## 6ES7315-2EH14-0AB0

**Data sheet** 



SIMATIC S7-300 CPU 315-2 PN/DP, Central processing unit with 384 KB work memory, 1st interface MPI/DP 12 Mbit/s, 2nd interface Ethernet PROFINET, with 2-port switch, Micro Memory Card required

General information	
HW functional status	01
Firmware version	V3.2
Product function	
Isochronous mode	Yes; Via PROFIBUS DP or PROFINET interface
Engineering with	
<ul> <li>Programming package</li> </ul>	STEP 7 V5.5 or higher
Supply voltage	
Rated value (DC)	24 V
permissible range, lower limit (DC)	20.4 V
permissible range, upper limit (DC)	28.8 V
external protection for power supply lines (recommendation)	2 A min.
Mains buffering	
<ul> <li>Mains/voltage failure stored energy time</li> </ul>	5 ms
<ul> <li>Repeat rate, min.</li> </ul>	1 s
Input current	
Current consumption (rated value)	750 mA
Current consumption (in no-load operation), typ.	150 mA
Inrush current, typ.	4 A
I²t	1 A <sup>2</sup> ·s
Power loss	
Power loss, typ.	4.65 W
Memory	
Work memory	
integrated	384 kbyte
<ul><li>expandable</li></ul>	No
Load memory	
<ul><li>Plug-in (MMC)</li></ul>	Yes
<ul><li>Plug-in (MMC), max.</li></ul>	8 Mbyte
<ul> <li>Data management on MMC (after last programming), min.</li> </ul>	10 y
Backup	
• present	Yes; Guaranteed by MMC (maintenance-free)
<ul><li>without battery</li></ul>	Yes; Program and data
CPU processing times	
for bit operations, typ.	0.05 μs
for word operations, typ.	0.09 µs
for fixed point arithmetic, typ.	0.12 µs

for floating point arithmetic, typ.	 0.45 μs
CPU-blocks	
Number of blocks (total)	1 024; (DBs, FCs, FBs); the maximum number of loadable blocks can
- Turnsor of shoote (total)	be reduced by the MMC used.
DB	
<ul><li>Number, max.</li></ul>	1 024; Number range: 1 to 16000
• Size, max.	64 kbyte
FB	
• Number, max.	1 024; Number range: 0 to 7999
• Size, max.	64 kbyte
FC	4.004: Number represe 0 to 7000
Number, max.	1 024; Number range: 0 to 7999
• Size, max.	64 kbyte
	64 khyto
<ul><li>Size, max.</li><li>Number of free cycle OBs</li></ul>	64 kbyte 1; OB 1
Number of time alarm OBs	1; OB 10
Number of time alarm OBs     Number of delay alarm OBs	2; OB 20, 21
Number of delay alarm Obs     Number of cyclic interrupt OBs	4; OB 32, 33, 34, 35
Number of cyclic interrupt OBs     Number of process alarm OBs	1; OB 40
Number of DPV1 alarm OBs	3; OB 55, 56, 57
Number of isochronous mode OBs	1; OB 61
Number of startup OBs	1; OB 100
Number of asynchronous error OBs	6; OB 80, 82, 83, 85, 86, 87 (OB83 only for PROFINET IO)
Number of synchronous error OBs	2; OB 121, 122
Nesting depth	
per priority class	16
additional within an error OB	4
Counters, timers and their retentivity	
S7 counter	
Number	256
Retentivity	
— adjustable	Yes
— lower limit	0
— upper limit	255
— preset	Z 0 to Z 7
Counting range	
— adjustable	Yes
— lower limit	0
— upper limit	999
IEC counter	
<ul><li>present</li></ul>	Yes
• Type	SFB
Number	Unlimited (limited only by RAM capacity)
S7 times	
Number	256
Retentivity	
— adjustable	Yes
— lower limit	0
— upper limit	255
— preset	No retentivity
Time range	40
— lower limit	10 ms
— upper limit	9 990 s
IEC timer	V
• present	Yes
• Type	SFB
Number	Unlimited (limited only by RAM capacity)
Data areas and their retentivity	400 lb. 4-
Retentive data area (incl. timers, counters, flags), max.	128 kbyte

Flag	
• Size, max.	2 048 byte
Retentivity available	Yes; MB 0 to MB 2 047
Retentivity preset	MB 0 to MB 15
Number of clock memories	8; 1 memory byte
Data blocks	o, i memory byte
Retentivity adjustable	Yes; via non-retain property on DB
Retentivity adjustable     Retentivity preset	Yes
Local data	165
	22 760 buto: May 2049 butos per block
per priority class, max.	32 768 byte; Max. 2048 bytes per block
Address area	
I/O address area	0.0401
• Inputs	2 048 byte
• Outputs	2 048 byte
of which distributed	
— Inputs	2 048 byte
— Outputs	2 048 byte
Process image	
<ul><li>Inputs</li></ul>	2 048 byte
<ul><li>Outputs</li></ul>	2 048 byte
<ul><li>Inputs, adjustable</li></ul>	2 048 byte
<ul> <li>Outputs, adjustable</li> </ul>	2 048 byte
Inputs, default	128 byte
Outputs, default	128 byte
Subprocess images	
<ul> <li>Number of subprocess images, max.</li> </ul>	1; With PROFINET IO, the length of the user data is limited to 1600
	bytes
Digital channels	
• Inputs	16 384
<ul><li>of which central</li></ul>	1 024
<ul><li>Outputs</li></ul>	16 384
— of which central	1 024
Analog channels	
• Inputs	1 024
— of which central	256
<ul><li>Outputs</li></ul>	1 024
— of which central	256
Hardware configuration	
Number of expansion units, max.	3
Number of DP masters	
<ul><li>integrated</li></ul>	1
• via CP	4
Number of operable FMs and CPs (recommended)	
• FM	8
• CP, PtP	8
• CP, LAN	10
Rack	
• Racks, max.	4
Modules per rack, max.	8
Time of day	
Clock	
Hardware clock (real-time)	Yes
retentive and synchronizable	Yes
Backup time	6 wk; At 40 °C ambient temperature
Deviation per day, max.	10 s; Typ.: 2 s
Behavior of the clock following POWER-ON     Pohavior of the clock following expire of backup.	Clock continues running after POWER OFF
<ul> <li>Behavior of the clock following expiry of backup period</li> </ul>	the clock continues at the time of day it had when power was switched off
Operating hours counter	
Number	1
- Humbon	•

Number/Number range	0
Range of values	0 to 2^31 hours (when using SFC 101)
Granularity	1 h
• retentive	Yes; Must be restarted at each restart
Clock synchronization	Von
• supported	Yes Yes
<ul><li>to MPI, master</li><li>to MPI, slave</li></ul>	Yes
• to DP, master	Yes; With DP slave only slave clock
• to DP, slave	Yes
• in AS, master	Yes
• in AS, slave	Yes
• on Ethernet via NTP	Yes; As client
Digital inputs	1.00,7.10 0.10.11.
Number of digital inputs	0
Digital outputs	
Number of digital outputs	0
Analog inputs	
Number of analog inputs	0
Analog outputs	U
	0
Number of analog outputs	0
Interfaces	4. O porto (quitab) DIAS
Number of industrial Ethernet interfaces	1; 2 ports (switch) RJ45
Number of PROFINET interfaces	1; 2 ports (switch) RJ45
Number of RS 485 interfaces  Number of RS 422 interfaces	1; Combined MPI / PROFIBUS DP
Interface	0
	lists most at DO 405 interfere
Interface type	Integrated RS 485 interface
laslated	
Isolated	Yes
Interface types	
Interface types • RS 485	Yes
Interface types  RS 485  Output current of the interface, max.	
