

product type designation



TIM 4R-IE DNP3

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

transfer rate	
transfer rate	
<ul style="list-style-type: none"> for Industrial Ethernet 	10 ... 100 Mbit/s
<ul style="list-style-type: none"> acc. to RS 232 	9600 ... 115200 bit/s
interfaces	
number of interfaces / acc. to Industrial Ethernet	2
number of electrical connections	
<ul style="list-style-type: none"> for external data transmission / acc. to RS 232 	2
<ul style="list-style-type: none"> for power supply 	1
type of electrical connection	
<ul style="list-style-type: none"> of Industrial Ethernet interface 	RJ45 port
type of electrical connection	
<ul style="list-style-type: none"> at interface 1 / for external data transmission 	9 pin Sub-D-connector, RS232 switchable to RS485
<ul style="list-style-type: none"> at interface 2 / for external data transmission 	9-pole D-sub connector, RS232 can be switched to RS485
<ul style="list-style-type: none"> for power supply 	2-pole plugable terminal block
design of the removable storage	
<ul style="list-style-type: none"> 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	
<ul style="list-style-type: none"> from backplane bus / at DC / at 24 V / maximum 	0.2 A
<ul style="list-style-type: none"> from external supply voltage / at DC / at 24 V / maximum 	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	
<ul style="list-style-type: none"> typical 	100 μ A
<ul style="list-style-type: none"> maximum 	160 μ A
ambient conditions	
ambient temperature	
<ul style="list-style-type: none"> during operation 	0 ... 60 °C
<ul style="list-style-type: none"> during storage 	-40 ... +70 °C

<ul style="list-style-type: none"> during transport 	-40 ... +70 °C
relative humidity <ul style="list-style-type: none"> at 25 °C / without condensation / during operation / maximum 	95 %
protection class IP	IP20
design, dimensions and weights	
module format	Compact module S7-300 double width
width	80 mm
height	125 mm
depth	120 mm
net weight	0.4 kg
product features, product functions, product components / general	
number of units <ul style="list-style-type: none"> note 	Number of TIMs per S7-300 / S7-400: 1
wire length <ul style="list-style-type: none"> with RS 232 interface / maximum with RS 485 interface / maximum 	6 m 30 m
performance data / S7 communication	
number of possible connections / for S7 communication <ul style="list-style-type: none"> maximum with PG connections / maximum with OP connections / maximum 	5; only via LAN 2 1
service <ul style="list-style-type: none"> PG/OP communication 	Yes
performance data / telecontrol	
suitability for use <ul style="list-style-type: none"> node station substation TIM control center 	Yes Yes Yes
protocol / is supported <ul style="list-style-type: none"> DNP3 SINAUT ST1 protocol SINAUT ST7 protocol Modbus RTU 	Yes No No Yes
product function / data buffering if connection is aborted	Yes; 200,000 data points with one master
number of DNP3 masters <ul style="list-style-type: none"> for Ethernet / maximum with RS 232 interface / maximum 	8 1
number of Modbus RTU slaves / maximum	1
product functions / management, configuration, engineering	
configuration software <ul style="list-style-type: none"> required 	SINAUT ST7 ES
storage location / of TIM configuration data	on the CPU or TIM
product functions / time	
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 <ul style="list-style-type: none"> from NTP-server 	Yes
standards, specifications, approvals / hazardous environments	
certificate of suitability / CCC / for hazardous zone according to GB standard	Yes
further information / internet-Links	
Internet-Link <ul style="list-style-type: none"> to web page: selection aid TIA Selection Tool to website: Industrial communication 	http://www.siemens.com/tia-selection-tool http://www.siemens.com/simatic-net

- to website: Industry Mall
- to website: Information and Download Center
- to website: Image database
- to website: CAX-Download-Manager
- to website: Industry Online Support

- <https://mall.industry.siemens.com>
- <http://www.siemens.com/industry/infocenter>
- <http://automation.siemens.com/bilddb>
- <http://www.siemens.com/cax>
- <https://support.industry.siemens.com>

security information

security information

Siemens provides products and solutions with industrial security functions that support the secure operation of plants, solutions, machines, equipment and/or networks. They are important components in a holistic industrial security concept. With this in mind, Siemens' products and solutions undergo continuous development. Siemens recommends strongly that you regularly check for product updates. For the secure operation of Siemens products and solutions, it is necessary to take suitable preventive action (e.g. cell protection concept) and integrate each component into a holistic, state-of-the-art industrial security concept. Third-party products that may be in use should also be considered. For more information about industrial security, visit <http://www.siemens.com/industrialsecurity>. To stay informed about product updates as they occur, sign up for a product-specific newsletter. For more information, visit <http://support.automation.siemens.com>. (V3.4)

last modified:

1/24/2021 