# **SIEMENS**

## **Data sheet**

# 6NH7803-4BA00-0AA0

#### 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	
<ul> <li>for Industrial Ethernet</li> </ul>	10 100 Mbit/s
• acc. to RS 232	9600 115200 bit/s
interfaces	
number of interfaces / according to Industrial Ethernet	2
number of electrical connections	
<ul> <li>for external data transmission / acc. to RS 232</li> </ul>	2
<ul><li>for power supply</li></ul>	1
type of electrical connection	
<ul> <li>of Industrial Ethernet interface</li> </ul>	RJ45 port
type of electrical connection	
<ul> <li>at interface 1 / for external data transmission</li> </ul>	9 pin Sub-D-connector, RS232 switchable to RS485
<ul> <li>at interface 2 / for external data transmission</li> </ul>	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	
<ul><li>from backplane bus / at DC / at 24 V / maximum</li></ul>	0.2 A
<ul> <li>from external supply voltage / at DC / at 24 V / maximum</li> </ul>	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 μΑ
• maximum	160 μΑ
ambient conditions	
ambient temperature	
<ul> <li>during operation</li> </ul>	0 60 °C
<ul> <li>during storage</li> </ul>	-40 +70 °C
<ul> <li>during transport</li> </ul>	-40 +70 °C

relative humidity	
• at 25 °C / without condensation / during operation /	95 %
maximum	
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	l general
number of units	
• note	Number of TIMs per S7-300 / S7-400: 1
wire length	Trained of time por of section 1
with RS 232 interface / maximum	6 m
with RS 485 interface / maximum	30 m
	30 III
performance data / S7 communication	
number of possible connections / for S7 communication	Frankrija I AN
• maximum	5; only via LAN
with PG connections / maximum	2
with OP connections / maximum	1
service	V.
PG/OP communication	Yes
performance data / telecontrol	
suitability for use	
<ul><li>node station</li></ul>	Yes
<ul><li>substation</li></ul>	Yes
TIM control center	Yes
protocol / is supported	
• DNP3	Yes
<ul> <li>SINAUT ST1 protocol</li> </ul>	No
<ul> <li>SINAUT ST7 protocol</li> </ul>	No
Modbus RTU	Yes
product function / data buffering if connection is aborted	Yes; 200,000 data points with one master
number of DNP3 masters	
for Ethernet / maximum	8
<ul> <li>with RS 232 interface / maximum</li> </ul>	1
number of Modbus RTU slaves / maximum	1
product functions / management, configuration, engineeri	ng
configuration software	
• required	SINAUT ST7 ES
storage location / of TIM configuration data	on the CPU or TIM
	OF THE OF O OF THE
product functions / time	V
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	
• 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	
	http://www.siemens.com/tia-selection-tool
to web page: selection aid TIA Selection Tool     to website: Industrial communication	
to website: Industrial communication     to website: Industry Mall	http://www.siemens.com/simatic-net
to website: Industry Mall     to website: Information and Developed Center	https://mall.industry.siemens.com
to website: Information and Download Center     to website: Image database	http://www.siemens.com/industry/infocenter
to website: Image database	http://automation.siemens.com/bilddb

to website: CAx-Download-Managerto website: Industry Online Support

http://www.siemens.com/cax https://support.industry.siemens.com

security information

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