Interface types  • RS 485  • Output current of the interface, max.  Protocols	Yes 200 mA
Interface types  RS 485  Output current of the interface, max.  Protocols  MPI	Yes 200 mA Yes
Interface types  RS 485  Output current of the interface, max.  Protocols  MPI  PROFIBUS DP master	Yes 200 mA Yes Yes
Interface types  RS 485  Output current of the interface, max.  Protocols  MPI  PROFIBUS DP master  PROFIBUS DP slave	Yes 200 mA Yes
Interface types  RS 485  Output current of the interface, max.  Protocols  MPI  PROFIBUS DP master	Yes 200 mA  Yes Yes Yes Yes
Interface types  RS 485  Output current of the interface, max.  Protocols  MPI  PROFIBUS DP master  PROFIBUS DP slave  Point-to-point connection  MPI	Yes 200 mA  Yes Yes Yes Yes
Interface types  RS 485  Output current of the interface, max.  Protocols  MPI  PROFIBUS DP master  PROFIBUS DP slave Point-to-point connection	Yes 200 mA  Yes Yes Yes No
Interface types  RS 485  Output current of the interface, max.  Protocols  MPI  PROFIBUS DP master  PROFIBUS DP slave  Point-to-point connection  MPI  Transmission rate, max.	Yes 200 mA  Yes Yes Yes No
Interface types  RS 485  Output current of the interface, max.  Protocols  MPI  PROFIBUS DP master  PROFIBUS DP slave  Point-to-point connection  MPI  Transmission rate, max.  Services	Yes 200 mA  Yes Yes Yes Yes No  12 Mbit/s
Interface types  RS 485  Output current of the interface, max.  Protocols  MPI  PROFIBUS DP master PROFIBUS DP slave Point-to-point connection  MPI  Transmission rate, max.  Services  PG/OP communication	Yes 200 mA  Yes Yes Yes No  12 Mbit/s  Yes
Interface types  RS 485 Output current of the interface, max.  Protocols MPI PROFIBUS DP master PROFIBUS DP slave Point-to-point connection  MPI Transmission rate, max. Services PG/OP communication Routing	Yes 200 mA  Yes Yes Yes No  12 Mbit/s  Yes Yes
Interface types  RS 485  Output current of the interface, max.  Protocols  MPI  PROFIBUS DP master  PROFIBUS DP slave Point-to-point connection  MPI  Transmission rate, max.  Services  PG/OP communication  Routing Global data communication	Yes 200 mA  Yes Yes Yes Yes No  12 Mbit/s  Yes Yes Yes Yes
Interface types  RS 485  Output current of the interface, max.  Protocols  MPI  PROFIBUS DP master  PROFIBUS DP slave  Point-to-point connection  MPI  Transmission rate, max.  Services  PG/OP communication  Routing  Global data communication  S7 basic communication	Yes 200 mA  Yes Yes Yes No  12 Mbit/s  Yes Yes Yes Yes Yes Yes Yes
Interface types  RS 485  Output current of the interface, max.  Protocols  MPI  PROFIBUS DP master PROFIBUS DP slave Point-to-point connection  MPI  Transmission rate, max.  Services  PG/OP communication Routing Global data communication S7 basic communication S7 communication	Yes 200 mA  Yes Yes Yes Yes No  12 Mbit/s  Yes Yes Yes Yes Yes Yes Yes Yes Yes
Interface types  RS 485  Output current of the interface, max.  Protocols  MPI  PROFIBUS DP master  PROFIBUS DP slave Point-to-point connection  MPI  Transmission rate, max.  Services  PG/OP communication  Routing  Global data communication  Rotomary  S7 basic communication  S7 communication  S7 communication, as client  S7 communication, as server	Yes 200 mA  Yes Yes Yes Yes No  12 Mbit/s  Yes Yes Yes Yes Yes Yes Yes Yes Yes Y
Interface types  RS 485 Output current of the interface, max.  Protocols  MPI PROFIBUS DP master PROFIBUS DP slave Point-to-point connection  MPI  Transmission rate, max.  Services  PG/OP communication Routing Global data communication S7 basic communication S7 communication S7 communication S7 communication, as client S7 communication, as server  PROFIBUS DP master Transmission rate, max.	Yes 200 mA  Yes Yes Yes Yes No  12 Mbit/s  Yes Yes Yes Yes Yes Yes Yes Yes Yes Y
Interface types  RS 485 Output current of the interface, max.  Protocols  MPI PROFIBUS DP master PROFIBUS DP slave Point-to-point connection  MPI Transmission rate, max.  Services PG/OP communication Routing Global data communication S7 basic communication S7 communication S7 communication S7 communication S7 communication, as client S7 communication, as server  PROFIBUS DP master Transmission rate, max. Number of DP slaves, max.	Yes 200 mA  Yes Yes Yes Yes No  12 Mbit/s  Yes Yes Yes Yes Yes Yes Yes Yes Yes Y
Interface types  RS 485 Output current of the interface, max.  Protocols  MPI PROFIBUS DP master PROFIBUS DP slave Point-to-point connection  MPI Transmission rate, max.  Services PG/OP communication Routing Global data communication S7 basic communication S7 communication S7 communication S7 communication S7 communication, as client S7 communication, as server  PROFIBUS DP master Transmission rate, max. Number of DP slaves, max. Services	Yes 200 mA  Yes Yes Yes Yes No  12 Mbit/s  Yes Yes Yes Yes Yes Yes Yes Yes Yes No; but via CP and loadable FB Yes  12 Mbit/s  12 Mbit/s
Interface types  RS 485 Output current of the interface, max.  Protocols MPI PROFIBUS DP master PROFIBUS DP slave Point-to-point connection  MPI Transmission rate, max. Services — PG/OP communication — Routing — Global data communication — S7 basic communication — S7 communication — S7 communication — S7 communication, as client — S7 communication, as server  PROFIBUS DP master Transmission rate, max. Number of DP slaves, max. Services — PG/OP communication	Yes 200 mA  Yes Yes Yes Yes No  12 Mbit/s  Yes Yes Yes Yes Yes Yes Yes Yes Yes No; but via CP and loadable FB Yes  12 Mbit/s  124  Yes
Interface types  RS 485 Output current of the interface, max.  Protocols  MPI PROFIBUS DP master PROFIBUS DP slave Point-to-point connection  MPI  Transmission rate, max.  Services  PG/OP communication Routing Global data communication S7 basic communication S7 communication S7 communication S7 communication, as client S7 communication, as server  PROFIBUS DP master Transmission rate, max. Number of DP slaves, max.  Services  PG/OP communication Routing	Yes 200 mA  Yes Yes Yes Yes No  12 Mbit/s  Yes Yes Yes Yes Yes Yes Yes Yes Yes No; but via CP and loadable FB Yes  12 Mbit/s  124  Yes Yes
Interface types  RS 485  Output current of the interface, max.  Protocols  MPI  PROFIBUS DP master  PROFIBUS DP slave  Point-to-point connection  MPI  Transmission rate, max.  Services  PG/OP communication  Routing  Global data communication  S7 basic communication  S7 communication  S7 communication, as client  S7 communication, as server  PROFIBUS DP master  Transmission rate, max.  Number of DP slaves, max.  Services  PG/OP communication  Routing  Global data communication  Routing  Global data communication	Yes 200 mA  Yes Yes Yes Yes No  12 Mbit/s  Yes Yes Yes Yes Yes Yes Yes Yes Yes No; but via CP and loadable FB Yes  12 Mbit/s  124  Yes Yes Yes No
Interface types  RS 485 Output current of the interface, max.  Protocols  MPI PROFIBUS DP master PROFIBUS DP slave Point-to-point connection  MPI  Transmission rate, max.  Services PG/OP communication Routing Global data communication S7 basic communication S7 communication S7 communication S7 communication, as client S7 communication, as server  PROFIBUS DP master Transmission rate, max. Number of DP slaves, max. Services PG/OP communication Routing Global data communication S7 basic communication S7 communication	Yes 200 mA  Yes Yes Yes Yes No  12 Mbit/s  Yes Yes Yes Yes Yes Yes Yes Yes Yes Y
Interface types  RS 485 Output current of the interface, max.  Protocols  MPI PROFIBUS DP master PROFIBUS DP slave Point-to-point connection  MPI  Transmission rate, max.  Services PG/OP communication Routing Global data communication S7 basic communication S7 communication S7 communication S7 communication, as client S7 communication, as server  PROFIBUS DP master Transmission rate, max. Number of DP slaves, max.  Services PG/OP communication Routing Global data communication Routing Global data communication S7 basic communication S7 basic communication S7 basic communication	Yes 200 mA  Yes Yes Yes Yes No  12 Mbit/s  Yes Yes Yes Yes Yes Yes Yes Yes Yes No; but via CP and loadable FB Yes  12 Mbit/s  124  Yes Yes Yes Yes Yes
Interface types  RS 485  Output current of the interface, max.  Protocols  MPI  PROFIBUS DP master  PROFIBUS DP slave Point-to-point connection  MPI  Transmission rate, max.  Services  PG/OP communication  Routing  Global data communication  S7 basic communication  S7 communication, as client  S7 communication, as server  PROFIBUS DP master  Transmission rate, max.  Number of DP slaves, max.  Services  PG/OP communication  Routing  Global data communication  S7 communication  S7 communication  S7 communication  Routing  Global data communication  S7 basic communication  S7 basic communication  S7 communication  S7 communication  S7 communication  S7 communication	Yes 200 mA  Yes Yes Yes Yes No  12 Mbit/s  Yes Yes Yes Yes Yes Yes Yes Yes No; but via CP and loadable FB Yes  12 Mbit/s 124  Yes Yes No Yes; I blocks only Yes No
Interface types  RS 485 Output current of the interface, max.  Protocols  MPI PROFIBUS DP master PROFIBUS DP slave Point-to-point connection  MPI  Transmission rate, max.  Services PG/OP communication Routing Global data communication S7 basic communication S7 communication S7 communication S7 communication, as client S7 communication, as server  PROFIBUS DP master Transmission rate, max. Number of DP slaves, max.  Services PG/OP communication Routing Global data communication Routing Global data communication S7 basic communication S7 basic communication S7 basic communication	Yes 200 mA  Yes Yes Yes Yes No  12 Mbit/s  Yes Yes Yes Yes Yes Yes Yes Yes Yes No; but via CP and loadable FB Yes  12 Mbit/s  124  Yes Yes Yes Yes Yes

— Isochronous mode	Yes; OB 61; isochronous mode can only be used alternatively on PROFIBUS DP or PROFINET IO
— SYNC/FREEZE	Yes
<ul> <li>Activation/deactivation of DP slaves</li> </ul>	Yes
