# **SIEMENS**

## **Data sheet**

## 6NH3112-3BA00-6XX1

### product type designation



### **Extension Board HART/RS485**

Extension Board HART/RS485 for low-power RTU3000C family; connection of 16 Modbus RTU devices or of 16 HART devices in multidrop mode, max. 32 variables.

transfer rate	
transfer rate	
<ul> <li>according to RS 232</li> </ul>	9600 115200 bit/s
interfaces	
number of electrical connections	
<ul> <li>for external data transmission / according to RS 232</li> </ul>	1
type of electrical connection	
<ul> <li>at interface 1 / for external data transmission</li> </ul>	6-pin plug-in terminal strip
for power supply	internal, via RTU3000C
interface design 1 / note	For Modbus RTU (9600 115200) bit/s, for HART 1200 bit/s
signal inputs/outputs	
output current / at digital output	300 mA; Limiting continuous current
supply voltage, current consumption, power loss	
type of voltage / of the supply voltage	DC
type of output voltage / for the supply of external devices	DC 12 V or 24 V
consumed current / note	without connected consumers
consumed current	
<ul> <li>from external supply voltage / at 24 V DC</li> </ul>	
— in update mode / typical	3 mA
<ul> <li>with battery operation / at 7.2 V DC</li> </ul>	
— in update mode / typical	5 mA
power loss [W]	without connected consumers
power loss [W] / with external supply voltage / at 24 V DC	
in update mode / typical	0.08 W
power loss [W] / with battery operation / at 7.2 V DC	
in update mode / typical	0.04 W
ambient conditions	
ambient temperature	
<ul> <li>for vertical installation / during operation</li> </ul>	-40 +60 °C
<ul> <li>for horizontally arranged busbars / during operation</li> </ul>	-40 +70 °C
<ul> <li>during storage</li> </ul>	-40 +70 °C
during transport	-40 +70 °C
relative humidity	
at 30 °C / without condensation / during operation / maximum	95 %
protection class IP	IP20; IP68 with protective housing (see accessories)
design, dimensions and weights	
module format	Plug-in module
width	38 mm

height	62 mm
height depth	21 mm
net weight	0.022 kg
fastening method	0.022 ng
35 mm top hat DIN rail mounting	No
wall mounting	No
product features, product functions, product components / gene	
	si ai
wire length	20 m
with RS 485 interface / maximum	30 m
performance data / telecontrol	via DTI 12000C
control center connection	via RTU3000C
protocol / is supported	V
Modbus RTU	Yes
HART protocol	Yes
protocol version / for HART communication	HART Multidrop
address range / of HART as master	from 0 to 63
address range / of Modbus RTU as master	from 1 to 247
product functions / management, configuration, engineering	
configuration software	
• required	No, configuration via RTU3000C
product functions / diagnostics	
product function / web-based diagnostics	Yes; over RTU3000C
standards, specifications, approvals / hazardous environments	
certificate of suitability / CCC / for hazardous zone according to GB standard	Yes
as marking	Ex nA IIC T4 Gc
further information / internet links	
internet link	
<ul> <li>to website: Industrial communication</li> </ul>	http://www.siemens.com/simatic-net
<ul> <li>to website: Industry Mall</li> </ul>	https://mall.industry.siemens.com
<ul> <li>to website: Information and Download Center</li> </ul>	http://www.siemens.com/industry/infocenter
• to website: Image database	http://automation.siemens.com/bilddb
<ul><li>to website: CAx-Download-Manager</li></ul>	http://www.siemens.com/cax
<ul> <li>to website: Industry Online Support</li> </ul>	https://support.industry.siemens.com
security information	
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