 16 16 32 54 byte 1 variable	S7 routing Open IE communication  ISO-on-TCP (RFC1006)  — Data length, max.  Web server  supported  Isochronous mode  Equidistance  Number of DP masters with isochronous mode	Via CP 443-1 and loadable FB 1 452 bytes via CP 443-1 Adv.  No  Yes 2
Communication functions / header  PG/OP communication  • Number of connectable OPs with message processing  • Number of connectable OPs without message processing  • Number of connectable OPs without message processing  Data record routing  Global data communication  • supported  Yes	Communication functions / header  PG/OP communication  Number of connectable OPs with message processing Number of connectable OPs without message processing  Data record routing  Global data communication  supported Number of GD loops, max.  Number of GD packets, transmitter, max.  Number of GD packets, receiver, max.  Number of GD packets, max.  Size of GD packet (of which consistent), max.  Size of GD packet (of which consistent), max.	Yes 63; When using Alarm_S/SQ and Alarm_D/DQ 63 Yes  Yes 16 16 32 54 byte 1 variable	S7 routing Open IE communication  ISO-on-TCP (RFC1006)  — Data length, max.  Web server  supported  Isochronous mode  Equidistance  Number of DP masters with isochronous mode	Via CP 443-1 and loadable FB 1 452 bytes via CP 443-1 Adv.  No  Yes 2 244 byte
PG/OP communication  Number of connectable OPs with message processing  Number of connectable OPs without message processing  Number of connectable OPs without message processing  Data record routing  Global data communication  supported  Yes  Yes	PG/OP communication  Number of connectable OPs with message processing Number of connectable OPs without message processing  Data record routing  Global data communication  supported Number of GD loops, max. Number of GD packets, transmitter, max. Number of GD packets, receiver, max. Size of GD packets, max. Size of GD packet (of which consistent), max.  Size of GD packet (of which consistent), max.  Yes  16  32  34  54 byte  1 variable	63; When using Alarm_S/SQ and Alarm_D/DQ 63 Yes  Yes 16 16 32 54 byte 1 variable	S7 routing  Open IE communication  ISO-on-TCP (RFC1006)  — Data length, max.  Web server  supported  Isochronous mode  Equidistance  Number of DP masters with isochronous mode  User data per isochronous slave, max.  shortest clock pulse	Via CP 443-1 and loadable FB 1 452 bytes via CP 443-1 Adv.  No  Yes 2 244 byte
<ul> <li>Number of connectable OPs with message processing</li> <li>Number of connectable OPs without message processing</li> <li>Data record routing</li> <li>Global data communication</li> <li>supported</li> <li>Yes</li> </ul>	<ul> <li>Number of connectable OPs with message processing</li> <li>Number of connectable OPs without message processing</li> <li>Data record routing</li> <li>Global data communication</li> <li>supported</li> <li>Number of GD loops, max.</li> <li>Number of GD packets, transmitter, max.</li> <li>Number of GD packets, receiver, max.</li> <li>Size of GD packets, max.</li> <li>Size of GD packet (of which consistent), max.</li> <li>Yes</li> <li>16</li> <li>32</li> <li>4 byte</li> <li>Size of GD packet (of which consistent), max.</li> <li>1 variable</li> </ul>	63; When using Alarm_S/SQ and Alarm_D/DQ 63 Yes  Yes 16 16 32 54 byte 1 variable	S7 routing  Open IE communication  ISO-on-TCP (RFC1006)  — Data length, max.  Web server  supported  Isochronous mode  Equidistance  Number of DP masters with isochronous mode  User data per isochronous slave, max.  shortest clock pulse  max. cycle	Via CP 443-1 and loadable FB 1 452 bytes via CP 443-1 Adv.  No  Yes 2 244 byte 1 ms; 0.5 ms without use of SFC 126, 127
<ul> <li>Number of connectable OPs without message processing</li> <li>Data record routing</li> <li>Global data communication</li> <li>supported</li> <li>Yes</li> </ul>	<ul> <li>Number of connectable OPs without message processing</li> <li>Data record routing</li> <li>Global data communication</li> <li>supported</li> <li>Number of GD loops, max.</li> <li>Number of GD packets, transmitter, max.</li> <li>Number of GD packets, receiver, max.</li> <li>Size of GD packets, max.</li> <li>Size of GD packet (of which consistent), max.</li> <li>Yes</li> <li>16</li> <li>32</li> <li>54 byte</li> <li>Size of GD packet (of which consistent), max.</li> <li>1 variable</li> </ul>	63 Yes  Yes  16 16 32 54 byte 1 variable	S7 routing  Open IE communication  ISO-on-TCP (RFC1006)  — Data length, max.  Web server  supported  Isochronous mode  Equidistance  Number of DP masters with isochronous mode  User data per isochronous slave, max.  shortest clock pulse  max. cycle	Via CP 443-1 and loadable FB 1 452 bytes via CP 443-1 Adv.  No  Yes 2 244 byte 1 ms; 0.5 ms without use of SFC 126, 127