<ul> <li>Number of DP slaves that can be simultaneously activated/deactivated, max.</li> </ul>	8
Direct data exchange (slave-to-slave)	Yes; as subscriber
communication)	
— DPV1	Yes
Address area	
— Inputs, max.	2 kbyte
— Outputs, max.	2 kbyte
User data per DP slave	
— Inputs, max.	244 byte
— Outputs, max.	244 byte
PROFIBUS DP slave	
<ul> <li>Transmission rate, max.</li> </ul>	12 Mbit/s
automatic baud rate search	Yes; only with passive interface
<ul> <li>Address area, max.</li> </ul>	32
<ul> <li>User data per address area, max.</li> </ul>	32 byte
Services	
<ul><li>— PG/OP communication</li></ul>	Yes
— Routing	Yes; Only with active interface
<ul> <li>Global data communication</li> </ul>	No
— S7 basic communication	No
— S7 communication	Yes
<ul> <li>— S7 communication, as client</li> </ul>	No
<ul> <li>S7 communication, as server</li> </ul>	Yes; Connection configured on one side only
<ul> <li>Direct data exchange (slave-to-slave</li> </ul>	Yes
communication)	
— DPV1	No
Transfer memory	
Transfer memory — Inputs	244 byte
·	244 byte 244 byte
— Inputs	
— Inputs — Outputs	
— Inputs — Outputs 2. Interface	244 byte
Inputs Outputs  2. Interface Interface type	244 byte PROFINET
- Inputs - Outputs  2. Interface Interface type Isolated	244 byte PROFINET Yes
Inputs Outputs  2. Interface Interface type Isolated automatic detection of transmission rate	244 byte  PROFINET  Yes  Yes; 10/100 Mbit/s
— Inputs — Outputs  2. Interface Interface type Isolated automatic detection of transmission rate Autonegotiation	PROFINET Yes Yes; 10/100 Mbit/s Yes
- Inputs - Outputs  2. Interface Interface type Isolated automatic detection of transmission rate Autonegotiation Autocrossing	PROFINET Yes Yes; 10/100 Mbit/s Yes Yes
- Inputs - Outputs  2. Interface Interface type Isolated automatic detection of transmission rate Autonegotiation Autocrossing Change of IP address at runtime, supported	PROFINET Yes Yes; 10/100 Mbit/s Yes Yes
— Inputs — Outputs  2. Interface Interface type Isolated automatic detection of transmission rate Autonegotiation Autocrossing Change of IP address at runtime, supported Interface types	PROFINET Yes Yes; 10/100 Mbit/s Yes Yes Yes
— Inputs — Outputs  2. Interface Interface type Isolated automatic detection of transmission rate Autonegotiation Autocrossing Change of IP address at runtime, supported Interface types • RJ 45 (Ethernet)	PROFINET Yes Yes; 10/100 Mbit/s Yes Yes Yes Yes
— Inputs — Outputs  2. Interface Interface type Isolated automatic detection of transmission rate Autonegotiation Autocrossing Change of IP address at runtime, supported Interface types  • RJ 45 (Ethernet) • Number of ports	PROFINET Yes Yes; 10/100 Mbit/s Yes Yes Yes Yes Yes
- Inputs - Outputs  2. Interface Interface type Isolated automatic detection of transmission rate Autonegotiation Autocrossing Change of IP address at runtime, supported Interface types  • RJ 45 (Ethernet) • Number of ports • integrated switch	PROFINET Yes Yes; 10/100 Mbit/s Yes Yes Yes Yes Yes
— Inputs — Outputs  2. Interface Interface type Isolated automatic detection of transmission rate Autonegotiation Autocrossing Change of IP address at runtime, supported Interface types  • RJ 45 (Ethernet) • Number of ports • integrated switch Protocols	PROFINET Yes Yes; 10/100 Mbit/s Yes Yes Yes Yes Yes Yes Yes
— Inputs — Outputs  2. Interface Interface type Isolated automatic detection of transmission rate Autonegotiation Autocrossing Change of IP address at runtime, supported Interface types • RJ 45 (Ethernet) • Number of ports • integrated switch  Protocols • MPI	PROFINET Yes Yes; 10/100 Mbit/s Yes Yes Yes Yes Yes Yes No
- Inputs - Outputs  2. Interface Interface type Isolated automatic detection of transmission rate Autonegotiation Autocrossing Change of IP address at runtime, supported Interface types • RJ 45 (Ethernet) • Number of ports • integrated switch  Protocols • MPI • PROFINET IO Controller	PROFINET Yes Yes; 10/100 Mbit/s Yes Yes Yes Yes Yes Yes Yes Yes Yes Ye
- Inputs - Outputs  2. Interface Interface type Isolated automatic detection of transmission rate Autonegotiation Autocrossing Change of IP address at runtime, supported Interface types  • RJ 45 (Ethernet) • Number of ports • integrated switch  Protocols • MPI • PROFINET IO Controller • PROFINET IO Device	PROFINET Yes Yes; 10/100 Mbit/s Yes Yes Yes Yes Yes Yes Yes Yes Yes Also simultaneously with IO-Device functionality Yes; Also simultaneously with IO Controller functionality
- Inputs - Outputs  2. Interface Interface type Isolated automatic detection of transmission rate Autonegotiation Autocrossing Change of IP address at runtime, supported Interface types • RJ 45 (Ethernet) • Number of ports • integrated switch  Protocols • MPI • PROFINET IO Controller • PROFINET IO Device • PROFINET CBA	PROFINET Yes Yes; 10/100 Mbit/s Yes Yes Yes Yes Yes  Yes  Yes  Yes  Y
- Inputs - Outputs  2. Interface Interface type Isolated automatic detection of transmission rate Autonegotiation Autocrossing Change of IP address at runtime, supported Interface types • RJ 45 (Ethernet) • Number of ports • integrated switch  Protocols • MPI • PROFINET IO Controller • PROFINET IO Device • PROFIBUS DP master • PROFIBUS DP slave	PROFINET Yes Yes; 10/100 Mbit/s Yes Yes Yes Yes Yes Yes Yes  Yes  Yes
- Inputs - Outputs  2. Interface Interface type Isolated automatic detection of transmission rate Autonegotiation Autocrossing Change of IP address at runtime, supported Interface types • RJ 45 (Ethernet) • Number of ports • integrated switch  Protocols • MPI • PROFINET IO Controller • PROFINET IO Device • PROFINET CBA • PROFIBUS DP master	PROFINET Yes Yes; 10/100 Mbit/s Yes Yes Yes Yes Yes Yes Yes  Yes  Yes
- Inputs - Outputs  2. Interface Interface type Isolated automatic detection of transmission rate Autonegotiation Autocrossing Change of IP address at runtime, supported Interface types  • RJ 45 (Ethernet) • Number of ports • integrated switch  Protocols  • MPI • PROFINET IO Controller • PROFINET IO Device • PROFINET CBA • PROFIBUS DP master • PROFIBUS DP slave • Open IE communication • Web server	PROFINET Yes Yes; 10/100 Mbit/s Yes Yes Yes Yes Yes Yes  Yes  Yes  No Yes; Also simultaneously with IO-Device functionality Yes; Also simultaneously with IO Controller functionality Yes No No No Yes; Via TCP/IP, ISO on TCP, and UDP
- Inputs - Outputs  2. Interface Interface type Isolated automatic detection of transmission rate Autonegotiation Autocrossing Change of IP address at runtime, supported Interface types • RJ 45 (Ethernet) • Number of ports • integrated switch  Protocols • MPI • PROFINET IO Controller • PROFINET IO Device • PROFINET CBA • PROFIBUS DP master • PROFIBUS DP slave • Open IE communication • Web server • Media redundancy	PROFINET Yes Yes; 10/100 Mbit/s Yes Yes Yes Yes  Yes  Yes  Yes  No Yes; Also simultaneously with IO-Device functionality Yes; Also simultaneously with IO Controller functionality Yes No No No Yes; Via TCP/IP, ISO on TCP, and UDP Yes
- Inputs - Outputs  2. Interface Interface type Isolated automatic detection of transmission rate Autonegotiation Autocrossing Change of IP address at runtime, supported Interface types • RJ 45 (Ethernet) • Number of ports • integrated switch  Protocols • MPI • PROFINET IO Controller • PROFINET IO Device • PROFINET CBA • PROFIBUS DP master • PROFIBUS DP slave • Open IE communication • Web server • Media redundancy PROFINET IO Controller	PROFINET Yes Yes; 10/100 Mbit/s Yes Yes Yes Yes Yes  Yes  Yes  Yes  Y
- Inputs - Outputs  2. Interface Interface type Isolated automatic detection of transmission rate Autonegotiation Autocrossing Change of IP address at runtime, supported Interface types • RJ 45 (Ethernet) • Number of ports • integrated switch  Protocols • MPI • PROFINET IO Controller • PROFINET IO Device • PROFIBUS DP master • PROFIBUS DP slave • Open IE communication • Web server • Media redundancy  PROFINET IO Controller • Transmission rate, max.	PROFINET Yes Yes; 10/100 Mbit/s Yes Yes Yes Yes  Yes  Yes  Yes  No Yes; Also simultaneously with IO-Device functionality Yes; Also simultaneously with IO Controller functionality Yes No No No Yes; Via TCP/IP, ISO on TCP, and UDP Yes
— Inputs — Outputs  2. Interface Interface type Isolated automatic detection of transmission rate Autonegotiation Autocrossing Change of IP address at runtime, supported Interface types  • RJ 45 (Ethernet) • Number of ports • integrated switch  Protocols  • MPI • PROFINET IO Controller • PROFINET IO Device • PROFIBUS DP master • PROFIBUS DP slave • Open IE communication • Web server • Media redundancy  PROFINET IO Controller • Transmission rate, max. Services	PROFINET Yes Yes; 10/100 Mbit/s Yes Yes Yes Yes Yes Yes  Yes  Yes  No Yes; Also simultaneously with IO-Device functionality Yes; Also simultaneously with IO Controller functionality Yes No No Yes; Via TCP/IP, ISO on TCP, and UDP Yes Yes  100 Mbit/s
— Inputs — Outputs  2. Interface Interface type Isolated automatic detection of transmission rate Autonegotiation Autocrossing Change of IP address at runtime, supported Interface types  • RJ 45 (Ethernet) • Number of ports • integrated switch  Protocols  • MPI • PROFINET IO Controller • PROFINET IO Device • PROFINET CBA • PROFIBUS DP master • PROFIBUS DP slave • Open IE communication • Web server • Media redundancy  PROFINET IO Controller • Transmission rate, max.  Services — PG/OP communication	PROFINET Yes Yes; 10/100 Mbit/s Yes Yes Yes Yes  Yes  Yes  Yes  No Yes; Also simultaneously with IO-Device functionality Yes; Also simultaneously with IO Controller functionality Yes No No No Yes; Via TCP/IP, ISO on TCP, and UDP Yes Yes  100 Mbit/s
