

Data sheet

CPU 517SN/NET (517-4NE02)

Technical data

Type CPU 517SNNET General information . Note - Features SPEED7 technology 2018 work memory Memory extension (max. 5 MB) Prover supply (rated value) DC 24 V Power supply (rated value) DC 20 428.8 V Reverse polarity protection yes Current consumption (rated operation) 300 mA Current consumption (rated value) 1.2 A Inrush current 5.A Pt 0.5 A*3 Max. current drain at backplane bus - Max. current drain load supply - Power loss 6.5 W Load and working memory 2 MB Work memory, integrated 8 MB Load memory, integrated 8 MB Work memory, maximal 8 MB Memory divided in 50% program / 50% data yes Hardware configuration - Reks, max. - Modules per trak, max. - Number of DP master via CP - Operable communication modules LAN - Operable communication modules LAN - </th <th>Order no.</th> <th>517-4NE02</th> <th></th>	Order no.	517-4NE02	
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Double integer arithmetic, min. 0.01 µs	Bit instructions, min.	0.01 µs	
	Word instruction, min.	0.01 µs	
Floating-point arithmetic, min. 0.06 µs	Double integer arithmetic, min.	0.01 µs	
	Floating-point arithmetic, min.	0.06 µs	

Timers/Counters and their retentive characteristics



Number of S7 counters	2048
S7 counter remanence	adjustable 0 up to 2048
S7 counter remanence adjustable	C0 C7
Number of S7 times	2048
S7 times remanence	adjustable 0 up to 2048
S7 times remanence adjustable	not retentive
Data range and retentive characteristic	
Number of flags	16384 Byte
Bit memories retentive characteristic adjustable	adjustable 0 up to 16384
Bit memories retentive characteristic preset	MB0 MB15
Number of data blocks	8190
Max. data blocks size	64 KB
Number range DBs	1 8190
Max. local data size per execution level	510 Byte
Max. local data size per block	-
Blocks	
	04
Number of OBs	24
Maximum OB size	64 KB
Total number DBs, FBs, FCs	-
Number of FBs	8191
Maximum FB size	64 KB
Number range FBs	0 8190
Number of FCs	8191
Maximum FC size	64 KB
Number range FCs	0 8190
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
Accuracy (max. deviation per day)	10 s
Number of operating hours counter	8
Clock synchronization	yes
Synchronization via MPI	Master/Slave
Synchronization via Ethernet (NTP)	Slave
Address areas (I/O)	
Input I/O address area	0100 Dute
	8192 Byte
Output I/O address area	8192 Byte
Output I/O address area Process image adjustable	
	8192 Byte
Process image adjustable	8192 Byte yes
Process image adjustable Input process image preset	8192 Byte yes 256 Byte
Process image adjustable Input process image preset Output process image preset	8192 Byte yes 256 Byte 256 Byte



Digital outputs65536Digital inputs central-Digital outputs central-Integrated digital outputs-Integrated digital outputs4096Analog inputs4096Analog outputs4096Analog outputs4096Analog outputs, central-Integrated analog inputs, central-Integrated analog outputs-Integrated analog outputs-Integrated analog outputs-Communication functions-PG/OP channelyesGlobal data communicationyesNumber of GD circuits, max.16Size of GD packets, max.54 ByteS7 basic communicationyesS7 communication as erveryesS7 communication as erveryesS7 communication as client-S7 communication, user data per job160 ByteNumber of connections, max.32Functionality Sub-D interfaces-	
Digital outputs central-Integrated digital inputs-Integrated digital outputs-Analog inputs4096Analog outputs4096Analog outputs, central-Analog outputs, central-Analog outputs, central-Integrated analog inputs-Integrated analog outputs-Integrated analog outputs-Integrated analog outputs-Communication functions-PG/OP channelyesGlobal data communicationyesNumber of GD circuits, max.16Size of GD packets, max.54 ByteS7 basic communicationyesS7 communicationyesS7 communicationyesS7 communicationyesS7 communicationyesS7 communicationyesS7 communication as serveryesS7 communication as client-S7 communication, user data per job160 ByteNumber of connections, max.32	
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Number of connections, max. 32	
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 -	
Point-to-point interface -	
5V DC Power supply max. 90mA, isolated	
24V DC Power supply max. 100mA, non-isolated	
Type X3	

Туре	Х3
Type of interface	RS485
Connector	Sub-D, 9-pin, female
Electrically isolated	yes
MPI	-
MP ² I (MPI/RS232)	-
DP master	yes
DP slave	yes
Point-to-point interface	-
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	
PG/OP channel	yes
Routing	yes
S7 basic communication	yes
S7 communication	yes
S7 communication as server	yes
S7 communication as client	-
Activation/deactivation of DP slaves	yes
Direct data exchange (slave-to-slave communication)	
DPV1	yes
Transmission speed, min.	9.6 kbit/s
Transmission speed, max.	12 Mbit/s
Number of DP slaves, max.	32
Address range inputs, max.	1 KB
Address range outputs, max.	1 KB
User data inputs per slave, max.	244 Byte
User data outputs per slave, max.	244 Byte
Functionality PROFIBUS slave	
PG/OP channel	yes
Routing	yes
S7 communication	yes
S7 communication as server	yes
S7 communication as client	-
Direct data exchange (slave-to-slave communication)	-
DPV1	yes
Transmission speed, min.	9.6 kbit/s
Transmission speed, max.	12 Mbit/s
Automatic detection of transmission speed	-
Transfer memory inputs, max.	244 Byte
Transfer memory outputs, max.	244 Byte
Address areas, max.	32
User data per address area, max.	32 Byte
Functionality RJ45 interfaces	
Type	n/d
21.5	-

YASKAWA VIPA CONTROLS

Ethernet 10/100 MBit
PCI bus
-
yes
4
-
-

Туре	X4
Type of interface	Ethernet 10/100 MBit
Connector	RJ45
Electrically isolated	yes
PG/OP channel	yes
Number of connections, max.	32
Productive connections	yes
Fieldbus	-
Ethernet communication CP	
Number of configurable connections, max.	64
Number of productive connections by Siemens NetPro, max.	16
S7 connections	USEND, URCV, BSEND, BRCV, GET, PUT, Connection of active and passive data handling
User data per S7 connection, max.	32 KB
TCP-connections	SEND, RECEIVE, FETCH PASSIV, WRITE PASSIV, Connection of active and passive data handling
User data per TCP connection, max.	64 KB
ISO-connections	SEND, RECEIVE, FETCH PASSIV, WRITE PASSIV, Connection of active and passive data handling
User data per ISO connection, max.	8 KB
ISO on TCP connections (RFC 1006)	SEND, RECEIVE, FETCH PASSIV, WRITE PASSIV, Connection of active and passive data handling
User data per ISO on TCP connection, max.	32 KB
UDP-connections	SEND and RECEIVE
User data per UDP connection, max.	2 KB
UDP-multicast-connections	SEND and RECEIVE (max. 16 Multicast groups)
UDP-broadcast-connections	SEND
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
Housing	
Material	-
Mounting	-



Mechanical data		
Dimensions (WxHxD)	40 mm x 106 mm x 174 mm	
Net weight	390 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	in preparation	
KC certification	-	