

Data sheet

VIPA CPU 315PN ECO (315-4PN43)

Technical data

Order no.	315-4PN43
Туре	VIPA CPU 315PN ECO
General information	
Note	
Features	Powered by SPEED7 Work memory [KB]: 5121.024 Integrated PROFINET controller Interface [RJ45]: Ethernet / PROFINET-IO Interface [RJ45]: Ethernet PG/OP communication Interface [RS485]: MPI Interface [RS485]: PtP: ASCII, STX/ETX, 3964(R), USS master, Modbus master/slave SD/MMC card slot with locking, up to 32 modules stackable, programmable with WinPLC7, SIMATIC Manager and TIA Portal
SPEED-Bus	-
Technical data power supply	
Power supply (rated value)	DC 24 V
Power supply (permitted range)	DC 20.428.8 V
Reverse polarity protection	yes
Current consumption (no-load operation)	200 mA
Current consumption (rated value)	0.7 A
Inrush current	11 A
	0.4 A ² s
Max. current drain at backplane bus	2 A
Max. current drain load supply	-
Power loss	5.5 W
Load and working memory	
Load memory, integrated	1 MB
Load memory, maximum	1 MB
Work memory, integrated	512 KB
Work memory, maximal	1 MB
Memory divided in 50% program / 50% data	yes
Memory card slot	SD/MMC-Card with max. 2 GB
Hardware configuration	
Racks, max.	4
Modules per rack, max.	8 in multiple-, 32 in a single-rack configuration
Number of integrated DP master	0
Number of DP master via CP	4
Operable function modules	8
Operable communication modules PtP	8
Operable communication modules LAN	8
Status information, alarms, diagnostics	
Status display	yes
Interrupts	no

Process alarm	no
Diagnostic interrupt	no
Diagnostic functions	yes
Diagnostics information read-out	possible
Supply voltage display	green LED
Group error display	red SF LED
Channel error display	none
Chainer end display	none
Command processing times	
Bit instructions, min.	0.01 µs
Word instruction, min.	0.01 µs
Double integer arithmetic, min.	0.01 µs
Floating-point arithmetic, min.	0.06 µs
Timers/Counters and their retentive characteri	stics
Number of S7 counters	512
S7 counter remanence	adjustable 0 up to 512
S7 counter remanence adjustable	C0 C7
Number of S7 times	512
S7 times remanence	adjustable 0 up to 512
S7 times remanence adjustable	not retentive
Data range and retentive characteristic	
Number of flags	8192 Byte
Bit memories retentive characteristic adjustable	adjustable 0 up to 8192
Bit memories retentive characteristic preset	MB0 MB15
Number of data blocks	4095
Max. data blocks size	64 KB
Number range DBs	1 4095
Max. local data size per execution level	1024 Byte
Max. local data size per block	1024 Byte
Blocks	
Number of OBs	20
Maximum OB size	64 KB
Total number DBs, FBs, FCs	-
Number of FBs	2048
Maximum FB size	64 KB
Number range FBs	0 2047
Number of FCs	2048
Maximum FC size	64 KB
Number range FCs	0 2047
Maximum nesting depth per priority class	8
Maximum nesting depth additional within an error OB	4
Time	
Real-time clock buffered	yes
Clock buffered period (min.)	6 W
Type of buffering	Vanadium Rechargeable Lithium Battery
Load time for 50% buffering period	20 h
Load time for 100% buffering period	48 h

Number of operating hours counter 8 Clock synchronization yes Synchronization via MPI Massier/Slave Synchronization via Ethemet (NTP) Slave Address areas (I/O) University of the state of the stat	Accuracy (max. deviation per day)	10 s
Clock synchronization va MPI Master/Slave Synchronization via MPI Master/Slave Synchronization via Ethemet (NTP) Slave Address areas (UO) Input I/O address area 2048 Byte Output I/O address area 2048 Byte Process image adjustable yes Input process image preset 256 Byte Output process image preset 256 Byte Output process image maximal 2048 Byte Output process image maximal 2044 Byte Output process image maximal 2048 Byte Output process image maximal 2024		8
Synchronization via MPI Master/Slave Synchronization via Ethernet (NTP) Slave Address areas (I/O) Slave Input I/O address area 2048 Byte Process image adjustable yes Input process image preset 256 Byte Output process image preset 256 Byte Input process image maximal 2048 Byte Output process image maximal 2048 Byte Injuit process image maximal 2048 Byte Output process image maximal 2044 Injuit process image maximal 2024 Injuit process image maximal 1024 Injuit process image maximal 1024 <		yes
Address areas (VO) Input I/O address area	Synchronization via MPI	Master/Slave