— Inputs — Outputs  2. Interface Interface type Isolated automatic detection of transmission rate Autonegotiation Autocrossing Change of IP address at runtime, supported Interface types  • RJ 45 (Ethernet) • Number of ports • integrated switch  Protocols  • MPI • PROFINET IO Controller • PROFINET IO Device • PROFIBUS DP master • PROFIBUS DP slave • Open IE communication • Web server • Media redundancy  PROFINET IO Controller • Transmission rate, max. Services	PROFINET Yes Yes; 10/100 Mbit/s Yes Yes Yes Yes Yes Yes  Yes  Yes  No Yes; Also simultaneously with IO-Device functionality Yes; Also simultaneously with IO Controller functionality Yes No No Yes; Via TCP/IP, ISO on TCP, and UDP Yes Yes  100 Mbit/s

	number of instances: 32
— Isochronous mode	Yes; OB 61; isochronous mode can only be used alternatively on
	PROFIBUS DP or PROFINET IO
— IRT	Yes
<ul> <li>Shared device</li> </ul>	Yes
<ul> <li>Prioritized startup</li> </ul>	Yes
<ul> <li>Number of IO devices with prioritized startup, max.</li> </ul>	32
<ul> <li>Number of connectable IO Devices, max.</li> </ul>	128
<ul> <li>Of which IO devices with IRT, max.</li> </ul>	64
— of which in line, max.	64
<ul> <li>Number of IO Devices with IRT and the option "high flexibility"</li> </ul>	128
— of which in line, max.	61
<ul> <li>Number of connectable IO Devices for RT, max.</li> </ul>	128
— of which in line, max.	128
<ul> <li>Activation/deactivation of IO Devices</li> </ul>	Yes
<ul> <li>Number of IO Devices that can be simultaneously activated/deactivated, max.</li> </ul>	8
<ul> <li>— IO Devices changing during operation (partner ports), supported</li> </ul>	Yes
Number of IO Devices per tool, max.	8
Device replacement without swap medium	Yes
— Send cycles	250 $\mu$ s, 500 $\mu$ s,1 ms; 2 ms, 4 ms (not in the case of IRT with "high flexibility" option)
— Updating time	$250~\mu s$ to 512 ms (depending on the operating mode, see Manual "S7-300 CPU 31xC and CPU 31x, technical Data" for more details)
Address area	
— Inputs, max.	2 kbyte
— Outputs, max.	2 kbyte
— User data consistency, max.	1 024 byte
PROFINET IO Device	
PROFINET IO Device Services	
	Yes
Services  — PG/OP communication  — Routing	Yes Yes
Services  — PG/OP communication  — Routing  — S7 communication	Yes Yes; With loadable FBs, max. configurable connections: 14, max. number of instances: 32
Services  — PG/OP communication  — Routing  — S7 communication  — Isochronous mode	Yes; With loadable FBs, max. configurable connections: 14, max. number of instances: 32 No
Services  — PG/OP communication  — Routing  — S7 communication	Yes Yes; With loadable FBs, max. configurable connections: 14, max. number of instances: 32
Services  — PG/OP communication  — Routing  — S7 communication  — Isochronous mode  — IRT  — PROFlenergy	Yes; With loadable FBs, max. configurable connections: 14, max. number of instances: 32 No Yes Yes; With SFB 73 / 74 prepared for loadable PROFlenergy standard FB for I-Device
Services  — PG/OP communication  — Routing  — S7 communication  — Isochronous mode  — IRT  — PROFlenergy  — Shared device	Yes; With loadable FBs, max. configurable connections: 14, max. number of instances: 32 No Yes Yes; With SFB 73 / 74 prepared for loadable PROFlenergy standard FB
Services  — PG/OP communication  — Routing  — S7 communication  — Isochronous mode  — IRT  — PROFlenergy  — Shared device  — Number of IO Controllers with shared device,	Yes; With loadable FBs, max. configurable connections: 14, max. number of instances: 32 No Yes Yes; With SFB 73 / 74 prepared for loadable PROFlenergy standard FB for I-Device
Services  — PG/OP communication  — Routing  — S7 communication  — Isochronous mode  — IRT  — PROFlenergy  — Shared device  — Number of IO Controllers with shared device, max.	Yes; With loadable FBs, max. configurable connections: 14, max. number of instances: 32 No Yes Yes; With SFB 73 / 74 prepared for loadable PROFlenergy standard FB for I-Device Yes
Services  — PG/OP communication  — Routing  — S7 communication  — Isochronous mode  — IRT  — PROFlenergy  — Shared device  — Number of IO Controllers with shared device, max.  Transfer memory	Yes; With loadable FBs, max. configurable connections: 14, max. number of instances: 32 No Yes Yes; With SFB 73 / 74 prepared for loadable PROFlenergy standard FB for I-Device Yes 2
Services  — PG/OP communication  — Routing  — S7 communication  — Isochronous mode  — IRT  — PROFlenergy  — Shared device  — Number of IO Controllers with shared device, max.  Transfer memory  — Inputs, max.	Yes Yes; With loadable FBs, max. configurable connections: 14, max. number of instances: 32 No Yes Yes; With SFB 73 / 74 prepared for loadable PROFlenergy standard FB for I-Device Yes 2  1 440 byte; Per IO Controller with shared device
Services  — PG/OP communication  — Routing  — S7 communication  — Isochronous mode  — IRT  — PROFlenergy  — Shared device  — Number of IO Controllers with shared device, max.  Transfer memory  — Inputs, max.  — Outputs, max.	Yes; With loadable FBs, max. configurable connections: 14, max. number of instances: 32 No Yes Yes; With SFB 73 / 74 prepared for loadable PROFlenergy standard FB for I-Device Yes 2
Services  — PG/OP communication  — Routing  — S7 communication  — Isochronous mode  — IRT  — PROFlenergy  — Shared device  — Number of IO Controllers with shared device, max.  Transfer memory  — Inputs, max.  — Outputs, max.  Submodules	Yes; With loadable FBs, max. configurable connections: 14, max. number of instances: 32 No Yes Yes; With SFB 73 / 74 prepared for loadable PROFlenergy standard FB for I-Device Yes 2  1 440 byte; Per IO Controller with shared device 1 440 byte; Per IO Controller with shared device
Services  — PG/OP communication  — Routing  — S7 communication  — Isochronous mode  — IRT  — PROFlenergy  — Shared device  — Number of IO Controllers with shared device, max.  Transfer memory  — Inputs, max.  — Outputs, max.  Submodules  — Number, max.	Yes; With loadable FBs, max. configurable connections: 14, max. number of instances: 32 No Yes Yes; With SFB 73 / 74 prepared for loadable PROFlenergy standard FB for I-Device Yes 2  1 440 byte; Per IO Controller with shared device 1 440 byte; Per IO Controller with shared device
Services  — PG/OP communication  — Routing  — S7 communication  — Isochronous mode  — IRT  — PROFlenergy  — Shared device  — Number of IO Controllers with shared device, max.  Transfer memory  — Inputs, max.  — Outputs, max.  Submodules  — Number, max.  — User data per submodule, max.	Yes; With loadable FBs, max. configurable connections: 14, max. number of instances: 32 No Yes Yes; With SFB 73 / 74 prepared for loadable PROFlenergy standard FB for I-Device Yes 2  1 440 byte; Per IO Controller with shared device 1 440 byte; Per IO Controller with shared device
Services  — PG/OP communication  — Routing  — S7 communication  — Isochronous mode  — IRT  — PROFlenergy  — Shared device  — Number of IO Controllers with shared device, max.  Transfer memory  — Inputs, max.  — Outputs, max.  Submodules  — Number, max.  — User data per submodule, max.  PROFINET CBA	Yes; With loadable FBs, max. configurable connections: 14, max. number of instances: 32 No Yes Yes; With SFB 73 / 74 prepared for loadable PROFlenergy standard FB for I-Device Yes 2  1 440 byte; Per IO Controller with shared device 1 440 byte; Per IO Controller with shared device 64 1 024 byte
Services  — PG/OP communication  — Routing  — S7 communication  — Isochronous mode  — IRT  — PROFlenergy  — Shared device  — Number of IO Controllers with shared device, max.  Transfer memory  — Inputs, max.  — Outputs, max.  Submodules  — Number, max.  — User data per submodule, max.  PROFINET CBA  • acyclic transmission	Yes; With loadable FBs, max. configurable connections: 14, max. number of instances: 32 No Yes Yes; With SFB 73 / 74 prepared for loadable PROFlenergy standard FB for I-Device Yes 2  1 440 byte; Per IO Controller with shared device 1 440 byte; Per IO Controller with shared device 64 1 024 byte
Services  — PG/OP communication  — Routing  — S7 communication  — Isochronous mode  — IRT  — PROFlenergy  — Shared device  — Number of IO Controllers with shared device, max.  Transfer memory  — Inputs, max.  — Outputs, max.  — Outputs, max.  Submodules  — Number, max.  — User data per submodule, max.  PROFINET CBA  • acyclic transmission  • cyclic transmission	Yes; With loadable FBs, max. configurable connections: 14, max. number of instances: 32 No Yes Yes; With SFB 73 / 74 prepared for loadable PROFlenergy standard FB for I-Device Yes 2  1 440 byte; Per IO Controller with shared device 1 440 byte; Per IO Controller with shared device 64 1 024 byte
Services  — PG/OP communication  — Routing  — S7 communication  — Isochronous mode  — IRT  — PROFlenergy  — Shared device  — Number of IO Controllers with shared device, max.  Transfer memory  — Inputs, max.  — Outputs, max.  — Outputs, max.  Submodules  — Number, max.  — User data per submodule, max.  PROFINET CBA  • acyclic transmission  • cyclic transmission  Open IE communication	Yes Yes; With loadable FBs, max. configurable connections: 14, max. number of instances: 32 No Yes Yes; With SFB 73 / 74 prepared for loadable PROFlenergy standard FB for I-Device Yes 2  1 440 byte; Per IO Controller with shared device 1 440 byte; Per IO Controller with shared device 64 1 024 byte  Yes Yes
Services  — PG/OP communication  — Routing  — S7 communication  — Isochronous mode  — IRT  — PROFlenergy  — Shared device  — Number of IO Controllers with shared device, max.  Transfer memory  — Inputs, max.  — Outputs, max.  Submodules  — Number, max.  — User data per submodule, max.  PROFINET CBA  • acyclic transmission  • cyclic transmission  Open IE communication  • Number of connections, max.	Yes Yes; With loadable FBs, max. configurable connections: 14, max. number of instances: 32 No Yes Yes; With SFB 73 / 74 prepared for loadable PROFlenergy standard FB for I-Device Yes 2  1 440 byte; Per IO Controller with shared device 1 440 byte; Per IO Controller with shared device 64 1 024 byte  Yes Yes Yes
