

### product type designation



### TIM 4R-IE DNP3

TIM 4R-IE DNP3 communications module for SIMATIC S7-300, S7-400, PC; with two RS232/RS485 Interfaces for DNP3- Communication via standard WAN networks and two RJ45 interfaces for DNP3 communication via IP-based networks (WAN or LAN).

### transfer rate

#### transfer rate

- for Industrial Ethernet
- according to RS 232

10 ... 100 Mbit/s  
9600 ... 115200 bit/s

### interfaces

number of interfaces / according to Industrial Ethernet  
number of electrical connections

2

- for external data transmission / according to RS 232
- for power supply

2  
1

type of electrical connection

- of Industrial Ethernet interface

RJ45 port

type of electrical connection

- at interface 1 / for external data transmission
- at interface 2 / for external data transmission
- for power supply

9 pin Sub-D-connector, RS232 switchable to RS485  
9-pole D-sub connector, RS232 can be switched to RS485  
2-pole plugable terminal block

design of the removable storage

- C-PLUG

Yes

### supply voltage, current consumption, power loss

type of voltage / of the supply voltage

DC

supply voltage

24 V

supply voltage

20.4 ... 28.8 V

supply voltage / external / at DC / rated value

24 V

supply voltage / external / at DC / rated value

20.4 ... 28.8 V

consumed current

- from backplane bus / at DC / at 24 V / maximum
- from external supply voltage / at DC / at 24 V / maximum

0.2 A  
0.17 A

power loss [W]

4.6 W

product extension / optional / backup battery

Yes

type of battery

Lithium AA / 3.6 V / 2.3 Ah

backup current

- typical
- maximum

100 µA  
160 µA

### ambient conditions

ambient temperature

- during operation
- during storage
- during transport

0 ... 60 °C  
-40 ... +70 °C  
-40 ... +70 °C

relative humidity

- at 25 °C / without condensation / during operation /

95 %

maximum protection class IP	IP20	
<b>design, dimensions and weights</b>		
module format	Compact module S7-300 double width	
width	80 mm	
height	125 mm	
depth	120 mm	
net weight	0.4 kg	
<b>product features, product functions, product components / general</b>		
number of units	Number of TIMs per S7-300 / S7-400: 1	
• note		
wire length	6 m	
• with RS 232 interface / maximum		
• with RS 485 interface / maximum		30 m
<b>performance data / S7 communication</b>		
number of possible connections / for S7 communication	5; only via LAN	
• maximum		
• with PG connections / maximum		2
• with OP connections / maximum	1	
service	Yes	
• PG/OP communication		
<b>performance data / telecontrol</b>		
suitability for use	Yes	
• node station		
• substation		Yes
• TIM control center	Yes	
protocol / is supported	Yes	
• DNP3		
• SINAUT ST1 protocol		No
• SINAUT ST7 protocol		No
• Modbus RTU	Yes	
product function / data buffering if connection is aborted	Yes; 200,000 data points with one master	
number of DNP3 masters	8	
• for Ethernet / maximum		
• with RS 232 interface / maximum	1	
number of Modbus RTU slaves / maximum	1	
<b>product functions / management, configuration, engineering</b>		
configuration software	SINAUT ST7 ES on the CPU or TIM	
• required		
storage location / of TIM configuration data		
<b>product functions / time</b>		
product component / hardware real time clock	Yes	
product feature / hardware real time clock w. battery backup	Yes	
accuracy / of the hardware real time clock / per day / maximum	4 s	
time synchronization	Yes	
• from NTP-server		
<b>standards, specifications, approvals / hazardous environments</b>		
certificate of suitability / CCC / for hazardous zone according to GB standard	Yes	
<b>further information / internet-Links</b>		
Internet-Link	<a href="http://www.siemens.com/tia-selection-tool">http://www.siemens.com/tia-selection-tool</a> <a href="http://www.siemens.com/simatic-net">http://www.siemens.com/simatic-net</a> <a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a> <a href="http://www.siemens.com/industry/infocenter">http://www.siemens.com/industry/infocenter</a> <a href="http://automation.siemens.com/bilddb">http://automation.siemens.com/bilddb</a> <a href="http://www.siemens.com/cax">http://www.siemens.com/cax</a> <a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>	
• to web page: selection aid TIA Selection Tool		
• to website: Industrial communication		
• to website: Industry Mall		
• to website: Information and Download Center		
• to website: Image database		
• to website: CAx-Download-Manager		
• to website: Industry Online Support		
<b>security information</b>		
security information	Siemens provides products and solutions with industrial security	

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last modified:

7/7/2022 