Input I/O address area 2048 Byte Output I/O address area 2048 Byte Process image adjustable yes Input process image preset 256 Byte Output process image preset 256 Byte Input process image maximal 2048 Byte Output process image maximal 2048 Byte Output process image maximal 2048 Byte Digital prupts 16384 Digital outputs 16384 Digital prupts central 1024 Integrated digital prupts - Integrated digital outputs - Integrated digital outputs 1024 Analog inputs 1024 Analog inputs 1024 Analog outputs, central 256 Analog outputs, central 256 Integrated analog inputs - Integrated analog inputs - Order process image maximal 256 Analog outputs, central 256 Integrated analog outputs - Order processor - Communication assume yes <	Synchronization via Ethernet (NTP)	Slave
Input I/O address area 2048 Byte Output I/O address area 2048 Byte Process image adjustable yes Input process image preset 256 Byte Output process image preset 256 Byte Input process image maximal 2048 Byte Output process image maximal 2048 Byte Output process image maximal 2048 Byte Digital prupts 16384 Digital outputs 16384 Digital prupts central 1024 Integrated digital prupts - Integrated digital outputs - Integrated digital outputs 1024 Analog inputs 1024 Analog inputs 1024 Analog outputs, central 256 Analog outputs, central 256 Integrated analog inputs - Integrated analog inputs - Order process image maximal 256 Analog outputs, central 256 Integrated analog outputs - Order processor - Communication assume yes <		
Output I/O address area 2048 Byte Process image adjustable yes Input process image preset 256 Byte Output process image maximal 2048 Byte Input process image maximal 2048 Byte Output process image maximal 2048 Byte Digital inputs 16384 Digital inputs 16384 Digital outputs 1024 Integrated digital inputs - Integrated digital outputs - Analog inputs 1024 Analog outputs 1024 Analog outputs 1024 Analog outputs 1024 Analog outputs 1024 Analog outputs, central 256 Integrated analog inputs - Integrated analog outputs - Communication functions 9es PG/OP channel yes Global data communication yes S7 basic communication yes S7 basic communication, user data per job 76 Byte S7 communication, user data per job 70 Byte <		
Process image adjustable yes		*
input process image preset 256 Byte Output process image preset 256 Byte Input process image maximal 2048 Byte Output process image maximal 2048 Byte Output process image maximal 2048 Byte Output process image maximal 2048 Byte Digital outputs 16384 Digital outputs 1024 Oligital outputs central 1024 Integrated digital inputs - Integrated digital outputs - Analog inputs 1024 Analog outputs, central 256 Analog outputs, central 256 Integrated analog inputs - Integrated analog outputs - PG/OP channel yes PG/OP channel yes Slobal data communication yes Sr oammunication user data per job		2048 Byte
Output process image preset 256 Byte Input process image maximal 2048 Byte Output process image maximal 2048 Byte Digital inputs 16384 Digital inputs 16384 Digital inputs central 1024 Digital inputs central 1024 Integrated digital outputs - Analog inputs 1024 Analog inputs 1024 Analog outputs 1024 Analog outputs 1024 Analog inputs, central 256 Integrated analog inputs - Integrated analog outputs - Communication functions - PG/OP channel yes Global data communication yes Size of GD packets, max. 22 Byte S7 basic communication yes S7 basic communication, user data per job 76 Byte S7 communication as server yes S7 communication as client - S7 communication, user data per job 160 Byte Number of connections, max. 32 <td></td> <td></td>		
input process image maximal 2048 Byte Output process image maximal 2048 Byte Digital inputs 16384 Digital outputs 16384 Digital toutputs central 1024 Digital outputs central 1024 Integrated digital inputs - Integrated digital outputs 1024 Analog inputs 1024 Analog inputs, central 256 Analog inputs, central 256 Analog inputs, central 256 Integrated analog outputs - Integrated analog outputs - Formunication functions PS PG/OP channel yes Global data communication yes Size of GD packets, max. 22 Byte Size of GD packets, max. 22 Byte Size of communication yes Size ocommunication yes Size ocommunication as estate per job 76 Byte Size ocommunication as server yes Size ocommunication as estate per job 160 Byte Number of connections, max.		