Services  — PG/OP communication  — Routing  — S7 communication  — Isochronous mode  — IRT  — PROFlenergy  — Shared device  — Number of IO Controllers with shared device, max.  Transfer memory  — Inputs, max.  — Outputs, max.  Submodules  — Number, max.  — User data per submodule, max.  PROFINET CBA  • acyclic transmission  • cyclic transmission  Open IE communication  • Number of connections, max.  • Local port numbers used at the system end	Yes; With loadable FBs, max. configurable connections: 14, max. number of instances: 32 No Yes Yes; With SFB 73 / 74 prepared for loadable PROFlenergy standard FB for I-Device Yes 2  1 440 byte; Per IO Controller with shared device 1 440 byte; Per IO Controller with shared device 64 1 024 byte  Yes Yes Yes Yes Yes Yes
Services  — PG/OP communication — Routing — S7 communication — Isochronous mode — IRT — PROFlenergy — Shared device — Number of IO Controllers with shared device, max.  Transfer memory — Inputs, max. — Outputs, max. — Outputs, max. Submodules — Number, max. — User data per submodule, max.  PROFINET CBA  • acyclic transmission • cyclic transmission Open IE communication • Number of connections, max. • Local port numbers used at the system end • Keep-alive function, supported	Yes; With loadable FBs, max. configurable connections: 14, max. number of instances: 32 No Yes Yes; With SFB 73 / 74 prepared for loadable PROFlenergy standard FB for I-Device Yes 2  1 440 byte; Per IO Controller with shared device 1 440 byte; Per IO Controller with shared device 64 1 024 byte  Yes Yes Yes Yes  8 0, 20, 21, 23, 25, 80, 102, 135, 161, 443, 8080, 34962, 34963, 34964,
Services  — PG/OP communication  — Routing — S7 communication  — Isochronous mode — IRT — PROFlenergy  — Shared device — Number of IO Controllers with shared device, max.  Transfer memory — Inputs, max. — Outputs, max. Submodules — Number, max. — User data per submodule, max.  PROFINET CBA  • acyclic transmission • cyclic transmission  Open IE communication  • Number of connections, max.  • Local port numbers used at the system end	Yes; With loadable FBs, max. configurable connections: 14, max. number of instances: 32 No Yes Yes; With SFB 73 / 74 prepared for loadable PROFlenergy standard FB for I-Device Yes 2  1 440 byte; Per IO Controller with shared device 1 440 byte; Per IO Controller with shared device 64 1 024 byte  Yes Yes Yes Yes Yes Yes
Services  — PG/OP communication — Routing — S7 communication — Isochronous mode — IRT — PROFlenergy — Shared device — Number of IO Controllers with shared device, max.  Transfer memory — Inputs, max. — Outputs, max. — Outputs, max. Submodules — Number, max. — User data per submodule, max.  PROFINET CBA  • acyclic transmission • cyclic transmission Open IE communication • Number of connections, max. • Local port numbers used at the system end • Keep-alive function, supported	Yes; With loadable FBs, max. configurable connections: 14, max. number of instances: 32 No Yes Yes; With SFB 73 / 74 prepared for loadable PROFlenergy standard FB for I-Device Yes 2  1 440 byte; Per IO Controller with shared device 1 440 byte; Per IO Controller with shared device 64 1 024 byte  Yes Yes Yes Yes Yes Yes
Services  — PG/OP communication — Routing — S7 communication — Isochronous mode — IRT — PROFlenergy — Shared device — Number of IO Controllers with shared device, max.  Transfer memory — Inputs, max. — Outputs, max. Submodules — Number, max. — User data per submodule, max.  PROFINET CBA  • acyclic transmission • cyclic transmission  • cyclic transmission  • Number of connections, max. • Local port numbers used at the system end  • Keep-alive function, supported  Protocols	Yes; With loadable FBs, max. configurable connections: 14, max. number of instances: 32 No Yes Yes; With SFB 73 / 74 prepared for loadable PROFlenergy standard FB for I-Device Yes 2  1 440 byte; Per IO Controller with shared device 1 440 byte; Per IO Controller with shared device  64 1 024 byte  Yes Yes Yes Yes  8 0, 20, 21, 23, 25, 80, 102, 135, 161, 443, 8080, 34962, 34963, 34964, 65532, 65533, 65534, 65535 Yes

Own It Some of stations in the first, max.    Content of stations in the first, max.   South of the station in the first of stations in the first, max.   South of the station in the first of the station in the first of the station in the station	Switchover time on line break tun	200 mg; DDOEINET MDD
Open   Communication	Switchover time on line break, typ.	200 ms; PROFINET MRP
TCP/IP  Number of connection, max.  Data length for connection type 01H, max. — Bata length for connection bype 01H, max. — Several passive connections per port. supported  ISO-on-TCP (RFC1006) — Number of connections, max. — Data length, max.  UDA length, max.  UBA length, max.  UBA length, max.  UBA length, max.  Web senser  Supported  Ves via integrated PROFINET interface and loadable FBs  1 472 byte  Web senser  Ves  Supported  Ves  Ves via integrated PROFINET interface and loadable FBs  1 472 byte  Web senser  Ves  Supported  Ves  Ves  Ves  Ves  Ves  Ves  Ves  V		50
- Number of connections, max.  - Data length for connection bye 01H, max several passive connection sper port, supported  - ISO-on-TCP (RFC1006) - Number of connections, max Data length, max Supported - Super of GD packets, reasiver, max Number of GD packets, reasiver, max Size of GD packets, max Size of GD packets, reasiver, max Size of GD packets, max Size	•	Vegration integrated DDOFINET interface and leadable EDs
Data length for connection type 01H, max Data length for connection spee port Several passive connections per port several passive connections per port supported SI-Oo-n-TCP (RFC1006) Number of connections, max Data length, max Supported su		
Data length for connection yep 11H. max several passive connections per port, supported  ISO-on-TOP (RFC1006) Number of connections, max Data length, max.  Data length le	·	
supported  ISO-On-TOP (RRC1006)  Number of connections, max.  Data length, max.  UDP  Number of connections, max.  A 23 768 byte  Yes; via integrated PROFINET interface and loadable FBs  1 472 byte  Web server  Supported  User-defined websites  Number of HTTP clients  Number of HTTP clients  Sommunication functions / header  PG/OP communication functions / header  PG/OP communication functions / header  Number of GD loackets, max.  Number of GD packets, max.  Size of GD packets, for divinic consistent), max.  Size of GD packet of which consistent), max.  Size of GD packet of of which consistent), max.  Size of GD packet of of which consistent), max.  Size of GD packet of of which consistent), max.  Size of GD packet of of which consistent), max.  Size of GD packet of of which consistent), max.  Size of GD packet of of which consistent of byte of byte; 76 byt		
ISO-on-TCP (RFC1006)     Number of connections, max.     Data length, max.     32 768 byte     Yes; via integrated PROFINET interface and loadable FBs     Number of connections, max.     1472 byte  Webserver     Supported     Ves     Supported     Ves     Number of HTTP clients     Sommunication functions / header     PGOP communication     Supported     Ves     Number of GD packets, max.     Size of GD		Yes
- Number of connections, max Data length, max.  - Supported  - User-defined websites  - Number of HTIP clients  - Supported  - Supported  - Supported  - Number of GD packets, max.  - Size of	• • • • • • • • • • • • • • • • • • • •	Yes: via integrated PROFINET interface and loadable FRs
UDP - Number of connections, max Data length, max.  - Supported - User-defined websites - Supported - Supported - Ves - Supported - Suppor		•
Ves: via integrated PROFINET interface and loadable FBs     — Number of connections, max.     — Data length, max.     — Data length, max.      — Data length, max.      — User-defined websites     — Supported     — User-defined websites     — Ves     — Number of HTIP clients     5  communication functions / header  PG/OP communication      — Supported     — Number of GD pose, max.     — Number of GD packets, max.     — Number of GD packets, max.     — Number of GD packets, realwer, max.     — Number of GD packets, receiver, max.     — Size of GD packet (of which consistent), max.     — Size of GD packet (of which consistent), max.     — Size of Buser of GD packets, max.     — User data per job, max.     — Supported     — as server     — as client     — User data per job, max.     — See online help of STEP 7 (shared parameters of the SFBs/FBs and of the SFCs/FCs of ST Communication  • Supported     — Yes     — as client     — User data per job, max.     — See online help of STEP 7 (shared parameters of the SFBs/FBs and of the SFCs/FCs of ST Communication  • Supported     — Yes     — as client     — User data per job, max.     — See online help of STEP 7 (shared parameters of the SFBs/FBs and of the SFCs/FCs of ST Communication  • Supported     — Seption for the CPU communication load     • number of mentoe connection partners / with PROFINET CBA     • number of remote connection partners / with PROFINET CBA / for master or slave  • data volume / of the input variables / with PROFINET CBA / for master or slave  • data volume / of the input variables / with PROFINET CBA / for master or slave  • data volume / of the input variables / with PROFINET CBA / for master or slave  • data volume / of the input variables / with PROFINET CBA / for master or slave  • data volume / of the input variables / with PROFINET CBA / for master or slave  • data volume / of the input variables / with PROFINET CBA / for master or slave  • data	•	