Data record routing  Yes  Global data communication  • supported  Yes	Data record routing  Global data communication  • supported • Number of GD loops, max. • Number of GD packets, transmitter, max. • Number of GD packets, receiver, max. • Size of GD packets, max. • Size of GD packet (of which consistent), max.  S7 basic communication	Yes  Yes  16  16  32  54 byte  1 variable	S7 routing Open IE communication  ISO-on-TCP (RFC1006)  Data length, max.  Web server supported Isochronous mode Equidistance Number of DP masters with isochronous mode User data per isochronous slave, max. shortest clock pulse max. cycle communication functions / header	Via CP 443-1 and loadable FB 1 452 bytes via CP 443-1 Adv.  No  Yes 2 244 byte 1 ms; 0.5 ms without use of SFC 126, 127 32 ms
Global data communication  • supported Yes	Global data communication  • supported  • Number of GD loops, max.  • Number of GD packets, transmitter, max.  • Number of GD packets, receiver, max.  • Size of GD packets, max.  • Size of GD packet (of which consistent), max.  S7 basic communication	Yes 16 16 32 54 byte 1 variable	S7 routing  Open IE communication  ISO-on-TCP (RFC1006)  — Data length, max.  Web server  supported  Isochronous mode  Equidistance  Number of DP masters with isochronous mode  User data per isochronous slave, max.  shortest clock pulse  max. cycle  communication functions / header  PG/OP communication	Via CP 443-1 and loadable FB 1 452 bytes via CP 443-1 Adv.  No  Yes 2 244 byte 1 ms; 0.5 ms without use of SFC 126, 127 32 ms  Yes
• supported Yes	<ul> <li>supported</li> <li>Number of GD loops, max.</li> <li>Number of GD packets, transmitter, max.</li> <li>Number of GD packets, receiver, max.</li> <li>Size of GD packets, max.</li> <li>Size of GD packet (of which consistent), max.</li> <li>Yes</li> <li>16</li> <li>32</li> <li>54 byte</li> <li>Size of GD packet (of which consistent), max.</li> <li>1 variable</li> </ul>	16 16 32 54 byte 1 variable	S7 routing  Open IE communication  ISO-on-TCP (RFC1006)  — Data length, max.  Web server  supported  Isochronous mode  Equidistance  Number of DP masters with isochronous mode  User data per isochronous slave, max.  shortest clock pulse  max. cycle  communication functions / header  PG/OP communication  Number of connectable OPs with message processing	Via CP 443-1 and loadable FB 1 452 bytes via CP 443-1 Adv.  No  Yes 2 244 byte 1 ms; 0.5 ms without use of SFC 126, 127 32 ms  Yes 63; When using Alarm_S/SQ and Alarm_D/DQ
	<ul> <li>Number of GD loops, max.</li> <li>Number of GD packets, transmitter, max.</li> <li>Number of GD packets, receiver, max.</li> <li>Size of GD packets, max.</li> <li>Size of GD packet (of which consistent), max.</li> <li>S7 basic communication</li> </ul>	16 16 32 54 byte 1 variable	S7 routing  Open IE communication  ISO-on-TCP (RFC1006)  — Data length, max.  Web server  supported  Isochronous mode  Equidistance  Number of DP masters with isochronous mode  User data per isochronous slave, max.  shortest clock pulse  max. cycle  communication functions / header  PG/OP communication  Number of connectable OPs without message processing  Number of connectable OPs without message processing	Via CP 443-1 and loadable FB 1 452 bytes via CP 443-1 Adv.  No  Yes 2 244 byte 1 ms; 0.5 ms without use of SFC 126, 127 32 ms  Yes 63; When using Alarm_S/SQ and Alarm_D/DQ 63
Number of GD loops, max.	<ul> <li>Number of GD packets, transmitter, max.</li> <li>Number of GD packets, receiver, max.</li> <li>Size of GD packets, max.</li> <li>Size of GD packet (of which consistent), max.</li> <li>S7 basic communication</li> </ul>	16 32 54 byte 1 variable	S7 routing  Open IE communication  ISO-on-TCP (RFC1006)  — Data length, max.  Web server  • supported  Isochronous mode  Equidistance  Number of DP masters with isochronous mode  User data per isochronous slave, max.  shortest clock pulse  max. cycle  communication functions / header  PG/OP communication  • Number of connectable OPs with message processing  • Number of connectable OPs without message processing  Data record routing	Via CP 443-1 and loadable FB 1 452 bytes via CP 443-1 Adv.  No  Yes 2 244 byte 1 ms; 0.5 ms without use of SFC 126, 127 32 ms  Yes 63; When using Alarm_S/SQ and Alarm_D/DQ 63