Output process image maximal 2048 Byte Digital inputs 16384 Digital outputs 16384 Digital outputs central 1024 Digital outputs central 1024 Integrated digital inputs - Integrated digital outputs - Analog inputs 1024 Analog outputs, central 256 Analog outputs, central 256 Integrated analog inputs - Integrated analog outputs - Communication functions PG/OP channel yes Global data communication yes Number of GD circuits, max. 8 Size of GD packets, max. 22 Byte S7 basic communication yes S7 basic communication yes S7 communication user data per job 76 Byte S7 communication as client - S7 communication, user data per job 160 Byte Number of connections, max. 32 Type of interface RS485 Connector <t< td=""><td></td><td></td></t<>		
Digital inputs 16384 Digital outputs 16384 Digital outputs central 1024 Digital outputs central 1024 Integrated digital inputs - Integrated digital outputs - Analog inputs 1024 Analog outputs 1024 Analog outputs, central 256 Analog outputs, central 256 Integrated analog inputs - Integrated analog outputs - Communication functions - PG/OP channel yes Global data communication yes Global data communication yes ST Dasic communication yes ST Dasic communication yes ST basic communication yes ST communication, user data per job 76 Byte ST communication as client - ST communication, user data per job 100 Byte Number of connections, max. 32 Functionality Sub-D interfaces RS485 Connector Sub-D, 9-pin, female		<u> </u>
Digital outputs 16384 Digital inputs central 1024 Digital outputs central 1024 Integrated digital inputs - Integrated digital outputs 1024 Analog outputs 1024 Analog outputs, central 256 Analog inputs, central 256 Analog outputs, central 256 Integrated analog inputs - Integrated analog outputs - Communication functions Ves PG/OP channel yes Global data communication yes Number of GD circuits, max. 8 Size of GD packets, max. 22 Byte S7 basic communication yes S7 basic communication, user data per job 76 Byte S7 communication as server yes S7 communication, user data per job 160 Byte Number of connections, max. 32 Functionality Sub-D interfaces X2 Type X2 Type of interface RS485 Connector Sub-D, 9-pin, female		<u> </u>
Digital inputs central 1024 Digital outputs central 1024 Integrated digital inputs - Integrated digital outputs - Analog inputs 1024 Analog untputs, central 256 Analog outputs, central 256 Integrated analog inputs - Integrated analog outputs - Communication functions PG/OP channel yes Global data communication yes Number of SD circuits, max. 8 Size of GD packets, max. 22 Byte S7 basic communication yes S7 basic communication, user data per job 76 Byte S7 communication as server yes S7 communication as client - S7 communication, user data per job 160 Byte Number of connections, max. 32 Functionality Sub-D interfaces Type X2 Type of interface R5485 Connector Sub-D, 9-pin, female Electrically isolated		
Digital outputs central 1024 Integrated digital inputs - Integrated digital outputs - Analog inputs 1024 Analog outputs 1024 Analog outputs 1024 Analog outputs 256 Integrated analog inputs 256 Integrated analog outputs - Integrated analog outputs - Communication functions PG/OP channel yes Global data communication yes Number of GD circuits, max. 8 Size of GD packets, max. 22 Byte S7 basic communication, user data per job 76 Byte S7 communication as server yes S7 communication as server yes S7 communication as client - S7 communication user data per job 160 Byte Number of connections, max. 32 Functionality Sub-D interfaces Type X2 Type (interface R5485 Connector Sub-D, 9-pin, female Electrically isolated MPI MPI/RS232) - DP master - DP slave -		
Integrated digital inputs - Integrated digital outputs - Analog inputs 1024 Analog inputs, central 256 Analog outputs, central 256 Integrated analog inputs - Integrated analog outputs - Communication functions - PG/OP channel yes Global data communication yes Number of GD circuits, max. 8 Size of GD packets, max. 22 Byte S7 basic communication yes S7 basic communication, user data per job 76 Byte S7 communication as server yes S7 communication as client - S7 communication sure data per job 160 Byte Number of connections, max. 32 Functionality Sub-D interfaces X2 Type of interface RS485 Connector Sub-D, 9-pin, female Electrically isolated yes MPI yes MPI (MPI/RS232) - DP master - DP slave </td <td></td> <td></td>		