— Number of connections, max. — Data length, max.  1472 byte  Web server  **supported  **User-defined websites  **User-defined websites  **Supported  **User-defined websites  **Number of HTTP clients  **Description of the CPU productions of the SPBs/FBs and of the SPCs/PCs of ST Communication  **supported  **Number 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.  **Size of Supported  **User data per job, max.  **User data per job for which consistent), max.  **Size of Supported  **User data per job, max.  **User data per job, max.  **User data per job, max.  **Size of Supported  **Supported  **Supported  **User data per job, max.  **Size of Size ommunication  **Supported  **User data per job, max.  **Size of Size ommunication  **Supported  **Supported  **Secompatible communication  **Supported  **Secompatible communication load  **number of remote connection partners / with PROFINET CBA (with set target communication load) / header  **Supported  **Supported  **Secompatible communication load  **number of remote connection partners / with PROFINET CBA / for master or slave  **number of technological functions / with PROFINET CBA / for master or slave / total  **data volume / of the input variables / with PROFINET CBA / for master or slave  **data volume / of the input variables / with PROFINET CBA / for master or slave  **data volume / of the input variables / with PROFINET CBA / for master or slave  **data volume / of the input variables / with PROFINET CBA / for master or slave  **data volume / of the input va		
Web server  supported Suser-defined websites Number of HTTP clients Number of HTTP clients Sommunication functions / header PG/OP communication Supported Number of GD loops, max. Number of GD packets, max. Number of GD packets, transmitter, max. Number of GD packets, transmitter, max. Size of GD packets, transmitter, max. Size of GD packets, max. Size of GD packets, max. Size of GD packets, of Michic consistent), max. Size of GD packets, of Michic consistent, with Size of Si		
Web server  • supported  • User-defined websites  • Number of HTTP clients  5  Communication functions / header  PG/OP communication  • supported  • Number of GD ploops, max.  • Number of GD packets, max.  • Size of Faction of Size of		
Supported  User-defined websites  Ves  Number of HTTP clients  FG/OP communication  supported  Number of GD packets, max.  Number of GD packets, max.  Number of GD packets, max.  Size of SD packets,		1 472 byte
User data per job, max.  User data per job (of which consistent), max.  So Scormentiation  Socompatible communication  Socompatible communicati		Vac
Ommunication functions / header PG/OP communication  Data record routing Supported Supported Number of GD loops, max. Number of GD packets, max. Number of GD packets, reasmitter, max. Size of GD packets, receiver, max. Size of GD packets, max. Size of GD packets, max. Size of GD packets, oreswitch, max. Size of GD packets, max. Size of SD packets, max. Size of GD packets, max. Size of SD packe	• •	
Communication functions / header PG/OP communication PG/OP communication  * supported PG/OP communication PG/OP communication  * supported PG/OP communication PG/OP commu		
PG/OP communication  Part are cord routing  Global data communication  Supported  Number of GD loops, max.  Number of GD packets, max.  Number of GD packets, max.  Number of GD packets, transmitter, max.  Number of GD packets, max.  Size of SD packets,		
Data record routing Global data communication  • supported • Number of GD loops, max. • Number of GD packets, 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.  • Size of GD packet (of which consistent), 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.  • Size of GD packet (of which consistent), 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.  • Supported • Supported • Security (of bytes (with X_SEND or X_RCV); 64 bytes (with X_PUT or X_GET as server)  • So communication • Supported • Security (of bytes, 76 bytes (with X_SEND or X_RCV); 64 bytes (with X_PUT or X_GET as server)  • Security (of bytes, 76 bytes, (with X_SEND or X_RCV); 64 bytes (with X_PUT or X_GET as server)  • Security (of bytes, 76 bytes, (with X_SEND or X_RCV); 64 bytes (with X_PUT or X_GET as server)  • Security (of bytes, 76 bytes, (with X_SEND or X_RCV); 64 bytes (with X_PUT or X_GET as server)  • Security (of bytes, 76 bytes, (with X_SEND or X_RCV); 64 bytes (with X_PUT or X_GET as server)  • Security (of bytes, 76 bytes, (with X_SEND or X_RCV); 64 bytes (with X_PUT or X_GET as server)  • Security (of bytes, 76 bytes, (with X_SEND or X_RCV); 64 bytes (with X_PUT or X_GET as server)  • Security (of bytes, 76 bytes, (with X_SEND or X_RCV); 64 bytes (with X_PUT or X_GET as server)  • Security (of bytes, 76 bytes, (with X_SEND or X_RCV); 64 bytes (with X_PUT or X_GET as server)  • Security (of bytes, 76 bytes, (with X_SEND or X_RCV); 64 bytes (with X_PUT or X_GET as server)  • Security (of bytes, (with X_SEND or X_RCV); 64 bytes (with X_PUT or X_GET as server)  • Security (of bytes, (with X_SEND or X_RCV); 64 bytes (wit		Vee
Global data communication  • supported  • Number of GD loops, max.  • Number of GD packets, max.  • Number of GD packets, treasiver, max.  • Number of GD packets, treasiver, max.  • Number of GD packets, treasiver, max.  • Number of GD packets, receiver, max.  • Size of GD packets, max.  • Size of GD packet (of which consistent), max.  • See of GD packet (of which consistent), max.  • See of St byte; 76 bytes (with x_SEND or x_RCV); 64 bytes (with X_PUT or X_SET as server)   • Supported  • See online help of STEP 7 (shared parameters of the SFBs/FBs and of the SFCs/FCs of S7 Communication)  • Supported  • See online help of STEP 7 (shared parameters of the SFBs/FBs and of the SFCs/FCs of S7 Communication)  • Supported  • See online help of STEP 7 (shared parameters of the SFBs/FBs and of the SFCs/FCs of S7 Communication)  • See online help of STEP 7 (shared parameters of the SFBs/FBs and of the SFCs/FCs of S7 Communication)  • See online help of STEP 7 (shared parameters of the SFBs/FBs and of the SFCs/FCs of S7 Communication load)  • See online help		
Supported     Number of GD loops, max.     Number of GD packets, max.     Number of GD packets, ransmitter, max.     Number of GD packets, ransmitter, max.     Number of GD packets, raceiver, 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.     State of GD packet (of which consistent), max.     Supported     Ves data per job, max.     User data per job, max.     Source of State of S		res
Number of GD loops, max.  Number of GD packets, max.  Number of GD packets, transmitter, max.  Number of GD packets, receiver, max.  Size of GD packets, max.  Number of ED packets, max.  Size of GD packets, max.  Supported  Susported  Suspor		Ves
Number of GD packets, 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.  2 byte Stasic communication  Stage of GD packet (of which consistent), max.  Size of GD packet (of which consistent), max.  Stasic communication  Stage of GD packet (of which consistent), max.  Stasic communication  Stage of GD packet (of which consistent), max.  Stage of GD packet (of which consistent), max.  Stage of GD packets, max.  Stage of GD packets.  Stage of GD packe	• •	
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.  Sported User data per job, max. User data per job (of which consistent), max.  Solution of the injust variables / with PROFINET CBA / for master or slave  number of the CPU communication / with PROFINET CBA / for master or slave data volume / of the output variables / with PROFINET CBA / for master or slave number of internal and PROFIBUS interconnections / with PROFINET CBA / maximum data volume / of internal and PROFIBUS interconnections / with PROFINET CBA / maximum data volume / of internal and PROFIBUS interconnections / with PROFINET CBA / maximum data volume / of internal and PROFIBUS  Size of GD packets, max. Supported Yes Yes 76 bytes (with X_SEND or X_RCV); 64 bytes (with X_PUT or X_GET as server) Yes		
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. State of GD packet (of which consistent) State of GD packets, max. State of GD packets (of which consistent), max. State of GD packets (of which consistent), max. State of GD packet (of byte; 76 bytes (with X_SEND or X_RCV); 64 bytes (with X_PUT or X_GET as server)  State of GD packet (of bytes (with X_PUT or X_GET as server)  Yes Yes Yes Yes Yes Yes Yes See online help of STEP 7 (shared parameters of the SFBs/FBs and of the SFCs/FCs of S7 Communication)  Yes; via CP and loadable FC  Communication functions / PROFINET CBA (with set target communication load) / header  State of GD packet (of SFBs/FBs and of the SFCs/FCs of S7 Communication)  State of GD packet (of SFBs/FBs and of SFBs/FBs and of the SFBs/FBs and of		
• Size of GD packets, max. • Size of GD packet (of which consistent), max.  2 byte  St basic communication  • supported • User data per job, max. • User data per job (of which consistent), max.  • St communication  • supported • St communication  • St compatible communication  • St compatible communication  • supported • St compatible communication  • supported • St compatible communication  • supported • St compatible communication • supported • St compatible communication • supported • St compatible communication • supported • St compatible communication • supported • St compatible communication load • supported • St compatible communication load • number of remote connection partners / with PROFINET CBA • number of technological functions / with PROFINET CBA / for master or slave • number of technological functions / with PROFINET CBA / for master or slave • data volume / of the input variables / with PROFINET CBA / for master or slave • data volume / of the output variables / with PROFINET CBA / for master or slave • number of internal and PROFIBUS interconnections / with PROFINET CBA / maximum • data volume / of internal and PROFIBUS		
Size of GD packet (of which consistent), max.  Signature of GD packet (of Which Signature), max.		