	<ul> <li>Number of GD packets, receiver, max.</li> <li>Size of GD packets, max.</li> <li>Size of GD packet (of which consistent), max.</li> <li>S7 basic communication</li> </ul>	32 54 byte 1 variable	S7 routing  Open IE communication  ISO-on-TCP (RFC1006)  — Data length, max.  Web server  supported  Isochronous mode  Equidistance  Number of DP masters with isochronous mode  User data per isochronous slave, max.  shortest clock pulse  max. cycle  communication functions / header  PG/OP communication  Number of connectable OPs with message processing  Number of connectable OPs without message processing  Data record routing  Global data communication	Via CP 443-1 and loadable FB 1 452 bytes via CP 443-1 Adv.  No  Yes 2 244 byte 1 ms; 0.5 ms without use of SFC 126, 127 32 ms  Yes 63; When using Alarm_S/SQ and Alarm_D/DQ 63 Yes
Number of GD packets, transmitter, max.	<ul> <li>Size of GD packets, max.</li> <li>Size of GD packet (of which consistent), max.</li> <li>S7 basic communication</li> </ul>	54 byte 1 variable	S7 routing  Open IE communication  ISO-on-TCP (RFC1006)  — Data length, max.  Web server  supported  Isochronous mode  Equidistance  Number of DP masters with isochronous mode  User data per isochronous slave, max. shortest clock pulse  max. cycle  communication functions / header  PG/OP communication  Number of connectable OPs with message processing  Number of connectable OPs without message processing  Data record routing  Global data communication  supported	Via CP 443-1 and loadable FB 1 452 bytes via CP 443-1 Adv.  No  Yes 2 244 byte 1 ms; 0.5 ms without use of SFC 126, 127 32 ms  Yes 63; When using Alarm_S/SQ and Alarm_D/DQ 63 Yes  Yes
Number of GD packets, receiver, max.     32	• Size of GD packet (of which consistent), max.  1 variable  S7 basic communication	1 variable	S7 routing  Open IE communication  ISO-on-TCP (RFC1006)  — Data length, max.  Web server  supported  Isochronous mode  Equidistance  Number of DP masters with isochronous mode  User data per isochronous slave, max.  shortest clock pulse  max. cycle  communication functions / header  PG/OP communication  Number of connectable OPs with message processing  Number of connectable OPs without message processing  Data record routing  Global data communication  supported  Number of GD loops, max.	Via CP 443-1 and loadable FB 1 452 bytes via CP 443-1 Adv.  No  Yes 2 244 byte 1 ms; 0.5 ms without use of SFC 126, 127 32 ms  Yes 63; When using Alarm_S/SQ and Alarm_D/DQ 63 Yes  Yes 16
• Size of GD packets, max. 54 byte	Size of GD packet (of which consistent), max.  1 variable  S7 basic communication		S7 routing  Open IE communication  ISO-on-TCP (RFC1006)  — Data length, max.  Web server  supported  Isochronous mode  Equidistance  Number of DP masters with isochronous mode  User data per isochronous slave, max.  shortest clock pulse  max. cycle  communication functions / header  PG/OP communication  Number of connectable OPs with message processing  Number of connectable OPs without message processing  Data record routing  Global data communication  supported  Number of GD loops, max.  Number of GD packets, transmitter, max.	Via CP 443-1 and loadable FB 1 452 bytes via CP 443-1 Adv.  No  Yes 2 244 byte 1 ms; 0.5 ms without use of SFC 126, 127 32 ms  Yes 63; When using Alarm_S/SQ and Alarm_D/DQ 63 Yes  Yes 16 16
	S7 basic communication		S7 routing  Open IE communication  ISO-on-TCP (RFC1006)  — Data length, max.  Web server  supported  Isochronous mode  Equidistance  Number of DP masters with isochronous mode  User data per isochronous slave, max.  shortest clock pulse  max. cycle  communication functions / header  PG/OP communication  Number of connectable OPs with message processing  Number of connectable OPs without message processing  Data record routing  Global data communication  supported  Number of GD loops, max.  Number of GD packets, transmitter, max.  Number of GD packets, receiver, max.	Via CP 443-1 and loadable FB 1 452 bytes via CP 443-1 Adv.  No  Yes 2 244 byte 1 ms; 0.5 ms without use of SFC 126, 127 32 ms  Yes 63; When using Alarm_S/SQ and Alarm_D/DQ 63 Yes  Yes 16 16 16 32