Integrated digital outputs 1024 Analog inputs 1024 Analog outputs 1024 Analog outputs 256 Analog outputs, central 256 Integrated analog outputs, central 256 Integrated analog outputs 256 Integrated analog outputs 356 Integrated analog outputs 357 Communication functions PG/OP channel yes Global data communication yes Size of GD packets, max. 8 Size of GD packets, max. 22 Byte S7 basic communication yes S7 basic communication, user data per job 76 Byte S7 communication, user data per job 76 Byte S7 communication as client 257 Communication as server yes S7 communication, user data per job 160 Byte Number of connections, max. 32 Functionality Sub-D interfaces Type X2 Type of interface RS485 Connector Sub-D, 9-pin, female Electrically isolated yes MPI yes MP2I (MPI/RS232) DP master DP slave DP slave Integrated Analog outputs 1024 Description 1024 Descr		1024
Analog inputs 1024 Analog outputs 1024 Analog inputs, central 256 Analog outputs, central 256 Integrated analog inputs - Integrated analog outputs - Communication functions PG/OP channel yes Global data communication yes Number of GD circuits, max. 8 Size of GD packets, max. 22 Byte S7 basic communication yes S7 basic communication, user data per job 76 Byte S7 communication as server yes S7 communication as server yes S7 communication, user data per job 160 Byte Number of connections, max. 32 Functionality Sub-D interfaces Type X2 Type of interface RS485 Connector Sub-D, 9-pin, female Electrically isolated yes MPI yes MP2 (MPI/RS232) - DP master -		•
Analog outputs 1024 Analog inputs, central 256 Analog outputs, central 256 Integrated analog inputs - Integrated analog outputs - Communication functions PG/OP channel yes Global data communication yes Number of GD circuits, max. 8 Size of GD packets, max. 22 Byte S7 basic communication yes S7 communication yes S7 communication yes S7 communication yes S8 communication yes S9 communication as server yes S9 communication as client - S9 communication, user data per job 160 Byte Number of connections, max. 32 Functionality Sub-D interfaces Type X2 Type X2 Type interface RS485 Connector Sub-D, 9-pin, female Electrically isolated yes MPI yes MP2 (MPU/RS232) DP master DP slave -	Integrated digital outputs	-
Analog inputs, central 256 Analog outputs, central 256 Integrated analog inputs - Integrated analog outputs - Communication functions PG/OP channel yes Global data communication yes Number of GD circuits, max. 8 Size of GD packets, max. 22 Byte S7 basic communication yes S7 communication, user data per job 76 Byte S7 communication as server yes S7 communication as client - S7 communication, user data per job 160 Byte Number of connections, max. 32 Functionality Sub-D interfaces Type X2 Type of interface RS485 Connector Sub-D, 9-pin, female Electrically isolated yes MPI yes MP2 (MPI/RS232) - DP master - DP slave -	Analog inputs	1024
Analog outputs, central Integrated analog inputs Integrated analog outputs Communication functions PG/OP channel Global data communication Number of GD circuits, max. Size of GD packets, max. 22 Byte S7 basic communication yes S7 basic communication yes S7 communication yes S7 communication yes S7 communication yes S7 communication as server yes S7 communication, user data per job 160 Byte Number of connections, max. 32 Functionality Sub-D interfaces Type X2 Type of interface RS485 Connector Sub-D, 9-pin, female Electrically isolated yes MPI yes MPI MPP/RS232) - DP master D Slave - - - - - - - - - - - - -		1024
