

product type designation



TIM 4R-IE DNP3

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

Technical Product Detail Page

<https://i.siemens.com/1P6NH7803-4BA00-0AA0>

transfer rate

transfer rate	
• for Industrial Ethernet	10 ... 100 Mbit/s
• according to RS 232	9600 ... 115200 bit/s

interfaces

number of interfaces / according to Industrial Ethernet	2
number of electrical connections	
• for external data transmission / according to RS 232	2
• for power supply	1
type of electrical connection	
• of Industrial Ethernet interface	RJ45 port
type of electrical connection	
• at interface 1 / for external data transmission	9 pin Sub-D-connector, RS232 switchable to RS485
• at interface 2 / for external data transmission	9-pole D-sub connector, RS232 can be switched to RS485
• for power supply	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	0.2 A
• 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	
• typical	100 µA
• maximum	160 µA

ambient conditions

ambient temperature	
• during operation	0 ... 60 °C
• during storage	-40 ... +70 °C
• 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 devices / 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 function / is supported / identification link	Yes; acc. to IEC 61406-1:2022
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	
certificate of suitability / CE marking	Yes
certificate of suitability / UKCA marking	Yes
certificate of suitability / KC approval	Yes
certificate of suitability / Regulatory Compliance Mark (RCM)	Yes
certificate of suitability / RoHS conformity	Yes
standards, specifications, approvals / hazardous environments / header	
certificate of suitability / ATEX	Yes
certificate of suitability / IECEx	Yes
certificate of suitability / ULhazloc approval	Yes

certificate of suitability / CCC / for hazardous zone according to GB standard	Yes				
certificate of suitability / FM registration	Yes				
further information / internet links					
internet link					
<ul style="list-style-type: none">to website: Selection guide for cables and connectorsto web page: selection aid TIA Selection Toolto website: Industrial communicationto web page: SiePortalto website: Image databaseto website: CAX-Download-Managerto website: Industry Online Support	https://support.industry.siemens.com/cs/ww/en/view/109766358 https://www.siemens.com/tstcloud https://www.siemens.com/simatic-net https://sieportal.siemens.com/ https://www.automation.siemens.com/bilddb https://siemens.com/cax https://support.industry.siemens.com				
security information					
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 RCM	KC	 ATEX	 IECEx	FM	CCC-Ex
For use in hazardous locations					
 UL					

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