	• supported Yes		S7 routing  Open IE communication  ISO-on-TCP (RFC1006)  — Data length, max.  Web server  • supported  Isochronous mode  Equidistance  Number of DP masters with isochronous mode  User data per isochronous slave, max.  shortest clock pulse  max. cycle  communication functions / header  PG/OP communication  • Number of connectable OPs with message processing  • Number of connectable OPs without message processing  Data record routing  Global data communication  • supported  • Number of GD loops, max.  • Number of GD packets, transmitter, max.  • Number of GD packets, receiver, max.  • Size of GD packets, max.	Via CP 443-1 and loadable FB 1 452 bytes via CP 443-1 Adv.  No  Yes 2 244 byte 1 ms; 0.5 ms without use of SFC 126, 127 32 ms  Yes 63; When using Alarm_S/SQ and Alarm_D/DQ 63 Yes  Yes 16 16 16 32 54 byte
• supported Yes		Yes	S7 routing  Open IE communication  ISO-on-TCP (RFC1006)  — Data length, max.  Web server  supported  Isochronous mode  Equidistance  Number of DP masters with isochronous mode  User data per isochronous slave, max.  shortest clock pulse  max. cycle  communication functions / header  PG/OP communication  Number of connectable OPs with message processing  Number of connectable OPs without message processing  Data record routing  Global data communication  supported  Number of GD loops, max.  Number of GD packets, transmitter, max.  Number of GD packets, receiver, max.  Size of GD packets, max.  Size of GD packet (of which consistent), max.	Via CP 443-1 and loadable FB 1 452 bytes via CP 443-1 Adv.  No  Yes 2 244 byte 1 ms; 0.5 ms without use of SFC 126, 127 32 ms  Yes 63; When using Alarm_S/SQ and Alarm_D/DQ 63 Yes  Yes 16 16 16 32 54 byte
• User data per job, max. 76 byte			S7 routing  Open IE communication  ISO-on-TCP (RFC1006)  — Data length, max.  Web server  supported  Isochronous mode  Equidistance  Number of DP masters with isochronous mode  User data per isochronous slave, max.  shortest clock pulse  max. cycle  communication functions / header  PG/OP communication  Number of connectable OPs with message processing  Number of connectable OPs without message processing  Data record routing  Global data communication  supported  Number of GD loops, max.  Number of GD packets, transmitter, max.  Number of GD packets, receiver, max.  Size of GD packet (of which consistent), max.  S7 basic communication	Via CP 443-1 and loadable FB 1 452 bytes via CP 443-1 Adv.  No  Yes 2 244 byte 1 ms; 0.5 ms without use of SFC 126, 127 32 ms  Yes 63; When using Alarm_S/SQ and Alarm_D/DQ 63 Yes  Yes 16 16 16 32 54 byte 1 variable
		1 variable	S7 routing  Open IE communication  ISO-on-TCP (RFC1006)  — Data length, max.  Web server  supported  Isochronous mode  Equidistance  Number of DP masters with isochronous mode  User data per isochronous slave, max.  shortest clock pulse  max. cycle  communication functions / header  PG/OP communication  Number of connectable OPs with message processing  Number of connectable OPs without message processing  Data record routing  Global data communication  supported  Number of GD loops, max.  Number of GD packets, transmitter, max.  Number of GD packets, receiver, max.  Size of GD packet (of which consistent), max.  S7 basic communication  supported	Via CP 443-1 and loadable FB 1 452 bytes via CP 443-1 Adv.  No  Yes 2 244 byte 1 ms; 0.5 ms without use of SFC 126, 127 32 ms  Yes 63; When using Alarm_S/SQ and Alarm_D/DQ 63 Yes  Yes 16 16 32 54 byte 1 variable  Yes

C7 communication	
S7 communication	Von
• supported	Yes
as server	Yes
• as client	Yes
<ul> <li>User data per job, max.</li> </ul>	64 kbyte
User data per job (of which consistent), max.	462 byte; 1 variable
S5 compatible communication	
<ul><li>supported</li></ul>	Yes; Via FC AG_SEND and AG_RECV, max. via 10 CP 443-1 or 443-5
<ul> <li>User data per job, max.</li> </ul>	8 kbyte
<ul> <li>User data per job (of which consistent), max.</li> </ul>	240 byte
<ul> <li>Number of simultaneous AG-SEND/AG-RECV orders per</li> </ul>	64/64
CPU, max.	