Integrated analog inputs - Integrated analog outputs - Communication functions PG/OP channel yes Global data communication yes Number of GD circuits, max. 8 Size of GD packets, max. 22 Byte S7 basic communication yes S7 basic communication yes S7 communication yes S7 communication yes S7 communication yes S7 communication server yes S7 communication as client - S7 communication, user data per job 160 Byte Number of connections, max. 32 Functionality Sub-D interfaces Type X2 Type interface RS485 Connector Sub-D, 9-pin, female Electrically isolated yes MPI yes MP2 (MPI/RS232) - DP master - DP slave	Analog inputs, central	256
Integrated analog outputs	Analog outputs, central	256
Communication functions PG/OP channel yes Global data communication yes Number of GD circuits, max. 8 Size of GD packets, max. 22 Byte S7 basic communication yes S7 basic communication, user data per job 76 Byte S7 communication yes S7 communication yes S7 communication as server yes S7 communication as client - S7 communication, user data per job 160 Byte Number of connections, max. 32 Functionality Sub-D interfaces Type X2 Type of interface RS485 Connector Sub-D, 9-pin, female Electrically isolated yes MPI MPI MPI MPI MPI MPI MPI MPI MPI MS485 Connector Sub-D slave - D slave		-
PG/OP channel yes Global data communication yes Number of GD circuits, max. 8 Size of GD packets, max. 22 Byte S7 basic communication yes S7 basic communication, user data per job 76 Byte S7 communication yes S7 communication as server yes S7 communication as client - S7 communication, user data per job 160 Byte Number of connections, max. 32 Functionality Sub-D interfaces Type X2 Type of interface RS485 Connector Sub-D, 9-pin, female Electrically isolated yes MPI yes MP2I (MPI/RS232) - DP master - DP slave S2 Byte S8 Server Save Save Save Save Save Save Save Save	Integrated analog outputs	-
Solution	Communication functions	
Number of GD circuits, max. Size of GD packets, max. 22 Byte S7 basic communication yes S7 basic communication, user data per job 76 Byte S7 communication yes S7 communication as server yes S7 communication as client - S7 communication, user data per job 160 Byte Number of connections, max. 32 Functionality Sub-D interfaces Type X2 Type of interface RS485 Connector Sub-D, 9-pin, female Electrically isolated yes MPI MPI (MPI/RS232) - DP master - DP slave 22 Byte 8 8 8 8 8 8 8 8 8 8 8 8 8	PG/OP channel	yes
Size of GD packets, max. 22 Byte S7 basic communication yes 57 basic communication, user data per job 76 Byte 57 communication yes 57 communication as server yes 57 communication as client - S7 communication, user data per job 160 Byte Number of connections, max. 32 Functionality Sub-D interfaces Type X2 Type of interface RS485 Connector Sub-D, 9-pin, female Electrically isolated MPI yes MPI yes MPI MPI (MPI/RS232) - DP master - DP slave - 22 Byte 28 Byte 160 Byte 160 Byte 22 X2 24 X2 X2 X2 X2 X2 X3 X4 X5 X5 X5 X5 X5 X5 X5 X5 X5	Global data communication	yes
S7 basic communication yes S7 basic communication, user data per job 76 Byte S7 communication yes S7 communication server yes S7 communication as server S7 communication as client - S7 communication, user data per job 160 Byte Number of connections, max. 32 Functionality Sub-D interfaces Type X2 Type of interface RS485 Connector Sub-D, 9-pin, female Electrically isolated yes MPI yes MPI yes MPI yes MPI yes MPI S1322) DP master DP slave - T6 Byte	Number of GD circuits, max.	8
S7 basic communication, user data per job 76 Byte 77 communication 99 yes 78 communication as server 99 yes 78 communication as client - \$7 communication, user data per job 160 Byte Number of connections, max. 32 Functionality Sub-D interfaces Type X2 Type of interface RS485 Connector Sub-D, 9-pin, female Electrically isolated yes MPI yes MPI (MPI/RS232) - DP master DP slave - 76 Byte 76 Byte 76 Byte 76 Byte 78 Byte 78 Byte 160 Byte - Uses - 160 Byte - 99 Byte - 160 Byte - 99 Syte - 160 Byte - 99 Syte - 160 Byte - 160 Byte - 99 Syte - 160 Byte - 160 Byte - 160 Byte - 99 Syte - 160 Byte - 160 Byte - 160 Byte - 160 Byte - 99 Syte - 160 Byte - 160 Byte	Size of GD packets, max.	22 Byte