S7 basic communication  Supported User data per job, max. User data per job (of which consistent), max.  S7 communication  S7 communication  S8 server S9 as server S9 as client User data per job, max. S9 communication  S9 communication  S9 communication  S9 communication  S9 compatible communication  S9		•
Supported     User data per job, max.     User data per job (of which consistent), max.     User data per job (of which consistent), max.      S7 communication      Supported     Supported     As server     As client     User data per job, max.      See online help of STEP 7 (shared parameters of the SFBs/FBs and of the SFCs/FCs of S7 Communication)  S5 compatible communication     Seponition for the CPU communication load     Number of remote connection partners / with PROFINET CBA     Number of technological functions / with PROFINET CBA / for master or slave     Number of the output variables / with PROFINET CBA / for master or slave     Atta volume / of the input variables / with PROFINET CBA / for master or slave     Number of internal and PROFIBUS interconnections / with PROFINET CBA / for maximum     Adata volume / of internal and PROFIBUS      A number of internal and PROFIBUS		22 byte
User data per job, max.  User data per job (of which consistent), max.  To byte the system of bytes (with X_SEND or X_RCV); 64 bytes (with X_PUT or X_GET as server)  To x_GET as server  Sommunication  Sommunication  User data per job, max.  User data per job, max.  User data per job, max.  See online help of STEP 7 (shared parameters of the SFBs/FBs and of the SFCs/FCs of S7 Communication)  Sommunication functions / PROFINET CBA (with set target communication load) / header  Sommunication functions / PROFINET CBA (with set target communication load) / header  Setpoint for the CPU communication load  In umber of remote connection partners / with PROFINET CBA (for master or slave)  In umber of technological functions / with PROFINET CBA / for master or slave / total  In unable of the input variables / with PROFINET CBA / for master or slave / total  In unable of the output variables / with PROFINET CBA / for master or slave / total  In unable of internal and PROFIBUS interconnections / with PROFINET CBA / for master or slave  In unmber of internal and PROFIBUS interconnections / with PROFINET CBA / for master or slave  In unmber of internal and PROFIBUS interconnections / with PROFINET CBA / for master or slave  In unmber of internal and PROFIBUS interconnections / with PROFINET CBA / for master or slave  In unmber of internal and PROFIBUS interconnections / with PROFINET CBA / for master or slave  In unmber of internal and PROFIBUS interconnections / with PROFINET CBA / for master or slave  In unmber of internal and PROFIBUS interconnections / with PROFINET CBA / for master or slave  In unmber of internal and PROFIBUS interconnections / with PROFINET CBA / for master or slave  In unmber of internal and PROFIBUS interconnections / with PROFINET CBA / for master or slave  In unmber of internal and PROFIBUS interconnections / with PROFINET CBA / for master or slave		
User data per job (of which consistent), max.  76 byte; 76 bytes (with X_SEND or X_RCV); 64 bytes (with X_PUT or X_GET as server)  9 supported 9 supported 9 as client 9 User data per job, max.  9 Set online help of STEP 7 (shared parameters of the SFBs/FBs and of the SFCs/FCs of S7 Communication)  10 St compatible communication 10 supported 10 Set point for the CPU communication load 10 number of remote connection partners / with PROFINET CBA 10 number of technological functions / with PROFINET CBA / for master or slave 10 Adat volume / of the input variables / with PROFINET CBA / for master or slave 10 data volume / of the output variables / with PROFINET CBA / for master or slave 10 number of internal and PROFIBUS interconnections / with PROFINET CBA / for master or slave 10 number of internal and PROFIBUS 10 byte 10 byte 10 byte 11 bytes (with X_SEND or X_RCV); 64 bytes (with X_PUT) or X_GET as server)  Yes 12 bytes (with X_SEND or X_RCV); 64 bytes (with X_SEND or X_RCV); 64 bytes (with X_PUT) or X_GET as server)  Yes 12 bytes 12 bytes (with X_SEND or X_RCV); 64 bytes (with X_SEND or X_RCV); 64 bytes (with X_SEND or X_GET as server)  Yes 12 bytes 13 care data volume / STEP 7 (shared parameters and loadable FB or via CP and loadable FB or	• •	
S7 communication  • supported • as server • as client  • User data per job, max.  • supported • User data per job, max.  • supported  • supported  • supported  • supported  • supported  • St compatible communication  • supported  • See online help of STEP 7 (shared parameters of the SFBs/FBs and of the SFCs/FCs of S7 Communication)  • supported  • Sepoint for the CPU communication load • number of remote connection partners / with PROFINET CBA • number of technological functions / with PROFINET CBA / for master or slave  • number of connections / with PROFINET CBA / for master or slave  • data volume / of the output variables / with PROFINET CBA / for master or slave  • number of internal and PROFIBUS interconnections / with PROFINET CBA / maximum  • data volume / of internal and PROFIBUS  • data volume / of internal and PROFIBUS  • data volume / of internal and PROFIBUS		
S7 communication  • supported • as server • as client  • User data per job, max.  • See online help of STEP 7 (shared parameters of the SFBs/FBs and of the SFCs/FCs of S7 Communication)  S5 compatible communication • supported  • Setpoint for the CPU communication load • number of remote connection partners / with PROFINET CBA • number of technological functions / with PROFINET CBA / for master or slave • number of connections / with PROFINET CBA / for master or slave of data volume / of the output variables / with PROFINET CBA / for master or slave • data volume / of the output variables / with PROFINET CBA / for master or slave • number of internal and PROFIBUS interconnections / with PROFINET CBA / for master or slave • data volume / of the output variables / with PROFINET CBA / for master or slave • data volume / of internal and PROFIBUS interconnections / with PROFINET CBA / maximum • data volume / of internal and PROFIBUS  • data volume / of internal and PROFIBUS  • doubte	<ul> <li>User data per job (of which consistent), max.</li> </ul>	
supported     as server     as client     Ves; via integrated PROFINET interface and loadable FB or via CP and loadable FB     User data per job, max.     See online help of STEP 7 (shared parameters of the SFBs/FBs and of the SFCs/FCs of S7 Communication)  S5 compatible communication     supported     Yes; via CP and loadable FC  communication functions / PROFINET CBA (with set target communication load) / header  Setpoint for the CPU communication load     number of remote connection partners / with PROFINET CBA     number of technological functions / with PROFINET CBA / for master or slave      number of connections / with PROFINET CBA / for master or slave      data volume / of the input variables / with PROFINET CBA / for master or slave      data volume / of the output variables / with PROFINET CBA / for master or slave      number of internal and PROFIBUS interconnections / with PROFINET CBA / maximum      data volume / of internal and PROFIBUS      4 000 byte	S7 communication	A_GLT as server)
<ul> <li>as server</li> <li>as client</li> <li>Yes; via integrated PROFINET interface and loadable FB or via CP and loadable FB</li> <li>User data per job, max.</li> <li>See online help of STEP 7 (shared parameters of the SFBs/FBs and of the SFCs/FCs of S7 Communication)</li> <li>supported</li> <li>Yes; via CP and loadable FC</li> <li>communication functions / PROFINET CBA (with set target communication load) / header</li> <li>Setpoint for the CPU communication load</li> <li>number of remote connection partners / with PROFINET CBA</li> <li>number of technological functions / with PROFINET CBA / for master or slave</li> <li>number of connections / with PROFINET CBA / for master or slave / total</li> <li>data volume / of the input variables / with PROFINET CBA / for master or slave</li> <li>adata volume / of the output variables / with PROFINET CBA / for master or slave</li> <li>number of internal and PROFIBUS interconnections / with PROFINET CBA / maximum</li> <li>data volume / of internal and PROFIBUS</li> <li>4 000 byte</li> </ul>		Vac
as client	• •	
User data per job, max.  See online help of STEP 7 (shared parameters of the SFBs/FBs and of the SFCs/FCs of S7 Communication)  State of the SFCs/FCs of S7 Communication)  State of the SFBs/FBs and of the SFCs/FCs of S7 Communication)  Yes; via CP and loadable FC  communication functions / PROFINET CBA (with set target communication load) / header  Set point for the CPU communication load  number of remote connection partners / with PROFINET CBA  number of technological functions / with PROFINET CBA / for master or slave  number of connections / with PROFINET CBA / for master or slave / data volume / of the input variables / with PROFINET CBA / for master or slave  data volume / of the output variables / with PROFINET CBA / for master or slave  number of internal and PROFIBUS interconnections / with PROFINET CBA / maximum  data volume / of internal and PROFIBUS  4 000 byte		
the SFCs/FCs of S7 Communication)  S5 compatible communication  supported  Yes; via CP and loadable FC  communication functions / PROFINET CBA (with set target communication load) / header  Setpoint for the CPU communication load  number of remote connection partners / with PROFINET CBA  number of technological functions / with PROFINET CBA / for master or slave  number of connections / with PROFINET CBA / for master or slave / total  data volume / of the input variables / with PROFINET CBA / for master or slave  data volume / of the output variables / with PROFINET CBA / for master or slave  number of internal and PROFIBUS interconnections / with PROFINET CBA / maximum  data volume / of internal and PROFIBUS  4 000 byte	• as cheffic	
● supported Yes; via CP and loadable FC  communication functions / PROFINET CBA (with set target communication load) / header  ● Setpoint for the CPU communication load 50 %  ● number of remote connection partners / with PROFINET CBA  ● number of technological functions / with PROFINET CBA / for master or slave  ● number of connections / with PROFINET CBA / for master or slave / total  ● data volume / of the input variables / with PROFINET CBA / for master or slave  ● data volume / of the output variables / with PROFINET CBA / for master or slave  ● data volume / of the output variables / with PROFINET CBA / for master or slave  ● number of internal and PROFIBUS interconnections / with PROFINET CBA / maximum  ● data volume / of internal and PROFIBUS  4 000 byte	<ul> <li>User data per job, max.</li> </ul>	