Standard communication (FMS)	
supported	Yes; Via CP and loadable FB
Number of connections	
• overall	64
<ul> <li>usable for PG communication</li> </ul>	63
<ul> <li>reserved for PG communication</li> </ul>	1
<ul> <li>adjustable for PG communication, max.</li> </ul>	0
<ul> <li>usable for OP communication</li> </ul>	63
<ul> <li>reserved for OP communication</li> </ul>	1
<ul> <li>adjustable for OP communication, max.</li> </ul>	0
<ul> <li>usable for S7 basic communication</li> </ul>	62
<ul> <li>reserved for S7 basic communication</li> </ul>	0
<ul> <li>adjustable for S7 basic communication, max.</li> </ul>	0
<ul> <li>usable for S7 communication</li> </ul>	62
<ul> <li>reserved for S7 communication</li> </ul>	0
<ul> <li>adjustable for S7 communication, max.</li> </ul>	0
<ul><li>usable for routing</li></ul>	31
— reserved for routing	0
— adjustable for routing, max.	0
S7 message functions	
Number of login stations for message functions, max.	63; Max. 63 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	Alarm_8, Alarm_8P, Notify and Notify_8 (e.g. WinCC) Yes
Symbol-related messages	Yes
Symbol-related messages SCAN procedure	Yes Yes
Symbol-related messages SCAN procedure Program alarms	Yes Yes Yes Yes
Symbol-related messages SCAN procedure Program alarms Process diagnostic messages	Yes Yes Yes
Symbol-related messages SCAN procedure Program alarms Process diagnostic messages simultaneously active Alarm_S blocks, max.	Yes Yes Yes Yes Yes 1 000; Simultaneously active alarm_S/SQ blocks or alarm_D/DQ blocks
Symbol-related messages  SCAN procedure  Program alarms  Process diagnostic messages  simultaneously active Alarm_S blocks, max.  Alarm 8-blocks	Yes Yes Yes Yes Yes 1 000; Simultaneously active alarm_S/SQ blocks or alarm_D/DQ blocks Yes
Symbol-related messages  SCAN procedure  Program alarms  Process diagnostic messages simultaneously active Alarm_S blocks, max.  Alarm 8-blocks  • Number of instances for alarm 8 and S7 communication	Yes Yes Yes Yes Yes 1 000; Simultaneously active alarm_S/SQ blocks or alarm_D/DQ blocks Yes
Symbol-related messages  SCAN procedure  Program alarms  Process diagnostic messages  simultaneously active Alarm_S blocks, max.  Alarm 8-blocks  • Number of instances for alarm 8 and S7 communication blocks, max.	Yes Yes Yes Yes Yes 1 000; Simultaneously active alarm_S/SQ blocks or alarm_D/DQ blocks Yes 4 000
Symbol-related messages  SCAN procedure  Program alarms  Process diagnostic messages simultaneously active Alarm_S blocks, max.  Alarm 8-blocks  Number of instances for alarm 8 and S7 communication blocks, max.  preset, max.	Yes Yes Yes Yes Yes 1 000; Simultaneously active alarm_S/SQ blocks or alarm_D/DQ blocks Yes 4 000 600
Symbol-related messages  SCAN procedure  Program alarms  Process diagnostic messages simultaneously active Alarm_S blocks, max.  Alarm 8-blocks  Number of instances for alarm 8 and S7 communication blocks, max.  process control messages  Number of archives that can log on simultaneously (SFB 37	Yes Yes Yes Yes 1 000; Simultaneously active alarm_S/SQ blocks or alarm_D/DQ blocks Yes 4 000 600 Yes
Symbol-related messages  SCAN procedure  Program alarms  Process diagnostic messages simultaneously active Alarm_S blocks, max.  Alarm 8-blocks  Number of instances for alarm 8 and S7 communication blocks, max.  preset, max.  Process control messages  Number of archives that can log on simultaneously (SFB 37 AR_SEND)	Yes Yes Yes Yes 1 000; Simultaneously active alarm_S/SQ blocks or alarm_D/DQ blocks Yes 4 000 600 Yes