S7 communication yes S7 communication as server yes S7 communication as client S7 communication, user data per job 160 Byte Number of connections, max. 32 Functionality Sub-D interfaces Type X2 Type of interface RS485 Connector Sub-D, 9-pin, female Electrically isolated yes MPI yes MP2 (MPI/RS232) DP master DP slave	S7 basic communication	yes
S7 communication as server S7 communication as client S7 communication, user data per job Number of connections, max. Functionality Sub-D interfaces Type X2 Type of interface RS485 Connector Sub-D, 9-pin, female Electrically isolated MPI MPI MPI MPI MPI MPI MPI MP	S7 basic communication, user data per job	76 Byte
S7 communication as client - S7 communication, user data per job 160 Byte Number of connections, max. 32 Functionality Sub-D interfaces Type X2 Type of interface RS485 Connector Sub-D, 9-pin, female Electrically isolated yes MPI yes MPI yes MP2I (MPI/RS232) - DP master - DP slave -	S7 communication	yes
S7 communication, user data per job Number of connections, max. 32 Functionality Sub-D interfaces Type X2 Type of interface RS485 Connector Sub-D, 9-pin, female Electrically isolated yes MPI yes MP2I (MPI/RS232) DP master DP slave 160 Byte 32 X2 Type of interface interfa	S7 communication as server	yes
Number of connections, max.32Functionality Sub-D interfacesTypeX2Type of interfaceRS485ConnectorSub-D, 9-pin, femaleElectrically isolatedyesMPIyesMP2I (MPI/RS232)-DP master-DP slave-	S7 communication as client	-
Type X2 Type of interface RS485 Connector Sub-D, 9-pin, female Electrically isolated yes MPI yes MP2 (MPI/RS232) - DP master - DP slave DP slave DR A2 A2 A2 A2 B2 A2 B2 B3 B4 B5 B4 B5 B5 B4 B5 B5 B5 B5	S7 communication, user data per job	160 Byte
Type of interface RS485 Connector Sub-D, 9-pin, female Electrically isolated yes MPI yes MP2I (MPI/RS232) - DP master - DP slave - X2 RS485 RS485 Sub-D, 9-pin, female yes	Number of connections, max.	32
Type of interface RS485 Connector Sub-D, 9-pin, female Electrically isolated yes MPI yes MP2I (MPI/RS232) - DP master - DP slave - X2 RS485 RS485 Sub-D, 9-pin, female yes	Functionality Sub-D interfaces	
Connector Sub-D, 9-pin, female Electrically isolated yes MPI yes MP2I (MPI/RS232) - DP master - DP slave -		X2
Connector Sub-D, 9-pin, female Electrically isolated yes MPI yes MP2I (MPI/RS232) - DP master - DP slave -		RS485
Electrically isolated yes MPI yes MP2I (MPI/RS232) - DP master - DP slave -		Sub-D, 9-pin, female
MPI yes MP2I (MPI/RS232) - DP master - DP slave -	Electrically isolated	<u> </u>
MP²I (MPI/RS232) - DP master - DP slave -	·	·
DP master - DP slave -	MP²I (MPI/RS232)	
		-
Point-to-point interface -	DP slave	-
	Point-to-point interface	-



5V DC Power supply	max. 90mA, isolated
24V DC Power supply	max. 100mA, non-isolated
Туре	X3
	RS485
Type of interface	
Connector	Sub-D, 9-pin, female
Electrically isolated	yes
MPI	-
MP ² I (MPI/RS232)	-
DP master	-
DP slave	-
Point-to-point interface	yes
5V DC Power supply	max. 90mA, isolated
24V DC Power supply	max. 100mA, non-isolated
Functionality MPI	
Number of connections, max.	32
PG/OP channel	yes
Routing	yes
Global data communication	yes
S7 basic communication	yes
S7 communication	yes
S7 communication as server	yes
S7 communication as client	-
Transmission speed, min.	19.2 kbit/s
Transmission speed, max.	12 Mbit/s
Functionality PROFIBUS master	
Number of connections, max.	-
PG/OP channel	-
Routing	-
S7 basic communication	-
S7 communication	-
S7 communication as server	-
S7 communication as client	-
Activation/deactivation of DP slaves	-
Direct data exchange (slave-to-slave communication)	-
DPV1	-
Transmission speed, min.	-
Transmission speed, max.	-
Number of DP slaves, max.	-
Address range inputs, max.	-
Address range outputs, max.	-
User data inputs per slave, max.	-
User data outputs per slave, max.	-
Functionality PROFIBUS slave	
Number of connections, max.	-
PG/OP channel	-
Routing	-
*	

S7 communication	-
S7 communication as server	-
S7 communication as client	-
Direct data exchange (slave-to-slave communication)	-
DPV1	-
Transmission speed, min.	-
Transmission speed, max.	-
Automatic detection of transmission speed	-
Transfer memory inputs, max.	-
Transfer memory outputs, max.	-
Address areas, max.	