• supported  Yes; via CP and loadable FC  communication functions / PROFINET CBA (with set target communication load) / header  • Setpoint for the CPU communication load • number of remote connection partners / with PROFINET CBA • number of technological functions / with PROFINET CBA / for master or slave • number of connections / with PROFINET CBA / for master or slave / total • data volume / of the input variables / with PROFINET CBA / for master or slave • data volume / of the output variables / with PROFINET CBA / for master or slave • number of internal and PROFIBUS interconnections / with PROFINET CBA / maximum • data volume / of internal and PROFIBUS  4 000 byte		the SFCs/FCs of S7 Communication)
communication functions / PROFINET CBA (with set target communication load) / header  Setpoint for the CPU communication load  number of remote connection partners / with PROFINET CBA  number of technological functions / with PROFINET CBA / for master or slave  number of connections / with PROFINET CBA / for master or slave / total  data volume / of the input variables / with PROFINET CBA / for master or slave  data volume / of the output variables / with PROFINET CBA / for master or slave  number of internal and PROFIBUS interconnections / with PROFINET CBA / maximum  data volume / of internal and PROFIBUS  4 000 byte		
<ul> <li>Setpoint for the CPU communication load</li> <li>number of remote connection partners / with PROFINET CBA</li> <li>number of technological functions / with PROFINET CBA / for master or slave</li> <li>number of connections / with PROFINET CBA / for master or slave / total</li> <li>data volume / of the input variables / with PROFINET CBA / for master or slave</li> <li>data volume / of the output variables / with PROFINET CBA / for master or slave</li> <li>number of internal and PROFIBUS interconnections / with PROFINET CBA / maximum</li> <li>data volume / of internal and PROFIBUS</li> <li>4 000 byte</li> </ul>	***	
<ul> <li>number of remote connection partners / with PROFINET CBA</li> <li>number of technological functions / with PROFINET CBA / for master or slave</li> <li>number of connections / with PROFINET CBA / for master or slave / total</li> <li>data volume / of the input variables / with PROFINET CBA / for master or slave</li> <li>data volume / of the output variables / with PROFINET CBA / for master or slave</li> <li>number of internal and PROFIBUS interconnections / with PROFINET CBA / maximum</li> <li>data volume / of internal and PROFIBUS</li> <li>4 000 byte</li> </ul>	· -	·
PROFINET CBA  • number of technological functions / with PROFINET CBA / for master or slave  • number of connections / with PROFINET CBA / for master or slave / total  • data volume / of the input variables / with PROFINET CBA / for master or slave  • data volume / of the output variables / with PROFINET CBA / for master or slave  • data volume / of the output variables / with PROFINET CBA / for master or slave  • number of internal and PROFIBUS interconnections / with PROFINET CBA / maximum  • data volume / of internal and PROFIBUS  4 000 byte	·	
CBA / for master or slave  In number of connections / with PROFINET CBA / for master or slave / total  In data volume / of the input variables / with PROFINET CBA / for master or slave  In data volume / of the output variables / with PROFINET CBA / for master or slave  In number of internal and PROFIBUS interconnections / with PROFINET CBA / maximum  In data volume / of internal and PROFIBUS  In data volume / of internal and PROFIBUS  In double variables / with variables / wit		32
<ul> <li>number of connections / with PROFINET CBA / for master or slave / total</li> <li>data volume / of the input variables / with PROFINET CBA / for master or slave</li> <li>data volume / of the output variables / with PROFINET CBA / for master or slave</li> <li>number of internal and PROFIBUS interconnections / with PROFINET CBA / maximum</li> <li>data volume / of internal and PROFIBUS</li> <li>4 000 byte</li> </ul>		30
<ul> <li>data volume / of the input variables / with PROFINET CBA / for master or slave</li> <li>data volume / of the output variables / with PROFINET CBA / for master or slave</li> <li>number of internal and PROFIBUS interconnections / with PROFINET CBA / maximum</li> <li>data volume / of internal and PROFIBUS</li> <li>4 000 byte</li> </ul>	• number of connections / with PROFINET CBA / for	1 000
PROFINET CBA / for master or slave  • data volume / of the output variables / with PROFINET CBA / for master or slave  • number of internal and PROFIBUS interconnections / with PROFINET CBA / maximum  • data volume / of internal and PROFIBUS  4 000 byte		4 000 byte
PROFINET CBA / for master or slave  • number of internal and PROFIBUS interconnections / with PROFINET CBA / maximum  • data volume / of internal and PROFIBUS  4 000 byte	PROFINET CBA / for master or slave	,
/ with PROFINET CBA / maximum  • data volume / of internal and PROFIBUS  4 000 byte	PROFINET CBA / for master or slave	,
		500
slave	interconnections / with PROFINET CBA / for master or	4 000 byte
data volume / with PROFINET CBA / per connection / maximum  1 400 byte		1 400 byte

and an arranged to the control of th	
performance data / PROFINET CBA / remote interconnec	-
<ul> <li>update time / of the remote interconnections / in the case of acyclic transmission / with PROFINET CBA</li> </ul>	500 ms
<ul> <li>number of remote connections to input variables / in the case of acyclic transmission / with PROFINET CBA / maximum</li> </ul>	100
<ul> <li>number of remote connections to output variables / in the case of acyclic transmission / with PROFINET CBA / maximum</li> </ul>	100
<ul> <li>data volume / as user data for remote interconnections with input variables / in the case of acyclic transmission / with PROFINET CBA</li> </ul>	2 000 byte
<ul> <li>data volume / as user data for remote interconnections with output variables / in the case of acyclic transmission / with PROFINET CBA</li> </ul>	2 000 byte
<ul> <li>data volume / as user data for remote interconnections / in the case of acyclic transmission / with PROFINET CBA / per connection / maximum</li> </ul>	1 400 byte
performance data / PROFINET CBA / remote interconnec	ction / with cyclic transfer / header
<ul> <li>update time / of the remote interconnections / with cyclical transfer / with PROFINET CBA</li> </ul>	10 ms
<ul> <li>number of remote connections to input variables / with PROFINET CBA / with cyclic transfer / maximum</li> </ul>	200
<ul> <li>number of remote connections to output variables / with cyclical transfer / with PROFINET CBA / maximum</li> </ul>	200
<ul> <li>data volume / as user data for remote interconnections with input variables / with cyclical transfer / with PROFINET CBA / maximum</li> </ul>	2 000 byte
<ul> <li>data volume / as user data for remote interconnections with output variables / with cyclical transfer / with PROFINET CBA / maximum</li> </ul>	2 000 byte
<ul> <li>data volume / as user data for remote interconnections / with cyclical transfer / with PROFINET CBA / per connection / maximum</li> </ul>	450 byte
performance data / PROFINET CBA / HMI variables via F	PROFINET / acyclic / header
<ul> <li>number of connectable HMI stations / for HMI variables / in the case of acyclic transmission / with PROFINET CBA</li> </ul>	3; 2x PN OPC/1x iMap
<ul> <li>update time / of the HMI variables / in the case of acyclic transmission / with PROFINET CBA</li> </ul>	500 ms
<ul> <li>number of HMI variables / in the case of acyclic transmission / with PROFINET CBA / maximum</li> </ul>	200
<ul> <li>data volume / as user data for HMI variables / in the case of acyclic transmission / with PROFINET CBA / maximum</li> </ul>	2 000 byte
performance data / PROFINET CBA / PROFIBUS proxy	functionality / header
<ul><li>product function / with PROFINET CBA / PROFIBUS proxy functionality</li></ul>	Yes
<ul> <li>number of coupled PROFIBUS devices / with PROFIBUS functionality</li> </ul>	16
— data volume / with PROFIBUS proxy functionality / with PROFINET CBA / per connection / maximum	240 byte; Slave-dependent
Number of connections	
• overall	16
<ul> <li>usable for PG communication</li> </ul>	15
<ul> <li>reserved for PG communication</li> </ul>	1
<ul> <li>adjustable for PG communication, min.</li> </ul>	1
<ul> <li>adjustable for PG communication, max.</li> </ul>	15
<ul> <li>usable for OP communication</li> </ul>	15
— reserved for OP communication	1
— adjustable for OP communication, min.	1
<ul> <li>adjustable for OP communication, max.</li> </ul>	15

usable for S7 basic communication	14
<ul> <li>reserved for S7 basic communication</li> </ul>	0
<ul> <li>adjustable for S7 basic communication, min.</li> </ul>	0
<ul> <li>adjustable for S7 basic communication, max.</li> </ul>	14
<ul> <li>usable for S7 communication</li> </ul>	14
<ul> <li>reserved for S7 communication</li> </ul>	0
<ul> <li>adjustable for S7 communication, min.</li> </ul>	0
<ul> <li>adjustable for S7 communication, max.</li> </ul>	14
<ul> <li>total number of instances, max.</li> </ul>	32
usable for routing	X1 as MPI: max. 10; X1 as DP master: max. 24; X1 as DP slave (active): max. 14; X2 as PROFINET: 24 max.
S7 message functions	
Number of login stations for message functions, max.	16; Depending on the configured connections for PG/OP and S7 basic communication
Process diagnostic messages	Yes
simultaneously active Alarm-S blocks, max.	300
Test commissioning functions	
Status block	Yes; Up to 2 simultaneously
Single step	Yes
Number of breakpoints	4
Status/control	7
Status/control variable	Yes
Variables     Number of variables, may	Inputs, outputs, memory bits, DB, times, counters
Number of variables, max.	30
— of which status variables, max.	30
— of which control variables, max.	14
Forcing	
<ul><li>Forcing</li></ul>	Yes
<ul><li>Forcing, variables</li></ul>	Inputs, outputs
Number of variables, max.	10
Diagnostic buffer	
• present	Yes
<ul> <li>Number of entries, max.</li> </ul>	500
— adjustable	No
<ul><li>— of which powerfail-proof</li></ul>	100; Only the last 100 entries are retained
<ul> <li>Number of entries readable in RUN, max.</li> </ul>	499
— adjustable	Yes; From 10 to 499
— preset	10
Service data	
can be read out	Yes
Ambient conditions	
Ambient temperature during operation	
• min.	0 °C
• max.	60 °C
configuration / header	
Configuration software	Vaca VE E and inhan
• STEP 7	Yes; V5.5 or higher
configuration / programming / header	
Command set	see instruction list
<ul> <li>Nesting levels</li> </ul>	8
<ul><li>System functions (SFC)</li></ul>	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
: :: = : =   = : = :	

Yes
Yes; With S7 block Privacy
40 mm
125 mm
130 mm
340 g

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