Symbol-related messages  SCAN procedure  Program alarms  Process diagnostic messages  simultaneously active Alarm_S blocks, max.  Alarm 8-blocks  • Number of instances for alarm 8 and S7 communication blocks, max.  • preset, max.  Process control messages  Number of archives that can log on simultaneously (SFB 37 AR_SEND)  Number of messages	Yes Yes Yes Yes 1 000; Simultaneously active alarm_S/SQ blocks or alarm_D/DQ blocks Yes 4 000 600 Yes 32
Symbol-related messages  SCAN procedure  Program alarms  Process diagnostic messages simultaneously active Alarm_S blocks, max.  Alarm 8-blocks  Number of instances for alarm 8 and S7 communication blocks, max.  preset, max.  Process control messages  Number of archives that can log on simultaneously (SFB 37 AR_SEND)  Number of messages  overall, max.	Yes Yes Yes Yes 1 000; Simultaneously active alarm_S/SQ blocks or alarm_D/DQ blocks Yes 4 000 600 Yes 32
Symbol-related messages  SCAN procedure  Program alarms  Process diagnostic messages simultaneously active Alarm_S blocks, max.  Alarm 8-blocks  Number of instances for alarm 8 and S7 communication blocks, max.  preset, max.  Process control messages  Number of archives that can log on simultaneously (SFB 37 AR_SEND)  Number of messages  overall, max.  in 100 ms grid, max.	Yes Yes Yes Yes 1 000; Simultaneously active alarm_S/SQ blocks or alarm_D/DQ blocks Yes 4 000 600 Yes 32
Symbol-related messages  SCAN procedure  Program alarms  Process diagnostic messages simultaneously active Alarm_S blocks, max.  Alarm 8-blocks  Number of instances for alarm 8 and S7 communication blocks, max.  preset, max.  Process control messages  Number of archives that can log on simultaneously (SFB 37 AR_SEND)  Number of messages  overall, max.  in 100 ms grid, max.  in 500 ms grid, max.	Yes Yes Yes Yes 1 000; Simultaneously active alarm_S/SQ blocks or alarm_D/DQ blocks Yes 4 000 600 Yes 32
Symbol-related messages  SCAN procedure  Program alarms  Process diagnostic messages simultaneously active Alarm_S blocks, max.  Alarm 8-blocks  Number of instances for alarm 8 and S7 communication blocks, max.  preset, max.  Process control messages  Number of archives that can log on simultaneously (SFB 37 AR_SEND)  Number of messages  overall, max.  in 100 ms grid, max.  in 500 ms grid, max.  in 1000 ms grid, max.	Yes Yes Yes Yes 1 000; Simultaneously active alarm_S/SQ blocks or alarm_D/DQ blocks Yes 4 000 600 Yes 32
Symbol-related messages  SCAN procedure  Program alarms  Process diagnostic messages  simultaneously active Alarm_S blocks, max.  Alarm 8-blocks  Number of instances for alarm 8 and S7 communication blocks, max.  preset, max.  Process control messages  Number of archives that can log on simultaneously (SFB 37 AR_SEND)  Number of messages  overall, max.  in 100 ms grid, max.  in 1000 ms grid, max.  in 1000 ms grid, max.  Number of additional values	Yes Yes Yes Yes 1 000; Simultaneously active alarm_S/SQ blocks or alarm_D/DQ blocks Yes 4 000 600 Yes 32 1 024 128 512 1 024
Symbol-related messages  SCAN procedure  Program alarms  Process diagnostic messages simultaneously active Alarm_S blocks, max.  Alarm 8-blocks  Number of instances for alarm 8 and S7 communication blocks, max.  preset, max.  Process control messages  Number of archives that can log on simultaneously (SFB 37 AR_SEND)  Number of messages  overall, max.  in 100 ms grid, max.  in 1000 ms grid, max.  in 1000 ms grid, max.  with 100 ms grid, max.  with 500, 1000 ms grid, max.  with 500, 1000 ms grid, max.	Yes Yes Yes Yes 1 000; Simultaneously active alarm_S/SQ blocks or alarm_D/DQ blocks Yes 4 000 600 Yes 32  1 024 128 512 1 024