User data per address area, max.	
Functionality RJ45 interfaces	
Туре	X5
Type of interface	Ethernet 10/100 MBit
Connector	RJ45
Electrically isolated	yes
PG/OP channel	yes
Number of connections, max.	4
Productive connections	-
Fieldbus	-
Туре	X8
Type of interface	Ethernet 10/100 MBit
Connector	RJ45
Electrically isolated	yes
PG/OP channel	yes
Number of connections, max.	8
Productive connections	yes
Fieldbus	-
Point-to-point communication	
PtP communication	yes
Interface isolated	yes
RS232 interface	•
RS422 interface	•
RS485 interface	yes
Connector	Sub-D, 9-pin, female
Transmission speed, min.	150 bit/s
Transmission speed, max.	115.5 kbit/s
Cable length, max.	500 m
Point-to-point protocol	
ASCII protocol	yes
STX/ETX protocol	yes
3964(R) protocol	yes
RK512 protocol	-
USS master protocol	yes
Modbus master protocol	yes
Modbus slave protocol	-



Special protocols	-
Properties PROFINET I/O controller	
Realtime Class	-
Conformance Class	PROFINET IO
Number of PN IO devices	128
IRT support	-
Shared Device supported	-
MRP Client supported	-
Prioritized start-up	-
Number of PN IO lines	1
Address range inputs, max.	2 KB
Address range outputs, max.	2 KB
Transmiting clock	1 ms
Update time	1 ms 512 ms
Isochronous mode	-
Parallel operation as controller and I-Device	-
Ethernet communication CP	
Number of configurable connections, max.	8
Number of productive connections by Siemens NetPro, max.	8
S7 connections	BSEND, BRCV, GET, PUT, Connection of active and passive data handling
User data per S7 connection, max.	32 KB
TCP-connections	FETCH PASSIV, WRITE PASSIV, Connection of passive data handling
User data per TCP connection, max.	64 KB
ISO-connections	-
User data per ISO connection, max.	-
ISO on TCP connections (RFC 1006)	FETCH PASSIV, WRITE PASSIV, Connection of passive data handling
User data per ISO on TCP connection, max.	32 KB
UDP-connections	-
User data per UDP connection, max.	-
UDP-multicast-connections	-
UDP-broadcast-connections	-
Ethernet open communication	
Number of connections, max.	8
ISO on TCP connections (RFC 1006)	TSEND, TRCV, TCON, TDISCON
User data per ISO on TCP connection, max.	8 KB
TCP-Connections native	TSEND, TRCV, TCON, TDISCON
User data per native TCP connection, max.	8 KB
User data per ad hoc TCP connection, max.	1460 Byte
UDP-connections	TUSEND, TURCV
User data per UDP connection, max.	1472 Byte
Management & diagnosis	
Protocols	ICMP DCP
Web based diagnosis	
NCM diagnosis	yes
Housing	

Material	PPE	
Mounting	Rail System 300	
Mechanical data		
Dimensions (WxHxD)	80 mm x 125 mm x 120 mm	
Net weight	380 g	
Weight including accessories	-	
Gross weight	•	
Environmental conditions		
Operating temperature	0 °C to 60 °C	
Storage temperature	-25 °C to 70 °C	
Certifications		
UL certification	yes	
KC certification	yes	
	·	