Symbol-related messages  SCAN procedure  Program alarms  Process diagnostic messages simultaneously active Alarm_S blocks, max.  Alarm 8-blocks  Number of instances for alarm 8 and S7 communication blocks, max.  preset, max.  Process control messages  Number of archives that can log on simultaneously (SFB 37 AR_SEND)  Number of messages  overall, max.  in 100 ms grid, max.  in 1000 ms grid, max.  in 1000 ms grid, max.  with 100 ms grid, max.  with 100 ms grid, max.  with 500, 1000 ms grid, max.  with 500, 1000 ms grid, max.	Yes Yes Yes Yes 1 000; Simultaneously active alarm_S/SQ blocks or alarm_D/DQ blocks Yes 4 000 600 Yes 32  1 024 128 512 1 024
Symbol-related messages  SCAN procedure  Program alarms  Process diagnostic messages simultaneously active Alarm_S blocks, max.  Alarm 8-blocks  Number of instances for alarm 8 and S7 communication blocks, max.  preset, max.  Process control messages  Number of archives that can log on simultaneously (SFB 37 AR_SEND)  Number of messages  overall, max.  in 100 ms grid, max.  in 100 ms grid, max.  in 1000 ms grid, max.  with 100 ms grid, max.  with 500, 1000 ms grid, max.  with 500, 1000 ms grid, max.  Test commissioning functions  Status block	Yes Yes Yes Yes 1 000; Simultaneously active alarm_S/SQ blocks or alarm_D/DQ blocks Yes 4 000 600 Yes 32  1 024 128 512 1 024 1 10  Yes; Up to 2 simultaneously
Symbol-related messages  SCAN procedure  Program alarms  Process diagnostic messages  simultaneously active Alarm_S blocks, max.  Alarm 8-blocks  • Number of instances for alarm 8 and S7 communication blocks, max.  • preset, max.  Process control messages  Number of archives that can log on simultaneously (SFB 37 AR_SEND)  Number of messages  • overall, max.  • in 100 ms grid, max.  • in 1000 ms grid, max.  • in 1000 ms grid, max.  • with 100 ms grid, max.  Number of additional values  • with 100 ms grid, max.  • with 500, 1000 ms grid, max.  Test commissioning functions  Status block  Single step	Yes Yes Yes Yes 1 000; Simultaneously active alarm_S/SQ blocks or alarm_D/DQ blocks Yes 4 000 600 Yes 32  1 024 128 512 1 024 1 1 10  Yes; Up to 2 simultaneously Yes
Symbol-related messages  SCAN procedure  Program alarms  Process diagnostic messages  simultaneously active Alarm_S blocks, max.  Alarm 8-blocks  Number of instances for alarm 8 and S7 communication blocks, max.  process control messages  Number of archives that can log on simultaneously (SFB 37 AR_SEND)  Number of messages  overall, max.  in 100 ms grid, max.  in 500 ms grid, max.  in 1000 ms grid, max.  with 100 ms grid, max.  with 100 ms grid, max.  with 500, 1000 ms grid, max.  Test commissioning functions  Status block  Single step  Number of breakpoints	Yes Yes Yes Yes 1 000; Simultaneously active alarm_S/SQ blocks or alarm_D/DQ blocks Yes 4 000 600 Yes 32  1 024 128 512 1 024 1 10  Yes; Up to 2 simultaneously
Symbol-related messages  SCAN procedure  Program alarms  Process diagnostic messages simultaneously active Alarm_S blocks, max.  Alarm 8-blocks  Number of instances for alarm 8 and S7 communication blocks, max.  preset, max.  Process control messages  Number of archives that can log on simultaneously (SFB 37 AR_SEND)  Number of messages  overall, max.  in 100 ms grid, max.  in 500 ms grid, max.  in 1000 ms grid, max.  with 100 ms grid, max.  with 500, 1000 ms grid, max.  with 500, 1000 ms grid, max.  Status block Single step  Number of breakpoints  Status/control	Yes Yes Yes Yes 1 000; Simultaneously active alarm_S/SQ blocks or alarm_D/DQ blocks Yes 4 000 600 Yes 32  1 024 128 512 1 024 1 100  Yes; Up to 2 simultaneously Yes 4
Symbol-related messages  SCAN procedure  Program alarms  Process diagnostic messages simultaneously active Alarm_S blocks, max.  Alarm 8-blocks  Number of instances for alarm 8 and S7 communication blocks, max.  preset, max.  Process control messages  Number of archives that can log on simultaneously (SFB 37 AR_SEND)  Number of messages  overall, max.  in 100 ms grid, max.  in 1000 ms grid, max.  with 100 ms grid, max.  with 500, 1000 ms grid, max.  with 500, 1000 ms grid, max.  Test commissioning functions  Status block Single step  Number of breakpoints  Status/control  Status/control variable	Yes Yes Yes Yes 1 000; Simultaneously active alarm_S/SQ blocks or alarm_D/DQ blocks Yes 4 000 600 Yes 32  1 024 128 512 1 024 1 10  Yes; Up to 2 simultaneously Yes 4 Yes; Up to 16 variable tables
Symbol-related messages  SCAN procedure  Program alarms  Process diagnostic messages simultaneously active Alarm_S blocks, max.  Alarm 8-blocks  Number of instances for alarm 8 and S7 communication blocks, max.  preset, max.  Process control messages  Number of archives that can log on simultaneously (SFB 37 AR_SEND)  Number of messages  overall, max.  in 100 ms grid, max.  in 500 ms grid, max.  in 1000 ms grid, max.  with 100 ms grid, max.  with 500, 1000 ms grid, max.  with 500, 1000 ms grid, max.  Status block Single step  Number of breakpoints  Status/control	Yes Yes Yes Yes 1 000; Simultaneously active alarm_S/SQ blocks or alarm_D/DQ blocks Yes 4 000 600 Yes 32  1 024 128 512 1 024 1 100  Yes; Up to 2 simultaneously Yes 4

Forcing	
• Forcing	Yes
Forcing, variables	Inputs, outputs, bit memories, peripheral inputs, peripheral outputs
<ul> <li>Number of variables, max.</li> </ul>	512
Diagnostic buffer	
• present	Yes
<ul> <li>Number of entries, max.</li> </ul>	3 200
— adjustable	Yes
— preset	120
Service data	
• can be read out	Yes
standards, approvals, certificates	103
	Ves
CE mark	Yes
CSA approval	Yes
UL approval	Yes
cULus	Yes
FM approval	Yes
RCM (formerly C-TICK)	Yes
KC approval	Yes
EAC (formerly Gost-R)	Yes
Use in hazardous areas	
• ATEX	ATEX II 3G Ex nA IIC T4 Gc
mbient conditions	
Ambient temperature during operation	
• min.	0 °C
• max.	60 °C
onfiguration / header	
Configuration software	
• STEP 7	Yes
configuration / programming / header	
Command set	see instruction list
Nesting levels	7
<u> </u>	
Access to consistent data in process image	Yes
System functions (SFC)	see instruction list
System function blocks (SFB)	see instruction list
Programming language	
— LAD	Yes
— FBD	Yes
— STL	Yes
— SCL	Yes
— CFC	Yes
— GRAPH	Yes
— HiGraph®	Yes
configuration / programming / number of simultaneously ac	ctive SFC / header
— DPSYC_FR	2; SFC 11; per interface
D_ACT_DP	8; SFC 12; per interface
— RD_REC	8; SFC 59; per interface
— WR_REC	8; SFC 58; per interface
— WR_PARM	8; SFC 55; per interface
— WK_FARIM — PARM_MOD	1; SFC 57; per interface
— WR_DPARM	2; SFC 56; per interface
— DPNRM_DG	8; SFC 13; per interface
— RDSYSST	8
— DP_TOPOL	1; SFC 103; per interface
	tive SFB / header
configuration / programming / number of simultaneously ac	
	8; SFB 52; per interface, but not more than 32 across all external interfaces
configuration / programming / number of simultaneously ac	
configuration / programming / number of simultaneously ac — RDREC	8; SFB 52; per interface, but not more than 32 across all external interfaces

Width	25 mm
Height	290 mm
Depth	219 mm
Weights	
Weight, approx.	720 g

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